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**2010 CENSUS PLANNING MEMORANDA SERIES**

**No. 192**

MEMORANDUM FOR      The Distribution List

From:                      Arnold Jackson *[signed]*  
                                 Acting Chief, Decennial Management Division

Subject:                    2010 Census Personally Identifiable Information Assessment Report

Attached is the 2010 Census Personally Identifiable (PII) Information Assessment Report. The Quality Process for the 2010 Census Test Evaluations, Experiments, and Assessments was applied to the methodology development and review process. The report is sound and appropriate for completeness and accuracy.

If you have questions about this report, please contact Doug Lee at (301) 763-8707.

Attachment

April 24, 2012

## **2010 Census Personally Identifiable Information Assessment Report**

U.S. Census Bureau standards and quality process procedures were applied throughout the creation of this report.

### **Final Report**

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## Executive Summary

The 2010 Census is the first decennial census requiring a full accounting of Personally Identifiable Information and Non-Personally Identifiable Information Title-13 data losses. This requirement stems from the Office of Management and Budget, specifically Memorandum M-06-19 *Reporting Incidents Involving Personally Identifiable Information and Incorporating the Cost for Security in Agency Information Technology Investments*. The team that created the system to collect the necessary information had limited historical data for estimating losses and workloads and limited time for creating an automated system in support of the 2010 Census. This assessment will provide information to assist 2020 Census planning for estimating workloads of number of losses in order to create a process and system for reporting and investigating Personally Identifiable Information and Non-Personally Identifiable Information data losses. This document will also provide guidance for developing a new computerized system to document and track protected data losses during the 2020 Census.

This report has four broad categories of questions:

1. How well was the FootPrints system application designed and, once deployed, was it easily used by staff?
2. What were the numbers and characteristics of the PII incidents reported?
3. Were there any issues related to the PII reporting processes and operations?
4. Was the training that was provided adequate and well-engaged?

The first question asks whether requirements were delivered with enough time to create the system, was the system delivered on schedule and did it meet the sponsor's requirements, were there adequate licenses for Footprints (the system used for Personally Identifiable Information incident management), was there sufficient role-based access provided in the system, were changes quickly and easily implemented, and other system-specific questions.

The second question is about metrics, and includes looking at the percentage of electronic and paper forms, the impact of miscoded forms, how many individuals were needed to perform investigations, and other resource/expectation specific questions. Results include showing that the Personally Identifiable Information Management System did permit us to track all incidents as they occurred, and use the data to evaluate how protected data losses were handled during the operation.

The third question includes procedural questions, that is, how the reporting of incidents was handled, any burdens associated with tracking lost or stolen forms, number of people required to investigate incidents, issues associated with reporting form losses, and costs of mailings and credit monitoring. Results include the difficulties in assessing the large number of different types of paper forms resulting in the analyst needing additional time to investigate these incidents by sending questions back and forth about the information on the forms.

Questions about training are covered by the fourth question and include how much training was provided, various types of training for users and whether the training was adequate, were reports used as intended, processes for closing incidents, updating users within the system, call center



data capture and Field Division processes for investigation, and questions regarding awareness of other area's processes and other decennial census processes. Results include the Personally Identifiable Information Management System requirement for better documentation so training of the staff can easily include all the functionality of the system.

Core findings include the following:

- Losses of both paper and equipment were very much lower than estimated.
- For the 2020 Census, an earlier start will relieve many of the system limitations described herein.
- Use of an electronic application and hiring process would resolve most of the “high risk” paper losses experienced in the 2010 Census.
- The use of Global Positioning System tracking in electronic equipment will reduce equipment losses in the 2020 Census.
- The need to fund full-time investigators “on the ground” in the Regional Census Centers.

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# 1. Introduction

## 1.1 Scope

This report is an assessment of the reporting and resolution of lost, missing, or stolen Personally Identifiable Information (PII) and Non-PII Title 13 information during the 2010 Census. This assessment documents the estimated and actual workloads, the estimated and actual staffing needed to implement the Personally Identifiable Information Incident Management System (PIMS), the estimated budget and actual costs, and lessons learned. An assessment of the PII system is needed to help improve on the current system and to prepare for the 2020 Census.

