



OFFICE OF
INSPECTOR GENERAL
U.S. DEPARTMENT OF THE INTERIOR

GUAM SCHOOL BUS TRANSPORTATION PROGRAM



**OFFICE OF
INSPECTOR GENERAL**
U.S. DEPARTMENT OF THE INTERIOR

AUG 09 2016

The Honorable Eddie Baza Calvo
Governor of Guam
Office of the Governor of Guam
Ricardo J. Bordallo Complex
513 West Marine Corps Drive
Hagatna, Guam 96910

Dear Governor Calvo:

This letter transmits the results of our evaluation of the Government of Guam's Department of Public Works' (DPW) school bus operations program ("Guam School Bus Transportation Program," Report No. 2015-CR-031). We assessed the effectiveness of DPW's school bus operations program; preventive maintenance capabilities; the supply warehouse in regards to procuring, tracking, and stocking adequate supplies of bus parts; and determined if DPW has a strategic, capital improvement plan for infrastructure replacement. We found that DPW could improve bus maintenance tracking, bus replacement and reserve planning, and bus substation capital improvement planning. DPW does not properly plan for its bus maintenance and replacement needs, has no reserve fleet in case of breakdowns or emergencies, and its satellite bus stations are in poor structural condition. Unless improvements are made, DPW will not be able to adequately prepare for the future transportation and safety needs of Guam's schoolchildren.

In our draft report, we offered seven recommendations to help enhance DPW's bus operations and transportation maintenance, to which we requested your response. We appreciate your response dated July 1, 2016, (Appendix 2) to the draft report. Based on your response, we consider Recommendations 1 and 3 through 7 resolved but not implemented, and Recommendation 2 resolved and implemented with no further action required. As the U.S. Department of the Interior's conduit for coordinating Federal policy and activities with insular area territories and governments, the Office of Insular Affairs (OIA) monitors and tracks recommendations contained in the attached report. Accordingly, we have requested that OIA track the progress Guam makes in implementing and resolving these recommendations.

The legislation creating the Office of Inspector General requires that we report to Congress semiannually on all audit, evaluation, and inspection reports issued; actions taken to implement our recommendations; and recommendations that have not been implemented.

If you have any questions regarding this report, please do not hesitate to contact Amy Billings, Regional Manager, at 303-236-8282.

Sincerely,



Mary L. Kendall
Deputy Inspector General

Attachment

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Results in Brief

The Guam Department of Public Works (DPW) is responsible for providing morning and afternoon school bus services to about 31,000 students per day. We found that DPW could improve in the areas of school bus maintenance, bus replacement, and capital improvement planning. For example, DPW does not have an automated system to help manage its fleet and costs. In addition, DPW claims it has a shortage of operational buses, yet it has no fleet replacement or reserve plan in place. In addition, DPW has satellite bus stations, which are used to house buses, that are in deplorable condition and has no capital improvement plan to address their repair.

By failing to improve bus maintenance practices such as tracking work orders and actual costs incurred, developing a bus replacement plan for replacing aging buses, and having a capital improvement plan for repairing all bus substation facilities, DPW is not taking a proactive approach to enhance the reliability and cost-efficiency of the service it provides. DPW cannot overcome these challenges without reliable data and appropriate planning.

We make seven recommendations that could help DPW improve planning shortfalls. Should DPW concur with and implement our recommendations, it can improve its school bus operations and maintenance program.

Introduction

Objective

We reviewed Guam's Department of Public Works' (DPW) school bus operations program. Our objective was to assess the effectiveness of DPW's school bus operations program; preventive maintenance capabilities; the supply warehouse in regards to procuring, tracking, and stocking adequate supplies of bus parts; and determine if DPW has a strategic, capital improvement plan for infrastructure replacement.

Background

DPW provides such essential services to the people of Guam as public safety, transportation services, highway maintenance, government-wide support, and capital improvement projects. DPW is also responsible for school bus operations through its Bus Operations Division, serving Guam's public and private school students. The Bus Operations Division has 151 employees, of which 132 are bus drivers. DPW's Transportation Maintenance Division (TMD) manages vehicle maintenance for all of the Government of Guam's vehicles and equipment, including school buses. TMD has nine employees, of which seven are mechanics dedicated to school buses.

Population Served by School Bus Operations

The American School Bus Council and the National Highway Traffic Safety Administration reported that school buses are among the safest modes of transporting children to and from school. Guam has 40 public schools (26 elementary schools, 8 middle schools, 5 high schools, and 1 alternative school), with an enrollment of over 30,000 students. In addition, Guam has 27 private schools with an enrollment of approximately 7,000 students. DPW provides morning and afternoon services to about 31,000 student passengers per day. About 94 percent of school bus riders attend the public schools. When feasible, buses transport students for interscholastic programs and field trips, take senior citizens to activities, and take voters to and from the election polls. The buses are also used for emergency transportation during natural disasters.

Demographics of the Present Bus Fleet

- DPW has 134 school buses to cover 179 bus routes, but only between 110 and 117 buses are operational daily.
- Out of the 134 buses, 10 are 84-passenger buses, while the others are 60-passenger buses. Sixty-eight buses, 51 percent, are over 15 years old.
- The oldest bus has been in service 25 years.
- Between August 2014 and July 2015, about 21 buses per day were in the maintenance shop for repairs.

