



Internal Audit Report

Wireless Device Program – Follow-Up

Report Number: 2016-4 | Report Date: December 1, 2016

Executive Summary

Audit Report No.: 2016-4

December 1, 2016

WE AUDITED the IT Division's management controls over the approval, assignment, use, and accountability of wireless devices used by individuals, as of January 2015.

AUDIT OBJECTIVE was to determine whether management has taken effective corrective actions to address the 2013 audit finding.

The audit examined management controls in place as of January 2015.

WHAT DID WE FIND?

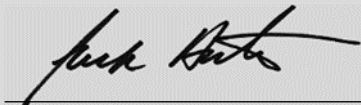
The agency's Wireless Device Program encompasses multiple types of devices and services used by employees and consultants, including mobile phones/tablets, wireless access devices, a monthly personal cell phone use stipend and wireless access for agency systems.

The IT Division administers the Wireless Device program, including procuring wireless devices and wireless services, assigning wireless devices, reviewing monthly wireless invoices, and researching and establishing the annual stipend amount. Sound Transit Policy 16 (Sound Transit Supplied Mobile Device) and 16A (Mobile Device Stipend), provides the specific criteria for an individual to receive a device or stipend, identifies responsibilities, sets forth procedures for obtaining a device or stipend, and establishes requirements of use.

As of June 2016, the Wireless Device Program includes wireless service for 472 wireless devices and 252 wireless access devices. Additionally there are 159 employees receiving the monthly stipend. The average monthly spend for wireless service, equipment and stipends is approximately \$49,000.

Internal Audit first reported on the status of the Wireless Device Program in late 2012. We noted that the IT Division was in the process of developing the program and the agency was undergoing changes to device standards, service providers and billing and payment procedures. The second audit of the Wireless Device Program in 2013 noted that the Program still had significant opportunities for improvement.

This current audit concluded that management controls to ensure compliance with the Wireless Device Policy continue to be inadequate, and resulted in \$89,619 of preventable expenses since 2015.



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Internal Audit Director

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Background

The agency's Wireless Device Program encompasses multiple types of devices and services used by employees and consultants.

- Sound Transit provides wireless mobile telephone, wireless tablet devices and wireless access devices to employees and consultants to conduct agency business while away from the office and/or during non-working hours.
- A stipend is available to employees who opt to use their own personal mobile telephone to conduct agency business. The current monthly stipend is \$55.
- Sound Transit utilizes other types of wireless devices for Sounder Rail wireless access, automatic passenger counting on Tacoma Link and Fare Enforcement's E-Citation systems.

Sound Transit Policy 16 (Sound Transit Supplied Mobile Device) and 16A (Mobile Device Stipend) address agency wireless mobile telephone use. The policy provides specific criteria that must be met for an individual to receive a device or stipend, identifies responsibilities, sets forth procedures for obtaining a device or stipend, and establishes requirements of use. The policy does not specifically address criteria for issuing wireless access or non-phone wireless devices, which are generally handled through IT service desk requests.

The IT Division administers the Wireless Device program. Responsibilities include procuring wireless devices and services, assigning wireless devices, reviewing monthly wireless invoices, and researching and establishing the annual stipend amount.

As of June 2016, the Wireless Device Program includes wireless service for 472 wireless devices and 252 wireless access devices. Approximately 80 of the devices are in service to provide wireless access to Sounder, Link and Fare Enforcement systems. The agency procures wireless device service and equipment from three vendors: AT&T Mobility, Verizon Wireless and T-Mobile. There are currently 159 employees receiving the monthly stipend.

Issued To (# of Devices)		Wireless Expenses			
		2014	2015	2016*	
Sound Transit	477	Service	\$293,364	\$366,707	\$208,773
KC Metro	128	Equipment	\$37,957	\$55,618	\$13,808
Securitas	69	Stipends	\$92,427	\$100,265	\$52,113
Halcon	17	Total	\$423,748	\$522,590	\$274,694
BNSF	19				
Others	14				

*Amounts are estimated as of June 2016

Internal Audit first reported on the status of the Wireless Device Program in late 2012. At that time the program was managed by the IT Business Manager. We noted that the IT Division was in the process of developing the program and the agency was undergoing changes to device standards, service providers and billing and payment procedures.