The intent of this assessment is to document what happened during the 2010 Census operations in using the PIMS and the reporting, updating, assessment, coordination, and resolution of protected data incidents. This assessment will aid 2020 Census planners in estimating workload, costs, training needs, and processes. Additionally, these results may supply additional information for planners when assessing technology enhancements and types of forms (i.e., electronic and paper) to use for the 2020 Census and the Centralized Automated Incident Management System (CAIMS) currently under development.

Data losses may affect individuals whose PII is exposed. It also creates negative publicity or animosity towards the U.S. Census Bureau. This assessment will help 2020 Census planners mitigate the potential for data losses and work to maintain the Census Bureau's positive reputation during the next decennial census. Additionally, the federal government and the Census Bureau are committed to mitigating risks to individuals who provide their information to the government as stated in the Office of Management and Budget (OMB) Memorandum 06-19 *Reporting Incidents Involving Personally Identifiable Information and Incorporating the Cost of Security in Agency Information Technology Investments* and OMB Memorandum 07-16 *Safeguarding Against and Responding to the Breach of Personally Identifiable information*. Understanding the types of losses that occurred during the 2010 Census will help planners understand weaknesses and how to mitigate those weaknesses.

### Regulations and Guidelines Governing Protected Data

In OMB Memorandum-06-19 (July 12, 2006), the term "Personally Identifiable Information" means "any information about an individual maintained by an agency, including, but not limited to, education, financial transactions, medical history, and criminal or employment history and information which can be used to distinguish or trace an individual's identity, such as their name, social security number, date and place of birth, mother's maiden name, biometric records, etc., including any other personal information which is linked or can be linked to an individual."

OMB Memorandum M-06-16, identified the need to improve security regarding the use of external and removable devices/media (e.g., flash drives, memory keys, thumb drives, floppy disks, CDs, DVDs) and laptop computers to store PII. This directive was initiated Federal Government-wide, including the U.S. Department of Commerce (DOC) and the Census Bureau.

OMB Memorandum 07-16, re-emphasizes the responsibilities under existing law for federal agencies to “establish appropriate administrative, technical, and physical safeguards to insure the security and confidentiality of records and to protect against any anticipated threats or hazards to their security or integrity which could result in substantial harm, embarrassment, inconvenience, or unfairness to any individual on whom information is maintained.” Further, OMB requires each agency to develop a breach notification policy and plan. Finally, OMB requires agencies to establish a core management team responsible for responding to the breach of PII.

Data Stewardship Policy DS022A: *Procedures for Reporting and Responding to a Data Breach for the 2010 Census* was approved by the Data Stewardship Executive Committee (DSEP) for the reporting and resolution of all incidents related to 2010 Census activities, including those that occur at both Census Bureau and non-Census Bureau facilities. These procedures are also in accordance with the Department of Commerce Breach Notification Response Plan dated September 28, 2007. The procedures state that all actual and suspected breaches occurring during the course of 2010 Census operations must be reported by employees/contractors within one hour of incident discovery to the Department of Commerce Computer Incident Response Team (DOC-CIRT). Non-decennial census incidents are also required to be reported within one hour to the Bureau of the Census Computer Incident Response Team (BOC CIRT) (see Appendix A).

The Privacy Coordination Team (PCT) in the Office of the Chief Privacy Officer (CPO), and the Field Division PII and Security Staff in Field Division were created for the purpose of investigating and reporting lost/missing/stolen incidents of PII and Title 13 data during the 2010 Census. Incidents typically occurred during the field collection and recruiting process and during the close out of Local Census Offices (LCOs) when forms and materials were shipped back to the Regional Census Centers (RCCs) or the National Processing Center (NPC). Incidents also occurred when equipment was lost/missing/stolen from individuals or discovered during inventory control. Although not all equipment contained PII or Title 13 data, these incidents were also reported for accountability purposes.

The Privacy Office (PO) provided an overview of all losses and offered credit monitoring by letter to those affected by a potential loss of “High Risk” information.<sup>1</sup> The Information Technology (IT) Staff provided security for IT security breaches. These breaches were reported to 2010 Census Managers<sup>2</sup>, the DOC, Office of the Inspector General, and the OMB on a daily, monthly, and yearly basis as necessary. Incidents reported by Field Staff was provided to the Public Information Office when it related to the media, Safety and Security Offices when related to safety or security issues, and to the Administrative and Customer Services Division (ACSD) Automated Property Management System when property was lost, missing, stolen or compromised.

