




**Lehigh County**  
Pennsylvania

**OFFICE OF THE CONTROLLER**

Mark Pinsley, MBA  
COUNTY CONTROLLER

Nanton John, CFE  
DEPUTY CONTROLLER

**TO:** Final Distribution  
**FROM:** Mark Pinsley, County Controller   
**DATE:** December 18, 2023  
**RE:** Performance Audit of Cellular Devices - Executive Summary

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We have completed our performance audit of cellular devices for the period, January 1, 2023 to June 30, 2023. Our report number 23-31 is attached. We wish to thank the Office of General Services, Cedarbrook Administration, and Information Technology for their cooperation during the audit.

The result of the audit identified the following:

- The County lacks a comprehensive cellular device policy.
- Cellular device management should be strengthened.
- Efficient means should be pursued to provide departments with effective cellular management tools.
- Periodic review for the use of mobile device management software should be performed.

See "*Schedule of Audit Findings and Recommendations*" for further details pertaining to the above areas, and other identified items where controls should be strengthened.

Please feel free to contact me if you have any questions.



**COUNTY OF LEHIGH, PENNSYLVANIA**

**CELLULAR DEVICE AUDIT**

*Performance Audit of Cellular Device  
For the Period January 1, 2023 to June 30, 2023*

AUDIT REPORT NO. 23-31

COUNTY OF LEHIGH, PENNSYLVANIA  
CELLULAR DEVICE AUDIT

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COUNTY OF LEHIGH, PENNSYLVANIA  
CELLULAR DEVICE AUDIT

*Background*

*Cellular Device Administration:*

General Services:

General Services and various non-nursing home departments have a shared responsibility for the administration of cellular devices (e.g.: phones, hotspots, routers, tablets, etc.). These departments utilize the Mobile Device Request application which is located on the County's intranet site. The application serves three purposes: First, the application allows "authorized persons" from a given department to view their cellular devices and service, request new service, upgrade devices, replacement devices, reassign existing device to other staff, report a device as lost or stolen, and to suspend, cancel or resume service for a given mobile number. Second, the application allows General Services to receive and maintain requests being submitted for further processing. Third, the application allows General Services to maintain the inventory of the physical devices and active mobile numbers. Although the application assists with managing of requests, it is still a very manual process to maintain device information and employee changes. There was a total of 720 devices inventoried as assigned on 7/21/2023.

Cedarbrook:

Cedarbrook Administration manages all aspects of cellular devices for both their Allentown and Fountain Hill facilities. This is currently a manual process. A spreadsheet is maintained listing assigned devices and is updated as necessary. As of 7/21/2023 there was a total of 68 devices being managed, of which 32 are shared devices (utilized by multiple employees within a department).



## OFFICE OF THE CONTROLLER

Mark Pinsley, MBA

Nanton John, CFE

COUNTY CONTROLLER

DEPUTY CONTROLLER

Richard Molchany, Director of General Services  
Lehigh County Government Center  
17 South Seventh Street  
Allentown, PA 18101-2400

Jason Cumello, Cedarbrook Director of Administration  
Cedarbrook Senior Care and Rehabilitation  
350 South Cedarbrook Road  
Allentown, PA 18104

We have recently completed a performance audit of the effectiveness of Lehigh County's management over Cellular Devices. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we evaluate and determine that staff performing the audit are independent per the generally accepted government auditing standards for internal auditors. Those standards also 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.

The scope of our detailed audit testing was for the period January 1, 2023 to June 30, 2023. The scope of the audit excluded the evaluation of the cost effectiveness of vendor service plans as those aspects are currently being evaluated by Administration's use of a third-party vendor. Our consideration of internal control was limited to audit testing required to meet our audit objectives and would not necessarily identify all deficiencies in internal control that might be significant or material weaknesses. We considered the concept of accountability and effectiveness for the use of public resources and government authority while assessing audit risk associated with internal controls and incorporated appropriate risk-based testing in our audit.