Budget and Funding Sources for Bus Operations

From fiscal year (FY) 2012 through FY 2014, the bulk of funding for the Bus Operations Division and TMD came from Guam's general and highway funds. From FY 2012 through FY 2014, the U.S. Department of the Interior's Office of Insular Affairs (OIA) awarded DPW \$5.8 million in grants for capital improvements to purchase 37 new buses, and for preventive maintenance. At the time of our review, only 10 new buses had arrived due to procurement related appeals made to the Office of Public Accountability. On March 2016, DPW received the additional 27 buses.

In February 2014, the Government of Guam authorized DPW to implement a commercial advertising program on school buses. Funds from advertising would allow DPW to collect and deposit all advertising fees into the newly created DPW Maintenance Fund. At the time of our review, DPW had not established this program.

Potential Impact of a Military Buildup

According to a "Guam Socioeconomic Areas of Interest" report, an impending U.S. military buildup on Guam is not expected to affect Guam's school system or school bus services significantly. School-age children of active-duty military and some Federal employees' children are educated in the U.S. Department of Defense's (DOD) Domestic Dependent Elementary and Secondary Schools system. DOD's school system is separate from Guam's system. The report noted a likely indirect impact on DPW's school bus services because children of temporary workers associated with the buildup, such as construction and other services, would attend Guam's schools.

Findings

DPW is missing several opportunities to make its school bus transportation program more efficient. DPW could improve in the areas of bus maintenance tracking, bus replacement and reserve planning, and bus substation capital improvement planning. We found that DPW does not track labor costs, repair costs, parts replacement, length of service, and actual maintenance costs for their buses. Without adequate data, DPW is unable to properly plan for their bus maintenance and replacement needs. Further, DPW does not have a reserve fleet in case of breakdowns or emergencies. Finally, the satellite bus stations are in poor structural condition, requiring much needed repairs and renovation.

Bus Maintenance Tracking Improvement Needed **DPW Does Not Have an Automated Fleet Management System**

DPW does not have an automated system for fleet management. In the past, DPW used a software system to track maintenance, cost history of buses, and to manage the fleet inventory but reported that the system is antiquated and is only capable of tracking its fleet inventory.¹

During our review, we found that service repair orders are handwritten, posted in a manual ledger, and kept in filing cabinets, making it difficult for personnel to organize and track information on a regular basis. A TMD official told us that the absence of an effective system also impedes DPW's ability to track all maintenance work orders and accurately determine the actual repair costs for each bus. TMD could not provide us work order information such as bus labor costs, repair costs, parts replacement, length of service, and actual maintenance costs. According to TMD, to do so would take months and require sorting through all the paper work manually. DPW estimated routine maintenance cost for old buses at \$6,369 per vehicle per year and new buses at \$3,737 per vehicle per year.

In July 2013, OIA awarded DPW \$200,000 to procure a software system to manage its fleet. DPW submitted its specification requirements and a requisition to Guam's General Services Agency (GSA), but to date, no software has been procured because of misunderstandings between GSA and TMD as to what software system features TMD needs. According to TMD, the recently purchased fleet fuel tracking service purchased by GSA addresses the operational side of managing the fleet of school buses, but does not address maintenance issues. For example, the fleet fuel tracking service does not track labor costs, repair costs, parts replaced, or generate work orders based on scheduled maintenance or unforeseen breakdowns.

¹ The Guam Office of Public Accountability issued a report in October 2007 titled "Government of Guam Vehicle Fleet Inventory," OPA Report No. 07-12 and reported that DPW did not have an effective fleet inventory management system.

DPW Does Not Use a Preventive Maintenance Checklist

We found that DPW's mechanics are not performing preventive maintenance using a checklist as required by DPW's shop manual. A checklist serves to document performed work to ensure that maintenance follows manufacturer guidelines. Instead, DPW relies on the mechanics' experience to perform the appropriate maintenance tasks. As a result, there is no assurance that DPW completes preventive maintenance according to recommended guidelines from the shop manual or the bus manufacturer.

DPW Does Not Track Bus Mileage

Mechanics perform school bus maintenance primarily during summer, winter, and spring breaks while the children are not in school. Other maintenance problems are addressed when discovered during a routine bus driver pre-trip and post-trip inspection. DPW does not currently track or log bus mileage as part of its maintenance practice. As a result, DPW is not ensuring that it is incorporating all manufacturer recommended services at specified mileage intervals. Tracking mileage and incorporating all manufacturers' recommended services may minimize bus breakdowns, downtime, and maintenance costs over the life of the vehicle. A TMD official told us that part of the reason it does not track mileage is because most of the older school buses do not have working odometers. We found, however, that mileage for each of the 10 new buses was also not tracked.

DPW Has Difficulty in Procuring Bus Parts and Equipment

During school year 2014 to 2015, most school buses that were not operating had compressor, engine, power steering, and electrical problems. DPW does not always receive the bus parts and equipment it needs on a timely basis, which impedes its ability to provide optimum levels of service and safety. In addition, the untimely replacement of bus parts can increase the length of time buses are out of service. According to DPW, it can take 3 months or more for a part to be ordered and received.