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<sup>1</sup> “High Risk” indicates laptops, handheld computers, desktop computers, servers, and paper forms with employee’s social security number and/or bank routing number.

<sup>2</sup> These included the Director, Deputy Director, Associate Director for Field Operations, Chief Privacy Officer, Chief of the IT Security Office, and Chief of Field Division.

The Field PII and Security Staff oversaw the development of the RCCs and LCOs, Business Recovery Plans (BRP), and the Employee Notification System (ENS). The BRP established procedures to ensure the continuation of Census Bureau mission critical activities or mission critical support activities conducted in the RCCs/LCOs—including steps for the protection of PII--and ENS information. The ENS is an automated web-based system that allowed Headquarters (HQ) and Field Offices to reach staff in the event of an emergency. It was used during the 2010 Census at the request of the Commerce Under Secretary to remind each field employee of the importance of protecting PII.

The PCT was created to assess and determine final resolution to all incidents of lost PII and Title 13 information. In addition, this included determining the possibility of a violation of the Census Bureau's Privacy Policy, as well as assessing the impact on the agency and the individual. When an incident resulted in a potential breach, the PCT sent a notification letter and offered credit monitoring to the affected individual. These procedures are in accordance with the established Data Stewardship Policy, DS022A Procedures for Reporting and Responding to a Data Breach for the 2010 Census.

The Telephone Center Coordination Office of NPC programmed interactive screens so that telephone center staff could record reports of losses from field employees.

## 1.2 Federal Protective Service (FPS)

For the 2010 Census, a Memorandum of Understanding (MOU) was signed between the Census Bureau and the Federal Protective Service (FPS). The FPS agreed to assist the Census Bureau in the resolution of cases involving lost/missing/stolen PII equipment. The Philadelphia FPS regional office took the lead role of coordinating investigations and recovery efforts with other FPS regional offices (11 nation-wide). The Philadelphia FPS regional office worked with other regional FPS offices to ensure that they had a clear understanding of census operations and the size of its workforce. The FPS was particularly helpful during the Address Canvassing operation with the recovery of lost, missing, or stolen handheld computers (HHCs). The Philadelphia FPS Regional Office held teleconferences and provided the other offices with valuable information concerning census operations and equipment. They coordinated and distributed contact information for each FPS regional office. The Census Bureau even used the FPS name on "demand letters" that were sent to employees who had not returned census equipment after their jobs ended. The demand letters seemed to encourage the return of equipment. The FPS played a key role in the return of stolen HHCs and laptops. The MOU helped ensure that of the 140,000<sup>3</sup> handheld computers (HHC) only .06 percent<sup>4</sup> remained unaccounted for at the end of the census.

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<sup>3</sup> "Estimated Equipment Losses," Field Division Excel Spreadsheet.

<sup>4</sup> "FY 09 Equipment Final Statistics," Field Division Excel Spreadsheet.

### 1.3 Intended Audience

The intended audiences for this document are:

- Program Managers;
- Stakeholders;
- Staff responsible for planning the 2020 Census; and
- Project Managers responsible for creating and modifying the Centralized Automated Incident System.

## 2. Background

The Census Bureau is the premier source of information about the nation's people and the economy. This information shapes important policy decisions that help improve the nation's social and economic conditions. The Census Bureau's mission is built around large-scale surveys and censuses. Activities involve survey and questionnaire design, geographic infrastructure updates, data collection, processing, and dissemination. Research and data analysis improve processes from data collection through dissemination.

OMB, per Memorandum M-06-19 *Reporting Incidents Involving PII and Incorporating the Cost for Security in Agency Information Technology Investments*, requires agencies to report any actual or potential loss of PII within one hour of discovering the incident to the United States Computer Emergency Readiness Team (US CERT), any actual or potential loss of PII within one hour of discovering the incident.

The PIMS system was developed to support the reporting, updating, assessment, coordination and resolution of all PII incidents that occurred during the 2010 Census operations.

The context in which the PIMS system functioned is summarized in the following paragraphs. These provide an overall description of the necessary processes for reporting, updating, assessing, coordinating, and resolving PII incidents that occurred during the 2010 Census operations.