During the 2013 audit of the Wireless Device Program (still managed by the IT Business Manager), we noted that the program still had significant opportunities for improvement, as follows:

- No evidence of a monthly audit of the agency wireless bills for correct equipment, service charges and service types, as required by policy.

- The current level of device usage monitoring did not effectively identify and escalate policy violations, including personal use and additional charges.
- Absence or improper authorization of the wireless device and stipend Agreement and Acceptable Use Statements.
- No current list of wireless device users maintained by IT.
- No reconciliations, as described in the procedure documents.
- No annual stipend review, as required by the policy.

Audit Objectives

To determine whether management has taken effective corrective actions to address the 2013 audit finding.

Scope and Methodology

We conducted this performance audit in accordance with Generally Accepted Government Auditing Standards and the International Standards for the Professional Practice of Internal Auditing. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

After interviewing personnel and reviewing previous audit activity and management status of corrective actions taken, we determined to focus our efforts on the areas of most concern noted in the previous audit, specifically, management controls over the approval, assignment, use, and accountability of wireless devices used by individuals, as of January 2015.

To determine whether management took effective corrective actions to address the 2013 audit finding, we conducted the following procedures:

1. Tested a sample of 31 new wireless device users and stipend recipients, to determine if the Agreement and Acceptable Use statements and Business Justification forms were completed, appropriately authorized and maintained.
2. Tested the assignment of wireless devices by reviewing 100% of the device assigned to an individual.
 - a. Confirming that each employee/consultant has only one agency issued wireless device.
 - b. Confirming that an employee receiving a stipend does not also have a wireless device.
 - c. Comparing current wireless device bills to termination records to determine whether ST continues to pay for wireless service for these users.
3. Tested four months of phone usage for unusual use or non-use and verify whether management has addressed irregular trends, if any, appropriately.
4. Confirmed that wireless devices were properly accounted for.

Conclusion

Management has not taken effective corrective actions to address the 2013 audit finding. As a result, conditions have worsened. See Finding 1.

Findings and Recommendations

1. Management Controls to Ensure Compliance with the Wireless Device Policy Continue to Be Inadequate.

Policy 16 (Sound Transit Supplied Mobile Device) and 16A (Mobile Device Stipend) provide a framework to:

- Ensure a business purpose for every wireless telephone device and stipend issued
- Maintain accountability of physical (i.e., devices) and financial (i.e., monthly bills) public assets
- Prevent non-emergency personal use of public assets

Management implemented a number of controls to meet the policy requirements. Internal Audit previously conducted two audits to determine their effectiveness. Those audits identified opportunities for improvements, and Internal Audit suggested corrective action recommendations for management consideration.

In the current audit, Internal Audit reviewed management efforts implemented following the release of the last audit results in 2013. The results of the current audit indicate that the efforts were not adequate in addressing the previous audit finding, as summarized and discussed below:

Preventable Expenses	
Device Recipients Receiving Stipends	\$4,174
Individuals With Multiple Devices	\$2,339
Untimely Account Deactivation	\$51,366
Excessive Purchased Pooled Minutes for a 12-month period ending June 2016	\$31,740
Total	\$89,619

New Device and Stipend Request Approval

According to the policies, new device or stipend requests require a Request and Business Justification Form. This form identifies specific eligibility criteria and helps to ensure wireless devices and stipends are only issued as needed for business purposes. In addition, the requesting employee or consultant must also complete and sign an Agreement and Acceptable Use Statement Form, acknowledging agreement with appropriate phone use. As an acknowledgement of the business need, Department Directors must approve the request. Requests for non-managers also require the approval of the CEO or Deputy CEO.

A test of 31 new stipend recipients and wireless device users since 2015 found that 29 recipients/users were not properly approved. Management did not consistently monitor the proper completion and approval of the forms. The business purpose cannot be verified in the absence of properly approved forms. Device/stipend issuance without a business need could result in unnecessary expenses, lost productivity and has the potential to impact agency reputation.

Device Assignments and Account Deactivations

According to policy, employees receiving the stipend should not have a ST issued wireless telephone. A review of the current list of stipend recipients, device users, and employees, as

of June 1, 2016, noted the following exceptions:

- 4 employees with both the monthly stipend and a device.
- 1 employee and 4 consultants with more than one active wireless telephone device.
- 44 device assignments to terminated employees and consultants. More than half of the employees/consultants were terminated over a year ago.