DPW said it has experienced delays in timely procurement of bus parts with Guam's GSA. As a result, buses sit idle, awaiting parts. For instance, DPW submitted a requisition for engine mounts, coolant sensor, and accelerator parts to GSA in October 2014; as of June 2015, it had not received all the necessary parts.

GSA officials told us that DPW was not using the existing Government of Guam Purchasing and Inventory System for managing vehicle parts and equipment. The system was upgraded in FY2011 to allow DPW to interface with GSA's inventory system. The system was designed to give the divisions access to the large inventory the DPW Supply Warehouse has available, which will expedite the services of vehicle fleet and equipment maintenance and repair. According to DPW staff, they are unsatisfied with the upgraded module (Tenda II) and were not using it because it does not meet their needs, and that they were experiencing user access and data entry problems. In addition, the Tenda II Module was not able to generate special reports. GSA said that if DPW inputs its bus part information into

the Tenda II, DPW could better manage its vehicle parts and equipment. GSA officials said that this would speed DPW's process for requisitioning and receiving the parts and equipment it needs from GSA.

Recommendations

We recommend that DPW:

1. Resolve any differences between TMD and GSA about appropriate fleet and maintenance software system features in order to obtain a fleet management system that can help TMD manage its fleet inventory, track the performance of its fleet, and track work orders and actual costs incurred.
2. Use a preventive maintenance checklist to ensure that all necessary and required services are performed and recorded in accordance with manufacturers' guidelines. Update the checklist as needed to conform to the maintenance requirements of new school buses.
3. Track and log bus mileage on all buses to determine replacement and maintenance times as part of TMD's regular maintenance practice.
4. Evaluate GSA's Tenda II inventory module to determine whether it meets DPW's inventory needs for parts and equipment. Communicate shortfalls to GSA so that the module can be improved and mutually benefit both parties.

Bus Replacement and Reserve Fleet Plan Needed DPW Does Not Have a School Bus Replacement Plan or Policy

The National Association of State Directors for Pupil Transportation Services reported that the timely replacement of school buses must be a planned process. DPW does not have a school bus replacement plan or policy to determine the maximum service life for its buses whether by mileage or age. Factors such as safety, efficiency, environmental conditions, maintenance, operating conditions, capacity, and funding are important factors in replacing buses. Maintenance and operating cost data on individual school buses could help DPW better predict and define when buses should be replaced.

DPW instead relies on the availability of grants from OIA to fund new buses. As previously noted, many of the buses in DPW's bus fleet are over 15 years old; the oldest bus has been in service for 25 years (see Figure 1). DPW estimated the routine maintenance cost for older buses is \$6,369 per vehicle per year, and the maintenance cost for newer buses is \$3,737 per vehicle per year. It is more costly, therefore, to operate and maintain older school buses than newer buses.

At the time of our review, 10 of the 37 OIA funded buses had arrived to replace some of the older buses. On March 2016, DPW received the additional 27 buses.



Figure 1. Older buses like this one could be replaced. Note the sun damage on roof and the rust spots. Source: Office of Inspector General.

Comparatively, the Hawaii State Department of Education requires that the age limit for each bus should be 15 years and that the average fleet age should be no more than 9 years. Other replacement plans vary. Some place age or mileage limitations on school buses or require replacement after logging 200,000 miles or reaching 20 years of age, or on a 250,000-mile 15-year cycle, whichever comes first.

DPW Does Not Have a Reserve Fleet

DPW does not have a reserve fleet of buses in case of breakdowns or emergencies even though it reports that buses break down on a daily basis. Some breakdowns are minor and others are more complicated, sometimes requiring a bus to be towed. As a result, DPW faces shuffling buses and manpower on a daily basis. Planning for an appropriate level of operational buses and having a reserve fleet would help DPW replace buses taken out of service and lessen any impact on student services or student safety.

Comparatively, Hawaii State Department of Education requires its contractors to maintain enough spare vehicles to cover 10 percent of the total, regular, daily routes operated. Using this reserve plan, DPW should have at least 17 reserve buses.

Recommendations

We recommend that DPW:

5. Develop and implement a life-cycle plan for bus replacement.
6. Perform an in-depth assessment to determine the appropriate level of operational school buses and reserve buses needed.

Bus Station Facility Improvement Plan Needed

DPW Does Not Have a Comprehensive Capital Improvement Plan for Improving Bus Substation Infrastructure

DPW has eight substations located in Yigo, Dededo, Tamuning, Barrigada, Ordot, Yona, Inarajan, and Agat villages. We found the substations to be in deplorable physical condition and overdue for renovation. A majority of the buildings have poor structural integrity. For example, most are termite infested causing cracks and leaks in the walls and roofs. One substation was using a tarp to cover a roof leak temporarily, while another substation used plywood and temporary structural supports to hold the roof up (see Figure 2).



Figure 2. Facility here needs a new roof. Source: Office of Inspector General.