Our audit also included sufficient and appropriate tests for fraud, waste, and abuse, and we included in our report any material (either quantitatively or qualitatively) instances we noted that are material to the audit objectives, however, our audit procedures would not necessarily identify all instances of fraud, waste and abuse that may be reportable. Any findings of waste, even though not material to the audit objectives, are included in writing and were brought to the attention of those in charge of governance.

Our office performed this audit at this time based on our evaluation of county-wide risk assessment. The cellular device audit objectives included an evaluation of the effectiveness of the county-wide cellular device policy; confirmation that cellular devices are assigned to active employees; validate existence of the cellular devices; review for excessive or little to no usage of cellular devices; evaluate the effectiveness and efficiency of department controls over the management of assigned devices; and evaluate the adequacy of controls over the purchasing, disconnecting and disposal of devices.

Audit criteria and standards included compliance with performance of other similarly structured organizations. Audit standards applied in performing the audit included generally accepted government auditing standards, and Government Auditing Standards issued by the Comptroller General of the United States.

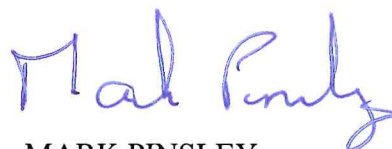
We achieved our objectives by comparing the established criteria and standards to actual practice. Tests included preparing schedules detailing the cost of the cellular device usage, by department, the number of cellular devices currently in use, cellular inventory confirmations, whether approvals/acquisitions and returns/deactivation controls were adequate, if cellular device usage is being actively monitored, and if a county-wide cellular device policy exists or should be enacted.

We believe that the audit evidence obtained by performing the following procedures and analyses provide a reasonable basis for our findings and conclusions based on our audit objective. Our audit included examination of the accounting records, documentation, invoices, observations, discussions with General Services' and Cedarbrook's Administration management, and other county personnel, and such other auditing procedures we considered necessary in the circumstances.

We concluded that, while many of the controls in place for the management of cellular devices are adequate, there are areas which controls should be strengthened. Please refer to the ***Schedule of Audit Findings and Recommendations*** for further information.

If provided, management's response to our audit is included in this report. We did not audit the response and, accordingly, we do not express an opinion on it.

We wish to thank the Office of General Services and Cedarbrook Administrative Staff, especially Jeanine Smolar and Natalia Villamil, for their cooperation during the audit. In addition, we wish to thank the Office of Information Technology for their assistance. This report is intended for the information and use of the Office of General Services, Cedarbrook Administration, and other affected county offices. However, this report is a matter of public record and its distribution is not limited.



MARK PINSLEY  
County Controller

December 15, 2023  
Allentown, Pennsylvania

Audited by: Joseph Buick

Final Distribution:

Phillips Armstrong, County Executive

Scott Clark, Risk Manager

Board of Commissioners

Edward Hozza, Jr., Director of Administration

Michelle Julian, Cedarbrook Administration Asst.

Robert Kennedy, Chief Information Officer, IT

Timothy Reeves, Chief Fiscal Officer

Angela Zemyan, General Services Manager

COUNTY OF LEHIGH, PENNSYLVANIA  
CELLULAR DEVICE AUDIT

*Summary of Cellular Devices Assigned and Associated Costs by Department:  
January 1, 2023 to June 30, 2023*