IT management deactivated these devices as of the June 2016 billing after the issues were brought to their attention by Internal Audit. However the delayed deactivation resulted in \$37,129 of unnecessary charges. Regular monitoring could have identified the exceptions for timely account deactivation.

Usage Monitoring

Monitoring device usage is necessary to comply with the policy, which explicitly disallows personal use of agency wireless devices except under urgent circumstances and requires consultants with ST issued mobile devices to submit monthly a signed declaration of no personal use. Thus, usage monitoring is an important first step to prevent the abuse and misuse of public assets.

Currently IT Management is a sole recipient of device usage information from wireless service providers. Department/division managers – who are ultimately responsible - would not be aware of potential misuse and abuse without a communication from IT. It was noted that IT management does not obtain consultant declarations, nor does it conduct sufficient reviews to identify potentially inappropriate device/data use trends. Our tests noted the following potentially inappropriate uses that IT should have identified and communicated to responsible departments/divisions for a follow-up:

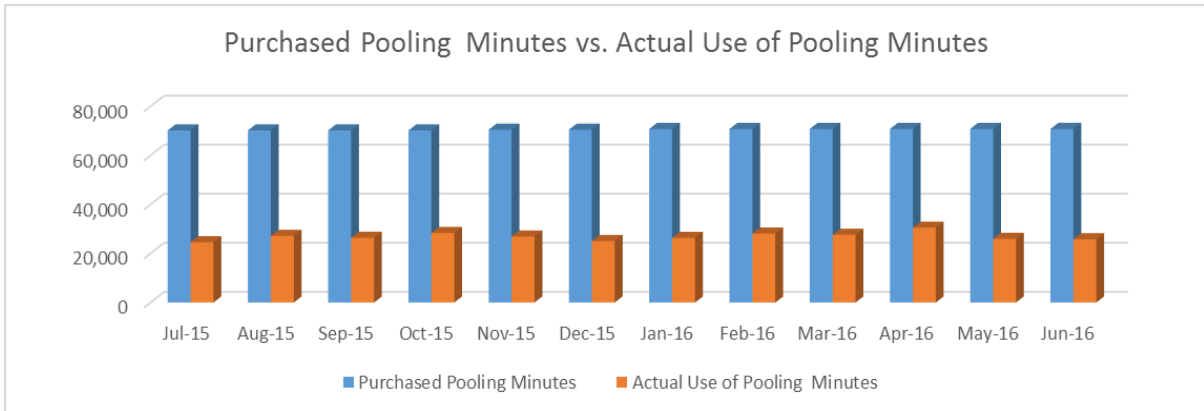
- 8 of the top 20 numbers with text message events appear to be non-business¹ related.
- 4 of the top 20 numbers called (minutes used) appear to be non-business¹ related.
- 7 of 16 users tested had a significant amount of what appears to be non-business¹ related calls and texts. In 2 of the cases it appears that most if not all of the phone use was non-business¹ related.
- 8 of the top ten users of data account for 25% (or 239GB) of the total data used by all users during a four month period ending May 15, 2016.
- One individual averaged 19GB per month when other device users with similar job responsibilities averaged about 1GB for the same period.
- 33 wireless devices had no use for a period of six months or greater. 15 of 33 had no usage for over a year. The cost for these devices for the period of no use was over \$17,000. IT management deactivated these devices as of the June 2016 billing after the non-use was brought to their attention by Internal Audit.
- 22 iPad devices with monthly wireless access were purchased in November 2015 for field use. Only 5 are currently assigned and in use. The other 17 devices had no use in the past five month, however ST continues to pay \$42 per month each for wireless access, resulting in \$3,570 of unnecessary charges to date.

There are currently 245 cell phone users with a standard package (\$15.99) that includes unlimited calls for nights, weekends and mobile-to-mobile, but minutes for calls during regular business hours are not part of the standard. To provide coverage for daytime calls, IT has purchased 230 pooling accounts with approximately 300 minutes each for the total of ~70,000

¹ Non-business determination is based on the fact that the number is not a ST office, ST wireless device or known contractor (e.g., King County, BNSF) related number.

available minutes at the cost of \$39.00/month/account. However, the actual use of daytime minutes has been consistently below 30,000 minutes which is less than 50% of the purchased.

