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**New York State Office of the State Comptroller**  
Thomas P. DiNapoli

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Division of State Government Accountability

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# **Disposal of Electronic Devices**

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## **Division of Housing and Community Renewal**

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Report 2012-S-101

June 2013

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# Executive Summary

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## Purpose

To determine if surplus electronic devices approved for sale by New York State Division of Housing and Community Renewal (Division) are permanently cleaned of all data, including personal, private and sensitive information (PPSI). The audit covers the period of June 1, 2012 through March 13, 2013.

## Background

New York State Policy requires all State entities to establish formal procedures to address the risk that personal, private or sensitive information may be improperly disclosed. One way information can be compromised is through careless disposal of electronic devices. Agencies may dispose of electronic devices on their own; however the Office of General Services (OGS) provides this service for many State agencies, including the Division. Agencies are required to remove all information prior to disposal and, if sending them to OGS, to certify in writing that the devices no longer contain any retrievable information.

## Key Findings

- We tested a total of 752 electronic devices at both the Albany and the New York City offices. In Albany, two devices still contained general agency information and personal pictures, but none contained PPSI. In New York City, 13 hard drives showed indications that they still contained data. We did not forensically examine their content due to technical issues that made it impractical to apply modern forensic software tools against their older technology. Instead, we returned these drives to Division staff so they could be properly wiped of data.
- We were unable to locate 17 computer hard drives that had already been removed from computers and were scheduled for shredding. The Division has no record of what information may have been on these missing drives and it is unclear whether they have been stolen, reused or simply misplaced.
- We also could not locate 18 servers listed on the inventory records. Subsequently, the Division provided documentation showing it had sold 24 servers about 18 months earlier. However, the documentation did not include asset numbers and, therefore, provided only limited assurance that these were the same devices still listed on the inventory records.
- We also could not locate eight other devices listed on inventory records and found one device recorded as surplus that was actually still in use.

## Key Recommendations

- Implement the Office of General Services' recently released policy and procedure for removing memory components from surplus electronic devices.
- Reinforce policies and procedures over the asset management system so that accurate records are maintained and assets are safeguarded, including periodic physical inventories to ensure the accuracy of records and assets are safeguarded.

## Other Related Audits/Reports of Interest

[Office of General Services: Disposal of Electronic Devices \(2012-S-4\)](#)

**State of New York  
Office of the State Comptroller**

**Division of State Government Accountability**

June 25, 2013

Darryl C. Towns  
Commissioner/CEO  
New York State Homes and Community Renewal  
Hampton Plaza  
38-40 State Street  
Albany, NY 12207

Dear Commissioner Towns:

The Office of the State Comptroller is committed to helping State agencies, public authorities and local government agencies manage government resources efficiently and effectively and, by so doing, providing accountability for tax dollars spent to support government operations. The Comptroller oversees the fiscal affairs of State agencies, public authorities and local government agencies, as well as their compliance with relevant statutes and their observance of good business practices. This fiscal oversight is accomplished, in part, through our audits, which identify opportunities for improving operations. Audits can also identify strategies for reducing costs and strengthening controls that are intended to safeguard assets.

Following is a report of our audit at the Division of Housing and Community Renewal entitled *Disposal of Electronic Devices*. This audit was performed according to the State Comptroller's authority under Article V, Section 1 of the State Constitution and Article II, Section 8 of the State Finance Law.

This audit's results and recommendations are resources for you to use in effectively managing your operations and in meeting the expectations of taxpayers. If you have any questions about this report, please feel free to contact us.

Respectfully submitted,

*Office of the State Comptroller  
Division of State Government Accountability*

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This report is also available on our website at: [www.osc.state.ny.us](http://www.osc.state.ny.us)

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## Background

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In today's electronic age, unauthorized disclosure of personal, private and sensitive information (PPSI) has become an extremely high-risk area. Various laws and regulations, including the State Technology Law, impose strict requirements on organizations to properly safeguard the information they collect.

In New York, the Office of Cyber Security Policy requires all State entities to establish formal processes to address the risk that PPSI may be improperly disclosed through careless disposal or re-use of electronic devices. Personal computers, tablets and smart phones pose a particular concern because they can easily be returned to the manufacturer or sold to the public while still containing personal identifiable information. The policy therefore requires that all electronic media (i.e. hard drives and other memory components) in these devices be securely overwritten or physically destroyed to prevent the unauthorized disclosure of sensitive information. This policy also requires that all laptops containing, or with access to, State information must be encrypted.