| <u>Department</u>                | <u>Costs</u>                | <u>Assigned<br/>Devices</u> |
|----------------------------------|-----------------------------|-----------------------------|
| Human Services                   | \$ 66,404.74                | 320                         |
| District Attorney                | \$ 25,161.99                | 106                         |
| Cedarbrook Nursing Homes         | \$ 18,137.40                | 70                          |
| Sheriff                          | \$ 14,219.00                | 64                          |
| Emergency Mgmt./Comm. Center     | \$ 8,880.16                 | 43                          |
| Coroner                          | \$ 7,973.18                 | 21                          |
| Adult Probation                  | \$ 5,977.84                 | 36                          |
| Juvenile Probation               | \$ 5,050.59                 | 44                          |
| Magisterial District Courts      | \$ 4,551.24                 | 21                          |
| Office of Voters Registration    | \$ 2,384.28                 | 9                           |
| Information Technology           | \$ 1,774.77                 | 10                          |
| Cedar View Apartments            | \$ 1,655.08                 | 7                           |
| Office of Parks and Recreation   | \$ 1,562.40                 | 7                           |
| Office of Public Defender        | \$ 1,517.10                 | 6                           |
| General Services                 | \$ 1,360.04                 | 6                           |
| Utility SVC - Bridges & Vehicles | \$ 856.53                   | 8                           |
| Community & Economic Development | \$ 479.61                   | 2                           |
| Community Corrections Center     | \$ 338.88                   | 2                           |
| Maintenance                      | \$ 326.34                   | 2                           |
| Human Resources                  | \$ 258.24                   | 1                           |
| Office of the Jail               | \$ 172.53                   | 2                           |
| Procurement                      | \$ 118.89                   | 1                           |
| <b>Total</b>                     | <b><u>\$ 169,160.83</u></b> | <b><u>788</u></b>           |

*Note: Cedarbrook Nursing Homes - Cedarbrook Administration manages 68 of their devices while General Services manages 2 of Cedarbrook's devices*



COUNTY OF LEHIGH, PENNSYLVANIA  
CELLULAR DEVICE AUDIT

*Schedule of Current Audit Findings and Recommendations*

1. No County-Wide Cellular Device Policy

**Condition #1:** Although recommended in the 2019 Cellular Device Use audit, the County of Lehigh has not instituted a county-wide comprehensive mobile cellular device policy.

In addition, based on inquiry of six of the 27 departments assigned cellular devices, inconsistencies were identified in the following areas:

- The monitoring of employee monthly usage in comparison to job responsibilities.
- Conducting periodic inventories ensuring the accuracy of inventory, and the existence of devices.
- Updating of inventory for terminations/retirements and device reassignments.
- Awareness of the cellular devices assigned to employees who are terminating or retiring.
- How to secure unassigned devices.
- How long a device should be held before suspending service and when to return the device to General Services.
- Who should retain devices for employees on leave.

**Condition #2:** When physically validating the existence of a sample of 79 devices, five were identified as lost/stolen.

The purpose of a mobile cellular device policy is to establish the procedures and protocols for the proper use of mobile devices and their connection to the network. This includes the allowable uses, security, and responsibilities of the management and the employees entrusted with the devices.

**Recommendation:** The Office of General Services and Cedarbrook Administration should work with the Department of Law, Administration, Risk Management and Information Technology to create, distribute, and educate employees on a comprehensive county-wide mobile cellular device policy. The policy should clearly communicate:

- The individual's responsibility for allowable use, security, and reporting. In addition, it should provide the implications/liability for not following the policy.
- Department management's responsibilities to monitor usage, reassess cellular services and device needs, and maintain/validate an accurate inventory.
- Management's oversight of department and user adherence to the policy

In addition, the policy should also include the responsibilities associated with departments that provide cellular devices to non-employees. Consideration should be given to creating a form that clearly states the responsibilities and liabilities of non-employees who are provided cellular devices, that requires acknowledgement (i.e., signature).

**Management's Response: (Richard Molchany)**

- i. I do agree that Lehigh County should have county-wide mobile cellular device policy. I will commit General Services Department commitment to achieve this goal. Specifically, I will have the General Services Operations Manager spearhead the County Policy to create the policy.
- ii. The Operations Manager will reach out and involve the necessary departments to achieve an agreed upon policy.
- iii. The policy will include specific language to ensure system security is maintained throughout the usage of Cellular devices. General Services will evaluate with Information Technology and the system security officer to ensure compliance.
- iv. The policy, once completed, will be incorporated into the Operating Plan, and may need to be approved as a component of the Administration Code.