The DPW bus drivers and their supervisors use the substations daily. Minor bus repairs on buses are done at these substations, and the buses are parked there at the end of each day. We noted that DPW did not have a capital improvement plan for the substations, nor could DPW estimate the cost of repairing all the bus substations. Department of the Interior compact impact grants totaling \$350,000

will be used to repair four of the dilapidated facilities, but additional funds will be needed to rebuild the Yona substation, which was burnt down due to arson, and to perform other upgrades to the remaining substations. At the time of our review, the renovation had not begun.

Recommendation

We recommend that DPW:

7. Develop a capital improvement plan for the estimated cost and repair of all satellite bus substations, and identify resources to make the necessary upgrades.

Conclusion and Recommendations

Conclusion

DPW has reached a critical point with its aging fleet of school buses. With the recent arrival of 27 new buses, and the 10 previously received, DPW can strengthen the level of service and safety it provides to Guam's schoolchildren. A successful school bus operations and maintenance program will involve assessing needed resources to enable DPW to properly prepare, plan, and provide for a more effective transportation system for Guam's schoolchildren. A fleet of well-maintained school buses and capital and replacement plans for buses and facilities will help DPW enhance the service its school bus transportation program provides.

Recommendations Summary

We recommend that DPW:

1. Resolve any differences between TMD and GSA about appropriate fleet and maintenance software system features in order to obtain a fleet management system that can help TMD manage its fleet inventory, track the performance of its fleet, and track work orders and actual costs incurred.

Guam Response: DPW is finalizing the acquisition of a fleet management software application with a contractor to implement the automation process. The software application will enable DPW to track vehicle registration, work orders, work history, preventive maintenance, inspections, inventory, purchases, and performance measures. The target date to implement corrective action is by January 2017.

OIG Reply: Based on the information provided, we consider this recommendation resolved, but not implemented. We are referring this recommendation to OIA to track its implementation.

2. Use a preventive maintenance checklist to ensure that all necessary and required services are performed and recorded in accordance with manufacturer's guidelines. Update the checklist as needed to conform to the maintenance requirements of new school buses.

Guam Response: DPW adopted a policy to document a preventive maintenance checklist for all their school buses. The checklist was prepared and implemented as part of DPW's standard operating procedures during this review.

OIG Reply: Based on the information provided, we consider this recommendation resolved and implemented. No further action is required.

3. Track and log bus mileage on all buses to determine replacement and maintenance times as part of TMD's regular maintenance practice.

Guam Response: DPW installed a Global Positioning System (GPS) in 100 of its school buses to monitor the bus routes with the speed, timing, and distance during each run. DPW plans to install the GPS on all of its buses. The system has the ability to track fuel consumption levels, and DPW intends to use this tool for the new buses so mileage can be verified.

DPW will estimate bus mileage using the GPS and other alternative manual tracking systems for buses without working odometers. The target date to implement corrective action is by October 2016.

OIG Reply: Based on the information provided, we consider this recommendation resolved, but not implemented. We are referring this recommendation to OIA to track its implementation.

4. Evaluate GSA's Tenda II inventory module to determine whether it meets DPW's inventory needs for parts and equipment. Communicate shortfalls to GSA so that the module can be improved and mutually benefit both parties.

Guam Response: DPW has difficulty in procuring bus parts and equipment because of a cumbersome procurement process. DPW plans to work with the Guam Attorney General's Office, the Governor's Office, GSA, and the Legislature to obtain procurement authority for school bus purchases as well as parts and equipment. DPW's Supply Warehouse Inventory Section also has system modification requirements that have not yet been resolved. DPW will work with Guam GSA to automate the system.

DPW sent a memorandum to GSA on May 18, 2016, outlining several issues and challenges they are experiencing with the AS400 Tenda System that need to be resolved. In the interim, DPW will use the automated fleet management system that it will be purchasing to include enabling the inventory module to serve as an alternate solution. The target date to implement corrective action is by April 2017 to July 2017.

OIG Reply: We acknowledge DPW's efforts to work with GSA to improve the Tenda System. Based on the information provided, we consider this recommendation resolved, but not implemented. We are referring this recommendation to OIA to track its implementation.

5. Develop and implement a life-cycle plan for bus replacement.

Guam Response: As part of DPW's preliminary plan, DPW will replace its current bus fleet by purchasing new buses yearly at the rate of up to 10

percent of its regularly operated routes, currently 179 routes. If the repair costs for a bus reaches \$15,000 and above, and it has been under several repairs in the past, then the bus will be considered for survey, a process for evaluating a bus if DPW can fix it, retire it, or use it for parts. If the overall repair costs reach 50 percent of the original purchase price of the bus, then the bus will be considered for survey. If there are no available parts and materials for repairs, then the bus will also be considered for survey. The target date to implement corrective action is by March 2017.

OIG Reply: Based on the information provided, we consider this recommendation resolved, but not implemented. We are referring this recommendation to OIA to track its implementation.

6. Perform an in-depth assessment to determine the appropriate level of operational school buses and reserve buses needed.

Guam Response: DPW has an average of 115 operational buses serving 179 bus routes. The optimum number of buses required on a daily basis is between 125 through 130. As part of DPW's preliminary plan, it will keep 24 buses, at a minimum, as reserve fleet. DPW has eight bus satellite substations; therefore, at least three buses will be in reserve at every bus satellite substation. The target date to implement corrective action is by March 2017.