Regular and consistent monitoring of usage would have indicated the trend, prompting an adjustment in the total number of purchased pooling accounts. Assuming 35,000 minutes are sufficient for daytime calls, there could have been an annual cost savings of \$31,740.



Recommendations:

We recommend the Information Technology Division:

1. Regularly and consistently perform existing management controls to ensure compliance with agency Policy 16 and 16A.

The following specific procedures are for management consideration:

- Work with the Human Resources Division, as well as other divisions having issued devices to consultants, to ensure information related to the separated employee/consultant is timely communicated to the IT Division.
- Monitor device issuance and usage to maintain an appropriate level of pooling minutes, to prevent multiple device/stipend assignments, and to manage non-emergency personal use.
- Issue devices/stipends only upon confirmation that a business reason has been received with approval by appropriate management

Management Response

Management agrees with the recommendations. While a number of punctual corrective measures were implemented by IT following the 2013 audit, Management recognizes the need for a comprehensive process overhaul to ensure the necessary controls are in place and operating as intended.

The mitigation plan for the findings in these report to be implemented by Management is structured as follows:

Phase 1: Implementation of immediate corrective actions.

Following receipt of the report, Sound Transit IT proceeded to apply immediate corrective measures to mitigate the impact of the findings. Such measures addressed:

- Insufficient documentation of the business justification and inadequate approval levels. Reminders to administrative staff (in writing and via meetings) were provided by IT, with an emphasis on the current policy requirements governing mobile device and stipend assignments.
- Redundant device/stipend assignments. Stipend assignments were removed for all personnel who were identified as having been issued a mobile phone.
- Personnel with more than one active mobile device. Upon further review and follow up with the personnel involved, IT determined the issue to be a records problem rather than an instance where a single user was in possession of more than one device. This was the result of a practice where managers or supervisors were recorded as the keepers of the devices, which would in turn be assigned to their reports. The underlying process issue will be addressed as part of the Phase 2 activities.
- Usage monitoring. IT has implemented a monthly billing review executed by the IT Purchasing Coordinator, targeting major indicators of misuse (or non-use) and escalating for corrective action.
- Inadequate/insufficient records of mobile device assignments. IT has initiated a reconciliation and documentation effort, to support the implementation of the control set to be developed in Phase 2.

It is the sense of Management that these corrective actions supported by the findings in this report will adequately mitigate the impact to the agency until the Phase 2 activities have been completed.

Phase 2: Implementation of process improvements and controls.

In order to effectively address the core risks highlighted in the report, Management has decided to implement a comprehensive mitigation plan with the following high-level milestones:

- a. Overhaul of the applicable governance. As part of the ongoing implementation of the agency's information security program, an overhaul of the existing policy instruments governing mobile devices (including the policies referenced in this report) is under way. The effort will result in the consolidation of instruments into a single "Acceptable Use of Technology Policy", which will act as the enabler for the implementation of the applicable procedures.

Owner: Senior Manager Information Security
Target completion date: February 1, 2017

- b. Engagement of the Audit Support function from ST Information Security. In order to ensure proper and effective implementation of the mitigation plan, IT has engaged the newly-created Audit Support function from Information Security, to provide subject matter expertise in process engineering and control set development, as well as track the lifecycle of the mitigation plan implementation.

Owner: Senior Manager Information Security
Target completion date: COMPLETE

- c. Review of the agency's mobile enablement strategy. Management will conduct a review of the agency's mobile enablement strategy to ensure that the criteria for issuance of mobile devices and the provision of stipends continue to meet agency needs.

Owner: Chief Information Officer
Target completion date: February 1, 2017

- d. Process development and control set design. A complete process engineering effort will be undertaken, to implement the mobile enablement strategy. Included in this effort are the development of the controls necessary to support the process, and the assignment of control owners and custodians, which will be properly documented.

Owner: Senior Manager Information Security
Target completion date: Q2 2017

- e. Implementation of new process and related controls. The new process and control set developed to implement the agency's mobile enablement strategy will be transitioned into operation. The resulting artifacts will be evaluated, and the process will be added to the scope of the newly-created Compliance function from Information Security, to ensure regular verification of control operations.

Owner: Chief Information Officer
Target completion date: End Q2 2017