2. **Cellular Device Management:**

**Condition #1:** Identified 106 devices (approx. 13% of total cellular devices) that were assigned to non-active employees:

- 88 devices were assigned to 24 terminated/retired employees. One retired employee had 54 assigned devices. The identified terminations/retirements ranged from 2015 through 2023.
- 9 devices were assigned to employees on leave
- 7 devices were assigned to employees that changed their names.
- 1 device was assigned to a non-employee.
- 1 device was assigned to a 'blank' 'Requested For' field.

Based on the audit, action was taken on 98 of the 106 identified devices as follows:

- 82 devices were reassigned to active employees;
- 4 devices were identified as lost or stolen;
- 3 devices were previously returned to General Services or given to another department; however, inventory records were not updated;
- 1 device was identified as no longer needed and was returned to General Services;
- 7 devices were updated with employee name changes; and,
- 1 device was identified as damaged and is to be recycled

**Condition #2:** While testing devices assigned to non-active employees, it was identified that a department was holding nine iPads in inventory for more than a year, with no immediate need to redistribute. The department cellular device administrator did not take into consideration the monthly cellular charges incurred on the devices while being held. We were informed that the iPads will be surrendered and re-distributed to another County department.

**Condition #3:** When reviewing the cellular device inventories maintained by the Office of General Services, which utilizes an application on the County's intranet site, the following was observed:

- Numerous devices are assigned to a single employee. Six employees had 15 or more assigned devices.

- Inconsistent employee name structure. Some listed as First Name, Last Name; others listed as Last Name, First Name.
- Incidences noted where names listed in the inventory is different than Personnel system (KEA)
- Numerous incidences of 'blank' fields:
- No reference to a device being assigned to a non-employee (state employee, contractor, agency)
- No reference that the cellular devices are shared
- Location of device not included if not held by assigned employee (e.g., kept in vehicle)

It should be noted that Cedarbrook Administration maintains a manual log of their assigned cellular devices which is susceptible to unknown employee changes.

**Recommendation:** Beyond the implementation and benefits of a county-wide cellular device policy, the following is also recommended:

- Cellular device inventory should be centralized and integrated with the Personnel system (whether current or anticipated future solution). This will provide timely identification of employees who terminate/retire, move between departments, or have name changes.
- In the meantime, The Office of General Services should work with Information Technology to 'clean-up' current inventory data, evaluate the current inventory application to ensure personnel data consistency, ensure proper edits to capture and populate all data fields, and be alerted to name changes. Once complete, evaluate the inclusion of Cedarbrook devices to centralize inventory and utilize data edits.
- Department management need to be periodically reminded to actively maintain their cellular device inventory in a timely manner. In-person training sessions should be considered.
- Numerous cellular devices should not be assigned to one employee, unless they are in possession of the devices. Management and Human Resource may not be aware of county cellular devices that an employee has in their possession when terminated/retired.
- Inventory should be enhanced to identify devices held and utilized by non-employees (e.g., state employee, contractor, agency, etc.), devices that are shared, devices that are being held and not assigned by a department, and location of devices (e.g., Emergency Management Vehicles).

**Management's Response: (Richard Molchany)**

- i. The Cellular Device Policy will include operating plans to manage the device inventory. Our efforts will be to create the forms and documents to ensure accurate inventory and billable expense allocations.
- ii. General Services will evaluate IT support to create an operating system to assist in device control
- iii. General Services will evaluate IT support to work with outside vendors to determine support to objectively review the paid services and make recommendations to eliminate and/or improve operating value.

### 3. Cellular Devices Not Using Cellular Services:

**Condition:** When reviewing two monthly invoices from two of our cellular service providers, the following number of devices did not have any cellular activity in both selected months:

Service provider #1: Selected invoices – January and April (paid in February and May)

- 44 devices were identified that did not have any cellular activity in either month. Cost for both months was approx. \$1.8k.