OIG Reply: Based on information provided, we consider this recommendation resolved, but not implemented. We are referring this recommendation to OIA to track its implementation.

7. Develop a capital improvement plan for the estimated cost and repair of all satellite bus substations, and identify resources to make the necessary upgrades.

Guam Response: DPW performed a preliminary review of their capital improvement plan for its eight satellite bus substations. Major repairs to the bus satellite substations are in progress. Using both Federal grants from the Department of the Interior and local funds, DPW was able to repair six of the satellite substations. Repairs to the Yigo, Barrigada, and Tamuning substations are complete. The Yona and the Dededo substations are 93 and 90 percent complete, while the Inarajan substation is about 30 percent complete. Repairs to the Agat and Ordos substations are pending a Memorandum of Understanding from the Agat Mayor's Office and the Chamorro Land Trust Commission for the Ordos site. Projected completion date for the development of a formal infrastructure plan, and completion of the renovations to the bus satellite substations, will be by July 2017.

OIG Reply: Based on the information provided, we consider this recommendation resolved, but not implemented. We are referring this recommendation to OIA to track its implementation.

Appendix I: Scope and Methodology

Scope

We conducted our evaluation in accordance with the Quality Standards for Inspection and Evaluation as put forth by the Council of the Inspectors General on Integrity and Efficiency. The work performed provides a reasonable basis for our conclusions and recommendations.

Methodology

We interviewed officials and staff from the Guam Department of Public Works (DPW). In addition, we reviewed—

- applicable laws, regulations, policies, and other criteria; and
- information from DPW’s website, publications, and financial records.

We visited or contacted the—

- U.S. Department of the Interior, Office of Insular Affairs, Washington, DC;
- Guam Office of Public Accountability, Hagatna, GU;
- Guam Department of Public Works, Tamuning, GU;
- Guam Department of Education, Tamuning, GU;
- Hawaii State Department of Education, Honolulu, HI;
- Ground Transport Incorporated, Honolulu, HI;
- Roberts Hawaii, Honolulu, HI; and the
- Commonwealth of the Northern Mariana Islands’ Public School System, Office of Pupil Transportation, Saipan, Northern Mariana Islands.

Appendix 2: Governor of Guam Response

The Governor's response to our draft report follows on page 16.



EDDIE BAZA CALVO
Governor

RAY TENORIO
Lieutenant Governor

Office of the Governor of Guam

July 1, 2016

Ms. Mary L. Kendall
Deputy Inspector General
Office of Inspector General
U.S. Department of the Interior
Washington, D.C.

SUBJECT: U.S. Department of Interior, Office of the Inspector General
Evaluation of the Government of Guam's Department of Public Works'
(DPW) Guam School Bus Transportation Program,
Report No. 2015-CR-031

Dear Ms. Kendall:

Buenas Yan Hafa! Transmitted herewith, please find the Department of Public Works (DPW) response dated July 1, 2016 to the draft report from the U.S. Department of Interior, Office of the Inspector General Evaluation of the Government of Guam's Department of Public Works' (DPW) Guam School Bus Transportation Program, Report No. 2015-CR-031.

I have read DPW's response to the draft report related to all seven recommendations. I concur with DPW's corrective actions. We will work diligently and expeditiously in ensuring that all recommendations and corrective actions are complied with accordingly.

If you have any questions, please do not hesitate to contact me at (671) 472-8931.

Un dangkulu na Si Yu'os Ma'ase!

EDDIE BAZA CALVO
Governor of Guam

Attachment:

Dept. of Public Work's letter dated July 1, 2016



The Honorable
EDDIE BAZA CALVO
Governor

The Honorable
RAY TENORIO
Lieutenant Governor



GLENN LEON GUERRERO
Director

FELIX C. BENAVENTE
Deputy Director

July 1, 2016

The Honorable Eddie Baza Calvo
Governor of Guam
Office of the Governor of Guam
Ricardo J. Bordallo Complex
513 West Marine Corps Drive
Hagåtña, Guam 96910

SUBJECT: U.S. Department of Interior, Office of the Inspector General
Evaluation of the Government of Guam's Department of Public Works' (DPW)
Guam School Bus Transportation Program,
Report No. 2015-CR-031

Buenas yan Håfa A'dai! We have received a draft report from the U.S. Department of the Interior, Office of Inspector General, regarding an Evaluation of the Government of Guam's Department of Public Works' (DPW) Guam School Bus Transportation Program, Report No. 2015-CR-031, dated May 20, 2016.

We appreciate the report from USDOIG, and concur with the findings and recommendations respectively. DPW commenced implementation of the seven (7) recommendations as noted on the draft report. DPW will continue to perform corrective action measures until all of the projects are fully completed.

DPW's annual budget from the legislature have been on a barebones budget for many years. Total of Federal Grants-In-Aid were received from the USDOIG is the aggregate amount of \$7.6M for the purchases of 55 new school buses, repairs of four (4) of our bus satellite substations, building of concrete bus shelters, and to purchase a software fleet management system. We provided a schedule of these grants report, see Attachment C. The remaining balance of \$865K is yet to be obligated and expended as of this report date. Most recently, PL33-149 was established so DPW can purchase new buses from prior year's local funds.

