



EXECUTIVE SUMMARY
Department of Public Works' Village Streets Management Strategy
Report No. 17-09, December 2017

For the first time, the Office of Public Accountability delivered the results of our audit and illustrated our findings in a video. You may view these videos at www.opaguam.org.

Our audit found that the Department of Public Works (DPW) Division of Highways did not have an effective asset management strategy to protect and prolong the life of village streets and ensure taxpayer dollars were utilized in the most cost effective manner for roads most in need of repair. Specifically,

1. The Division of Highways (the Division) did not take action to ensure the Village Streets Master Plan (VSMP) was regularly monitored and properly implemented;
2. Repairs of village streets were determined on a reactive basis; and
3. Management did not keep records of performance metrics to evaluate achievement of goals.

With the recent increase in liquid fuel taxes dedicating new funds for village street repairs, the need for effective asset management practices is especially important. Research has shown that without an effective asset management strategy, deterioration of village streets will accelerate to a point where the taxpayers will carry higher costs for street rehabilitation than if the streets had been maintained continuously.

No Follow-through with the VSMP

After the VSMP's development in 2009 to address rehabilitation of village streets, we found that the Division has not implemented, evaluated, and updated the VSMP after its publication. No village streets repair projects were done based on the results of the VSMP.

Moreover, the VSMP may be outdated to address the current conditions of village streets. Village streets' conditions are likely to change over time, therefore regular monitoring and assessment should be done throughout its life. The update the VSMP will allow the Division to identify the best treatment to sustain the performance and condition of roads.

Unsystematic Pavement Management System for Village Streets

The Division operated in an unsystematic and reactive manner to maintain and repair village streets. Despite the existence of the VSMP, the Division's awareness of village streets needing repair come through legislative mandates, phone calls from concerned individuals that were not documented or tracked, and irregular assessments of village streets conditions. Road repair decisions were made on a daily basis and rests on the Division Superintendent's discretion.

This unsystematic and subjective practice may lead to utilizing resources in an ineffective manner whereby village streets in better conditions may be prioritized over those in worse conditions.

Without systematic methods to assess conditions of village streets, there is a risk that selection may be based to favor certain constituents and neglect other factors important to prioritizing street repairs such as cost-effectiveness based on road conditions.

According to the Federal Highway Administration (FHWA), neglecting maintenance on deteriorating roads will also cost more over time. For every dollar spent on maintaining roads in good condition prevents the need to spend four to five times more to rehabilitate the same road that has not been maintained.

Unlike the locally funded village streets, the Division has developed a comprehensive Pavement Management System for its federally funded routed roads since 2011. This system assesses the conditions of roads; determines the need for preventive maintenance, corrective maintenance, rehabilitation, or removal and replacement; and shows the rate of pavement deterioration for the next few years. The Division's Acting Administrator stated that local funding is needed to adopt such a system for village streets.

Lack of Performance Measures to Evaluate Achievement of Goals

The Division did not have performance measures to guide day-to-day operations and allow for strategic management. Such measures can also assist in evaluating whether the Division is achieving its goals. Due to the lack of an organized tracking system, the Division is unable to provide data on village streets repair activities. Accordingly, we were unable to quantify the number of repairs made on a particular village street, assess the nature of village streets repair work, or collect village street repair project cost information.

Subsequent to our review, the Division started compiling data electronically from their Daily Job Reports to assist management in obtaining statistics to measure their performance.

Conclusion and Recommendation

While our audit focused on village streets, Guam's federally funded highways also require local funding for routine maintenance, yet only a Pavement Management System exists for federally funded routed roads. Public Law 34-44 was enacted to increase the liquid fuel tax rates for village street repairs and construction projects. Effective January 2018, diesel fuel will increase from \$0.10 to \$0.14 per gallon and other liquid fuel taxes will increase from \$0.11 to \$0.15 per gallon.

It is imperative that DPW be accountable and transparent with the use of taxpayer dollars just as well as federal funds and ensure it is protecting the major investments into our village streets and highways. This would require leadership focus in adopting transportation asset management best practices for village streets like it has done for Guam's highways. Given competing needs for operations and infrastructure maintenance, an asset management strategy can help DPW or public officials plan for needed funding to maintain roads and save costs over the life of the roads.

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