### 2.1 Initial Incident Reporting

A census worker who believed they had lost PII called the 2010 Census PII Incident Reporting toll-free number. The call was taken by an operator who proceeded by asking questions about the incident and recording the answers in the system. The questions were scripted and displayed to the operator. Where possible, answer categories were displayed as radio buttons or drop-down lists. The operator proceeded through the screens as the caller provided additional details about the incident in response to the operator's questions. In some instances, navigation from one screen to another was automatic as a function of specific answers to previous screens. In other cases, the operator could freely navigate among screens, moving forward and backward as needed. When the call was completed, the operator submitted the report to the system. The system prompted the operator to confirm the submission which provided the operator an opportunity to review the report prior to submitting.

The system automatically took certain actions based on the information about the incident. If the incident was reportable to US-CERT, the appropriately formatted message was composed and sent to US-CERT, with copies to the BOC CIRT) and the DOC CIRT. If the incident was not reportable to US-CERT, it was reported to BOC CIRT with a copy to DOC CIRT. The PIMS also created and distributed summary reports and alert messages to various stakeholders.

## 2.2 Updating Incident Reporting

A person with additional information called the 2010 Census toll-free number for reporting PII incidents. If the operator determined that a call was about an existing case, they would access the existing incident case and ask what additional information the caller could provide. The operator navigated to the appropriate screen and either entered or updated information about the case. If the update was in a field with radio buttons or drop-down lists, the change was made, but the system recorded the field name, change, date and time, and operator ID in an audit/transaction file. For text fields such as those used for describing what happened in free form narrative text, the previous entry could not be changed, although it was visible to the operator. An additional text block was appended to the field with new and updated information. Until the updated report was submitted, the text was malleable; the system also inserted the date and time automatically. Some key fields such as the case number, time of the initial report, name of the initial caller, and similar system assigned fields were not changeable, although they were visible to the operator. When the call was completed, the operator submitted the updated report to the system. The system prompted the operator to confirm the submission which provided the operator an opportunity to review the report prior to submission.

The system then automatically took appropriate action as determined by the information about the incident. If the incident was reportable to US-CERT, the appropriately formatted updated message was composed and sent to US-CERT, with copies to BOC CIRT and DOC CIRT. If the incident was not reportable to US-CERT, the updated report was sent to BOC CIRT with a copy to DOC CIRT.

The system also would automatically take certain actions based on elapsed time including automated incident assessment. It would issue periodic summary reports to the PO and to the managers in the RCCs and LCOs.

## 2.3 Automated Incident Assessment

The Decennial Management Division (DMD) and Field Division (FLD) jointly developed the original expected call volume. The original expected call volume for lost, missing, stolen paper, electronic hardware, and/or data activity was 65,550 from January 2009 through December 2009; 822,935 from January 2010 through December 2010; and 33,966 from January 2011 through September 2011.<sup>5</sup> With the expected volume of incidents, it would be impossible to assess and remediate the individual cases manually. Therefore, the system had the capability to assess each incident as being HIGH, MEDIUM or LOW, based on the information that was recorded on the incident report and on the automated assessment criteria provided by the Census Bureau. “Low

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<sup>5</sup> Weekly Telephone Center Coordination Office reports.

Risk” events were automatically dropped from individual investigation requirements after three days so staff could focus on investigating high risk events.

The high-level specifications for the system were developed in 2008 by a team that included representatives from DMD, Information Technology Support Office (ITSO), FLD, National Processing Center’s Telephone Center Coordination Office (TCCO), Office of Analysis and Executive Support (OAES), and the PO. The initial specification sessions were facilitated by a contractor from the MITRE Corporation. The contractor created and updated the flow diagrams and narratives. All system documents were finalized by the MITRE Corporation.

TCCO created the system screen specifications, tested the telephone center system for accepting and entering incoming call data, and created the training package for the telephone center staff, as well as testing the complete PIMS system during and after development.

#### 2.4 PII Incident Coordination

Due to timing restraints, contracting for a custom-designed system was determined to be impossible, so the Numara FootPrints system (already utilized in-house by ITSO) supported the reporting, updating, assessment, coordination and resolution of PII and Title 13 incidents during the 2010 Census operations. It was the software on which the PIMS was built. A PII incident occurred when the Census Bureau lost an artifact, whether paper or electronic, which had PII on it. The Census Bureau CPO had the overall responsibility for managing the final resolution of incidents resulting from the 2010 Census operations.