It is DPW's goal to work with the Governor's Office and the Legislature to include funding for capital outlay in our future budgets. Our capital budget will include cost to purchase buses and maintain our infrastructure related to bus satellite stations and bus shelters. In addition, DPW will also work with Bureau of Budget and Management Research (BBMR), Governor's Office and Legislature on a plan for funding these capital projects in identifying a more permanent funding source other than Federal Grants award. However, there are no guarantees that DPW will obtain funding due to the current financial constraint based upon our ailing General Fund Revenues. If not, DPW will need to request that federal grants funding be identified to DPW to meet our transportation and safety requirements for school children.

Provided below is our individual response to each of the respective findings and recommendations as noted in the draft report.

Bus Maintenance Tracking Improvement Needed

Finding: DPW Does Not Have an Automated Fleet Management System.

In the past, DPW used a software system to track maintenance, cost history of buses, and to manage the fleet inventory but reported that the system is antiquated and is only capable of tracking its fleet inventory.

Recommendation 1:

Resolve any differences between TMD and GSA about appropriate fleet and maintenance software system features in order to obtain a fleet management system that can help TMD manage its fleet inventory, track the performance of its fleet, and track work orders and actual costs incurred.

Corrective Action 1:

DPW received a \$200,000 grant from USDOJ for the purchase of an automated fleet management system. Please refer to Attachment C. This software system will enable DPW to perform the following objectives related to DPW's fleet: vehicle register, work orders, work history, preventive maintenance, inspections, request management, inventory management, purchasing, reliable job tracking, increased fleet availability, and establish performance measurements. DPW is in the process of finalizing the acquisition of the fleet management system software application with a contractor to implement the automation process. The actual contract documents are with the Attorney General's office for their review and approval.

Responsible Person:

Paul Cepeda, Superintendent of DPW's Transportation Maintenance Division.

Target Date:

DPW estimates the contract for the purchase of the fleet management software system will be signed by all parties by the end of July, 2016. A more detailed work plan should be in place by August for the actual implementation plan for the software launch followed by training, testing, deployment and live run. The completion date for actual implementation will be within six (6) months.

Finding: DPW Does Not Use a Preventive Maintenance Checklist.

We found that DPW's mechanics are not performing preventive maintenance using a checklist as required by DPW's shop manual.

A checklist serves to document performed work to ensure that maintenance follows manufacturer guidelines. Instead, DPW relies on the mechanics' experience to perform the appropriate maintenance tasks. As a result, there is no assurance that DPW completes preventive maintenance according to recommended guidelines from the shop manual or the bus manufacturer.

Recommendation 2:

Use a preventive maintenance checklist to ensure that all necessary and required services are performed and recorded in accordance with manufacturers' guidelines. Update the checklist as needed to conform to the maintenance requirements of new school buses.

Corrective Action 2:

DPW has adopted the policy to document a preventive maintenance checklist for all buses. This checklist was prepared and implemented as part of the standard operating procedures and have been in use for almost a year now. We have attached a sample copy of this checklist. Refer to Attachment A. After the checklist is prepared by the mechanic it is reviewed by his supervisor and kept on permanent file.

Responsible Person:

Paul Cepeda, Superintendent of DPW's Transportation Maintenance Division.

Target Date:

Task has already been completed.

Finding: DPW Does Not Track Bus Mileage.

Mechanics perform school bus maintenance primarily during summer, winter, and spring breaks while the children are not in school. Other maintenance problems are addressed when discovered during a routine bus driver pre-trip and post-trip inspection. DPW does not currently track or log bus mileage as part of its maintenance practiced. As a result, DPW is not enduring that it is incorporating all manufacturer recommended services at specified mileage intervals. Tracking mileage and incorporating all manufacturers' recommended services may minimize bus breakdowns, downtime, and maintenance costs over the life to the vehicle. A TMD official told us that part of the reason it does not track mileage is because most of the older school buses do not have working odometers. We found, however, that mileage for each of the 10 new buses was also not tracked.

Recommendation 3:

Track and log bus mileage on all buses to determined replacement and maintenance times as part of TMD's regular maintenance practice.

Corrective Action 3:

Currently, we have procured a vendor to implement the Global Positioning Satellite (GPS) tracking system and have installed these tracking devices to a hundred (100) of our school buses. The GPS monitors all of our bus routes with the speed, timing and distance of each bus during each run. Moreover, the system has the ability to track fuel consumption levels which we intend on implementing on our new buses where the mileage gauges can be verified. As for the rest of our aged bus fleet, our bus drivers will track mileage by preparing a vehicle trip report to estimate the mileage information on a daily basis. The GPS will assist the Bus Operations division in tracking

and managing all of their buses on-line and real-time. Statistical data information to include fuel information has yet to be reconciled against DPW's fuel invoices since the GPS System was under GSA's purview and managed by them rather than DPW during the past fiscal years.