Service provider #2: Selected invoices – March and May (paid in April and June)

- 72 devices were identified that did not have any cellular activity in either month. Cost for both months was approx. \$4.5k.

#### **Recommendation:**

- Consideration should be given to communicate department specific responsibilities with regards to the needs and monitoring of cellular services for devices within a county-wide cellular device policy.
- Recommend to contact service vendors to request enhance reporting options. Determine whether monthly reports could be received to provide assistance to department management to efficiently review employee usage. This could include the identification of devices that have no cellular service in the month, or devices that exceed established usage thresholds (minutes or cellular data usage).

#### **Management's Response: (Richard Molchany)**

- i. Although I fully understand that devices may be inventoried by the department as they recruit and hire staff. I do believe that our Policy will incorporate departmental update requirements that identify their departmental allocations to staff. In the event staff isn't identified, and the device is in an unallocated inventory, the department will be responsible to provide that update to the General Services department.
- ii. Then, when the device is allocated to a specific employee, the department will provide General Services with the update.

### 4. Mobile Device Manager Software:

**Condition:** A recommendation in the 2019 Cellular Device Use audit included the assessment of a cellular (mobile) device management software solution to optimize the effectiveness of cellular device management.

Examples of mobile device manager software benefits include:

- Cost effective solution for managing devices
- Reduces workload on administrators thereby improving productivity while ensuring data security
- Eliminates maintenance and support expenses associated with manual device management

- Ensures automated device enrollment and application installation with zero dependency on the users
- Ensures only the IT approved applications are present on the device

Information Technology management informed us that current cell phones used by county personnel can only access county email accounts. Due to this, it is their opinion that moving cell phones onto a mobile device manager software solution is not currently necessary. Tablets, on the other hand, are being used to access various software and are currently being migrated to the county's mobile device management software.

**Recommendation:** Although cellular phones are only accessing the County's email system, in many offices/departments, emails may contain personal identifiable information that must be protected. The Office of General Services and Cedarbrook Administration should work with Information Technology and Risk Management to periodically evaluate the use and risks of cellular devices' potential impact to the county's network, and to determine whether devices should be integrated onto the county's mobile device management software.

**Management's Response: (Richard Molchany)**

- i. General Services and Information Technology did evaluate a mobile device software system; however, we couldn't identify a value worth pursuing.
- ii. General Services will work with Information Technology to evaluate system solutions.

COUNTY OF LEHIGH, PENNSYLVANIA  
CELLULAR DEVICE USE AUDIT

*Schedule of Prior Audit Findings and Recommendations*  
(Report #19-38 dated December 31, 2019)

1. No Comprehensive Cellular Device Policies or Guidelines In Use

**Condition:** The County of Lehigh lacks robust and comprehensive cellular device policies or guidelines.

**Recommendation:** The Office of General Services should evaluate the need for comprehensive and robust cellular device policies or guidelines, or a cellular device stipend policy to reimburse employees for the use of their personal cellular devices for business purposes, by December 31, 2020. Cellular device policies and guidelines should define:

- That the Office of General Services will be responsible to enforce, monitor, and update cellular device policies or guidelines;
- That cellular device assignments should only be made after a departmental evaluation of the need for cellular devices is completed;
- How cellular device assignments should be recorded and tracked;
- How responsibility for lost or damaged cellular devices is assigned;
- How cellular device transfers or deactivations should be recorded and tracked;
- How personal talk, text, and data usage will be monitored and;
- How the disposition of cellular device assets should be handled.

The Department of General Services should also evaluate the cost benefit of obtaining a cellular device management software suite which can assist in optimizing the effectiveness of cellular device policies or guidelines and the functionality and security of cellular devices used within the organization.

**Current Status:**

- A county-wide comprehensive cellular device policy has not been created. See Finding #1 on page 6 of this report.
- Information Technology is beginning to migrate tablets on to their cellular (mobile) device management software. See Finding #4 on page 10 of this report.