Agencies may dispose of electronic devices on their own. However, the Office of General Services (OGS) provides this service for many State agencies, including the Division. OGS does not always take physical custody of the equipment, but instead arranges for the sale or transfer directly by the owner agency. OGS does not assume responsibility for removing information from electronic devices or testing devices to ensure information has been removed. Instead, it requires each agency to remove all information and to certify, in writing, that they have done so prior to authorizing an item for disposal. Once an item is ready for surplus, OGS will offer electronic devices for reuse to State agencies and public authorities, then to municipalities and then to school districts. If the items are not transferred to these entities, OGS will make them available for sale to the public.

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# Audit Findings and Recommendations

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## Removal of Information

During August and October 2012, we tested a total of 752 surplus electronic devices with electronic storage capacity; 420 in Albany and 332 in New York City. We did this either by attaching the hard drive to specific hardware to test for any remaining data or by booting up hand-held devices like blackberries and palm pilots to check for information. We also physically examined certain of these devices that the Division deemed to be of no value to ensure that hard drives had already been physically removed in compliance with its policy.

Of the 420 devices tested in Albany, we also conducted forensic testing on four hard drives that we found had not been wiped. Two of those drives contained general agency information and personal pictures, but none contained PPSI. Of the 332 hard drives we tested from the New York City offices, 13 showed indications that they still held some form of data. We removed the hard drives from these computers, but did not forensically examine their content due to technical issues that made it impractical to apply modern forensic software tools against the older technology that was available for surplus in New York City. Instead, we returned these units to Division staff for proper wiping and disposal.

Included in the 752 devices we tested were 188 personal computers that the Division had classified as having no value and had scheduled to be discarded rather than sold. The Division's policy for personal computers scheduled to be discarded is to have their hard drives removed and shredded. We examined these 188 personal computers and found all hard drives had been removed. Because none of these hard drives had been wiped since they were destined to be shredded, we also tested to ensure that they were all properly accounted for and safeguarded pending destruction. We were unable to locate 17 of these hard drives. The Division has no record of what information may have been on the missing drives and it is unclear whether they have been stolen, reused or simply misplaced.

Our review of the Division's policies and procedures for preparing surplus equipment found them to be appropriate, but dependent on staff compliance. As our tests show, there is always a risk that human errors may occur. As a result, removing and destroying a hard drive appears to be the most reliable way of limiting the risk of data being improperly disclosed.

## Asset Management Records

We used internal inventory records from the Division's asset management system to locate electronic devices for testing and found several contained inaccuracies. For instance, we could not locate 18 servers listed on the inventory records. Subsequently, the Division provided documentation indicating that they sold 24 servers about 18 months earlier. However, the documentation did not include asset tag numbers for the sold servers and therefore provided only limited assurance that the sold assets are the same devices still listed on the inventory records.

We also could not locate eight other electronic devices listed on the inventory records; six in Albany and two in New York City. Two devices that we did test, both with worn assets tags, were not listed on the inventory records. The Division believes these two devices are actually recorded on the inventory records, but under different but similar asset tag numbers. Because the items have been disposed, we could not reconcile this difference. We also found a server that was listed on the inventory record as surplus that was actually currently in use. Discrepancies like these make it difficult for management to ensure that all its information assets are properly accounted for and protected.

The Division's policy requires annual physical inventories of all assets, but we found these counts are rarely done. Division officials stated that they simply do not have the staff available to count every piece of equipment, even on an annual basis. While we understand the difficulty, we believe alternative techniques (such as testing portions of the inventory record on a cyclical schedule or electronic tagging) can be substituted to ensure that inventory records match assets on hand and assets are safeguarded.

## Recommendations

1. Implement the Office of General Services' recently released policy and procedure for removing the electronic storage components from surplus electronic devices.
2. Reinforce policies and procedures over the asset management system, including requirements for periodic physical inventories, so accurate records are maintained and assets are safeguarded.

## Audit Scope and Methodology

The objective of our audit was to determine if electronic devices being surplus are permanently cleaned of all data, which may include personal, private and sensitive information, and whether State entities have developed formal processes to minimize the risk of disclosure of information when disposing of devices storing this type of information. The audit covers the period of June 1, 2012 through March 13, 2013.