Currently, a monthly fuel consumption report is obtained from our fuel company and is validated against individual fuel gas receipts prepared by DPW's Administrative Services Division (ASD). ASD will then distribute report listing to all divisions for validation. Bus Operations has yet to compare both reports for an in depth review and analysis related to bus fuel consumption levels as data received from GPS vendor was not compatible to DPW's reports. Moreover, 50% of our bus fleet are aged and do not have working odometers. Estimates for bus mileage can be made by GPS system and other alternative manual tracking system. Mileage traveled are manually obtained from each bus driver using a trip report.

DPW intends on meeting with GPS vendor to obtain fuel consumption report on existing GPS fleet to improve reporting efforts and to achieve greater efficiency in determining the fuel consumption levels of our bus fleet as well as the total miles buses were driven. DPW intends on installing GPS device in all of our bus fleet to include new buses.

Responsible Person(s):

This project will be divided into three components and will be handled by each manager and task assignments accordingly. They are listed as follows:

Franklin Taitano, Superintendent of Bus Operations & Danny Quintanilla, Assistant Superintendent of Bus Operations, full implementation of the GPS system to entire bus fleet.

Paul Cepeda, Superintendent of Transportation Maintenance Division, GPS integrated with the automated Fleet Management System and Preventive Maintenance Practice.

Arleen Pierce, DPW Controller, Administrative Services Division, fuel consumption reports and other financial management reports related to GPS System.

Target Date:

This task is currently on going related to the GPS monitoring system. Several meetings with the GPS vendor must be conducted as well as the above task assignments noted above. The new buses have yet to be implemented. The target date for implementing the GPS on the new buses as well as the above tasks are to be completed within three (3) months.

Finding: DPW Has Difficulty in Procuring Bus Parts and Equipment.

During SY2014-2015, most school buses that were not operating had compressor, engine, power steering, and electrical problems. DPW does not always receive the bus parts and equipment it needs on a timely basis, which impedes its ability to provide optimum levels of service and safety. In addition, the untimely replacement of bus parts can increase the length of time buses are out of service. According to DPW, it can take 3 months or more for a part to be ordered and received.

Recommendation 4:

Evaluate GSA's Tenda II inventory module to determine whether it meets DPW's inventory needs for parts and equipment. Communicate shortfalls to GSA so that the module can be improved and mutually benefit both parties.

Corrective Action 4:

DPW will break this task assignments into three areas of focus. These task assignments are the procurement of goods and services related to all bus parts, materials and supplies and acquisition of new buses and the DPW Tenda II Inventory System, which both are currently under the purview of GSA, and the implementation of the automated fleet management system under DPW's purview.

First, DPW has difficulty in procuring bus parts and equipment because of our current cumbersome procurement process related to goods and services. Also attributing to this lengthy process is the procurement appeals. One of the major reasons there are delays results from GSA having a high volume of workload and a very limited number of staff. We would like to relief GSA from this burden by having DPW handle our own procurement related to our bus fleet and heavy equipment. Since DPW is the procurement officer for construction with millions of dollars there should not be an issue. DPW plans on working with the Attorney General's Office, the Governor's Office, GSA and the Legislature in obtaining our procurement authority related to the purchases of school buses as well as all parts and materials.

The second task assignment relates to DPW's Supply Warehouse Inventory Section. While there are system modification requirements that have yet to be resolved, DPW will work with GSA to automate the system. A copy of DPW's memorandum to GSA is enclosed as Attachment B. During the interim, DPW will enable the automated fleet management system to be utilized at its maximum use to include the inventory module as an alternative solution.

The third task assignment relates to DPW's overall information system related to the Transportation Maintenance Division. It is DPW's overall objective, for the fleet management software system to be implemented to improve our efficiency level and obtain critical fleet data information.

Responsible Person(s):

Glenn Leon Guerrero, DPW Director & Felix Benavente, DPW Deputy Director, for procurement authority.

Arleen U. Pierce, DPW Controller for DPW Warehouse and Supply Inventory Tenda II Automation Project.

Paul Cepeda, Superintendent TMD, Fleet Management Software System.

Target Date:

Our projected target date is within nine to twelve (9-12) months.

Bus Replacement and Reserve Fleet Plan Needed

Finding: DPW Does Not Have a School Bus Replacement Plan or Policy.

The National Association of State Directors for Pupil Transportation services reported that the timely replacement of school buses must be a planned process.

DPW does not have a school bus replacement plan or policy to determine the maximum service life for its buses whether by mileage or age. Factors such as safety, efficiency, environmental conditions, maintenance, operating conditions, capacity, and funding are important factors in replacing buses. Maintenance and operating cost data on individual school buses could help DPW better predict and define when buses should be replaced.

Recommendation 5:

Develop and implement a life-cycle plan for bus replacement.

Corrective Action 5:

DPW has purchased 55 new buses from USDOl federal grant funding during FY2014, 2015 & 2016. We are in the process of acquiring another 5 more buses from local funds per PL33-149 which was recently passed by the legislature. A listing of our bus fleet is enclosed, please refer to Attachments C and D. The total number of new buses purchased will reach 60. Consequently, as part of our preliminary plan which will be further developed, we will institute the following policies and procedures:

- a. DPW will replace our current bus fleet every fiscal year by purchasing new buses of up to 10% of our regular operated routes of which DPW has a total of 179 routes
- b. If the cost of the repair for buses reaches \$15k and above, and have been under several repairs in the past, then the bus will be considered for survey,
- c. If the overall repairment cost reaches 50% of the original purchased price of the bus, then the bus will be considered for survey
- d. If there are no available parts and materials for repairs, then the bus will be considered for survey.