To accomplish our audit objectives, we reviewed relevant industry standards, State laws, agency policies and procedures, and interviewed Division officials. We physically examined surplus electronic devices at both the Albany and New York City offices. Using forensic software, we examined the contents of electronic media contained in these devices while taking steps to ensure that the actual data was unaffected by our testing.

We conducted our performance audit in accordance with generally accepted government auditing standards. 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.

In addition to being the State Auditor, the Comptroller performs certain other constitutionally and statutorily mandated duties as the chief fiscal officer of New York State. These include operating the State's accounting system; preparing the State's financial statements; and approving State contracts, refunds, and other payments. In addition, the Comptroller appoints members to certain boards, commissions and public authorities, some of whom have minority voting rights. These duties may be considered management functions for purposes of evaluating organizational independence under generally accepted government auditing standards. In our opinion, these functions do not affect our ability to conduct independent audits of program performance.

## Authority

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This audit was done according to the State Comptroller's authority as set forth in Article V, Section 1 of the State Constitution and Article II, Section 8 of the State Finance Law.

## Reporting Requirements

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A draft copy of this report was provided to the Division officials for their review and comment. Their comments, which were in agreement with our findings, were considered in preparing this report and are attached in their entirety at the end of this report.

Within 90 days of the final release of this report, as required by Section 170 of the Executive Law, the Commissioner of New York State Homes and Community Renewal shall report to the Governor, the State Comptroller, and the leaders of the Legislature and fiscal committees, advising what steps were taken to implement the recommendations contained herein, and where recommendations were not implemented, the reasons why.



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## Contributors to This Report

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**John Buyce**, Audit Director  
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**Bob Mainello**, Audit Supervisor  
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## Division of State Government Accountability

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### Vision

A team of accountability experts respected for providing information that decision makers value.

### Mission

To improve government operations by conducting independent audits, reviews and evaluations of New York State and New York City taxpayer financed programs.

# Agency Comments



ANDREW M. CUOMO  
GOVERNOR

DARRYL C. TOWNS  
COMMISSIONER/CEO

June 10, 2013

Mr. John F. Buyce, CPA  
Audit Director  
Office of the State Comptroller  
Division of State Government Accountability  
110 State Street, 11<sup>th</sup> Floor  
Albany, New York, 12236

Dear Mr. Buyce:

Thank you for the opportunity to review draft report 2012-S-101 Disposal of Electronic Devices. We are in agreement with all of the recommendations contained in the report and offer our detailed responses below.

Very truly yours,

A handwritten signature in black ink, appearing to read "D.C. Towns". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Darryl C. Towns  
Commissioner/CEO

cc: Sharon Devine  
Gary Connor  
Tom Lukacs, Division of Budget

38-40 State Street, Albany, NY 12207

[nyshcr.org](http://nyshcr.org)

**NYS Division of Housing and Community Renewal  
Response to Draft Audit Report 2012-S-101**

**Recommendation 1:**

Implement the Office of General Services' recently released policy and procedure for removing the electronic storage components from surplus electronic devices.

**HCR Response:**

HCR has implemented the Office of General Services' recently released policy and procedure for removing the electronic storage components from surplus electronic devices. Removed electronic storage components will be destroyed by an OGS contract certified electronics disposal vendor following industry standard practices designed to ensure complete shredding and destruction of data including any personal, private, or government information that may be contained on the removed electronic components.

**Recommendation 2:**

Reinforce policies and procedures over the asset management system, including requirements for periodic physical inventories, so accurate records are maintained and assets safeguarded.

**HCR Response**

HCR will re-enforce the policies and procedures over the asset management system, including requirements for periodic physical inventories, so that accurate records are maintained and assets are safeguarded. Specifically the agency will be reviewing its inventory processes to ensure that all employees involved in maintaining electronic equipment inventory records at any stage of an electronic asset's lifecycle have knowledge of and are following the correct inventory procedures. To ensure this is happening periodic sampling of inventory records will be performed at agency offices to verify that the physical location and identifying serial numbers match the information contained on the inventory record. The Agency will maintain a separation of duties in performing this verification by having employees other than those who updated the inventory record perform the inventory verification. The Office of Internal Audit will be one of the parties providing comment and recommendation.