Finding: DPW Does Not Have a Reserve Fleet.

DPW does not have a reserve fleet of buses in case of breakdowns or emergencies even though it reports that buses break down on a daily basis. Some breakdowns are minor and others are more complicated, sometimes requiring a bus to be towed. As a result, DPW faces shuffling buses and manpower on a daily basis.

Planning for an appropriate level of operational buses and having a reserve fleet would help DPW replace buses taken out of service and lessen any impact on student services or student safety.

Responsible Person:

Paul Cepeda, Superintendent of Transportation Maintenance Division & Franklin Taitano, Superintendent of Bus Operation Division

Target Date:

Our projected target date is within eight (8) months.

Recommendation 6:

Perform an in-depth assessment to determine the appropriate level of operational school buses and reserve buses needed.

Corrective Action 6:

Currently, DPW has buses that are older than the average life span of buses. Our oldest bus is twenty-five (25) years old. Please refer to Attachment D (2) for a listing of our bus fleet and the aging of each bus. DPW's total bus fleet amounts to 189 (for FY 2016) buses (of which includes 18 new buses already ordered and 5 that are pending due to the procurement from GSA).

DPW has a total of 179 bus routes with about 115 average operational bus out of a total bus fleet of 189. The optimum number of buses is between 125 through 130 is required on a daily basis. Consequently, as part of our preliminary plan which will be further developed, we will institute the following policy and procedure: a total of 24 buses (at a minimum) will be used as reserved fleet. This means that there will be at least 3 buses in every bus satellite substations to be used as stand by in the event they are needed. DPW has a total of 8 bus satellite substations.

Responsible Person:

Paul Cepeda, Superintendent of Transportation Maintenance Division & Franklin Taitano, Superintendent of Bus Operation Division

Target Date:

Our projected target date is within eight (8) months.

Bus Substation Facility Improvement Plan Needed

Finding: DPW Does Not Have a Comprehensive Capital Improvement Plan for Improving Bus Substation Infrastructure.

DPW has eight (8) substations located in Yigo, Dededo, Tamuning, Barrigada, Ordot, Yona, Inarajan, and Agat villages. We found the substations to be in deplorable physical condition and overdue for renovation. A majority of the buildings have poor structural integrity. For example, most are termite infested causing cracks and leaks in the walls and roofs. One substation was using a tarp to temporarily cover a roof leak, while another substation used plywood and temporary structural supports to hold the roof up.

Recommendation 7:

Develop a capital improvement plan for the estimated cost and repair of all satellite bus substations, and identify resources to make the necessary upgrades.

Corrective Action 7:

DPW has done a preliminary review of our capital improvement plan for our satellite bus substations. Major repairs to our bus satellite substations are in progress since the audit field work was completed. DPW has a total of eight (8) bus satellites. Repairs are funded using both the federal grant award funds from USDOl and our local funds to begin the construction work. We were able to repair six (6) satellite substations. Three of the five satellite substations are 100%, one is 95% complete and the last substation is about 30% complete. Please refer to Attachment E which is the listing of each satellite location and the detail status of each repair work. The remaining two substations are pending a memorandum of understanding from the Agat Mayor's Office and the Chamorro Land Trust Commission for the Ordot site.

Responsible Person(s):

Franklin Taitano, Superintendent of Bus Operations and Danny Quintanilla, Assistant Superintendent of Bus Operations.

Target Date:

Projected completion date for the development of a formal infrastructure plan and completion of renovations related to bus satellite substations will be within twelve (12) months.

Should you require further information or inquiries, please do not hesitate to contact me at 646-3131 or our Deputy Director, Mr. Felix Benavente at 646-3232.

Si Yu'os Ma'ase!


GLENN LEON GUERRERO

Attachments –

- A. *Transportation Maintenance Division's Preventive Maintenance Checklist*
- B. *DPW Supply Warehouse & Inventory Tenda II Memorandum from DPW to GSA*
- C. *FGIA USDOl Listing Grants Status Report*
- D. *Inventory List of DPW Assets:*
 - 1. *Bus Fleet*
 - 2. *Bus Satellite Substations*

cc: *Governor's Chief of Staff (COS)*
Governor's Chief Financial Officer (CFA)
Bureau of Budget & Management Research (BBMR)
Department of Administration (DOA)

Appendix 3: Status of Recommendations

Recommendation	Status	Action Required
1, 3-7	Resolved but not implemented.	We are referring these recommendations to the Office of Insular Affairs to track their implementation.
2	Resolved and implemented.	No action required.

Report Fraud, Waste, and Mismanagement



Fraud, waste, and mismanagement in Government concern everyone: Office of Inspector General staff, departmental employees, and the general public. We actively solicit allegations of any inefficient and wasteful practices, fraud, and mismanagement related to departmental or Insular Area programs and operations. You can report allegations to us in several ways.



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