The PIMS also created and distributed summary reports to the Associate Director for Field Operations, Privacy Office, the Field Division PII and Security Office, and to the managers in the RCCs, as well as to the PCT. The PIMS had the capability to automatically assess and assign a rating to each incident as soon as it was reported or updated. The rating was based on the information recorded about the incident and on the automated assessment criteria. Once the automated assessment was done, the PCT reviewed the incident, updated the incident, and initiated the necessary actions for “high” and “medium” events.

The PCT in the PO was established to coordinate the final resolution of PII incidents. This included the manual process that was in place to handle exceptional cases that did not fit in with the automated process. A large part of the effort was to work with other units within the Census Bureau to get information missing in the incident record. The PCT used the PIMS to update the incident records, and the system automatically took the appropriate action, including automated incident assessment, based on the information about the incident. The PCT used the PIMS system to track the progress of coordination efforts on one or more incident cases. The PCT merged individual incident cases if later it was determined that they were in fact a single incident. The PCT worked primarily with the Field Division to ensure that incident cases were closed out as expeditiously as possible. The team also worked with the CPO, ITSO, and DMD, as necessary.

The Field PII staff investigated decennial census incidents and worked with managers in each of the 12 RCCs, who in turn followed up with employees and their supervisors in the LCO where



the incident occurred. Investigation, especially of equipment or high-risk losses, began as soon as PIMS notifications were automatically distributed by email to FLD and PCT. Through an agreement with the FPS, equipment losses also were reported by the RCCs to the appropriate FPS regional office to assist in stolen equipment recovery.

The PCT was responsible for resolving all incidents of lost, missing, stolen, or compromised PII and Title 13 information. This included determining any violation of the Census Bureau Privacy Policy, as well as any potential impact on the agency and the individual.

The ITSO turned over authority to investigate and close incidents on the HHCs to the Field PII Staff.

Typically, not all information about an incident was available at the time of the initial report. Call center operators instructed callers to call the 2010 Census PII Incident Reporting Line back with updated information such as police reports, hardware tracking, and Federal Express tracking numbers.

### **3. Methodology**

#### **3.1 Objective**

To accomplish the objective of this assessment, data related to PII and Title 13 incidents were extracted from the FootPrints database. The data were analyzed and used to answer questions pertaining to 2010 Census operations. Other sources, such as budget and actual data from FMRs, call center data as captured by TCCO, and debriefing data from 2010 Census field managers and all incidents analysts, were utilized.

The major topics listed below will address system issues and development, metrics, procedures, and training.

#### **3.2 Questions to be Answered**

The team seeks to answer four broad questions:

1. How well was the FootPrints system application designed and, once deployed, was it easily used by staff?
2. What were the numbers and characteristics of the PII incidents reported?
3. Were there any issues related to the PII reporting processes and operations?
4. Was the training that was provided adequate and well-engaged?

The team used 51 more detailed questions to answer the four over-arching questions. Each of the 51 questions will be discussed in detail in Section 5. Results.

### **4. Limitations**

January 1, 2009, we began collecting the data used for analysis. The data were collected from the beginning of census operations through the last operation in the field, Coverage

Measurement. All field operations ended with Coverage Measurement on June 30, 2011. However, FLD staff continued to record incidents because the RCCs were not closed until September 30, 2011. FLD decided to stop incorporating calls after June 30, 2011, into the extract file used for the study plan. This cutoff date was used because all field operations had ended and to allow sufficient time for the data to be verified and analyzed before it was added to the study plan.

Additionally, some statistics that may be relevant or pertinent to a question may not be reported in this report. This is due to the sensitive nature of some of the data and subsequent statistics.

## 5. Results

The following questions include the four categories as presented in the study plan, and in Section 3.2 above, followed by data that answer each question.

5.1 How well was the FootPrints system application designed and, once deployed, was it easily used by staff?

5.1.1 Were there incidents that indicated a process or procedure problem?

There were concerns whether proper procedures were followed and whether the appropriate property forms (BC-1206 and CD-52) and Security Office Incident Reporting System (SIRS) were utilized when responding to lost/missing/stolen equipment. To mitigate this concern, the FLD PII staff requested the following information from the RCCs:

- A copy of the BC-1206;
- The original CD-52 (sent FedEx, not faxed);
- A copy of the SIRS report in reference to this incident;
- A copy of the PIMS investigation notes; and
- A copy of the police report and number if available.

Other examples are:

- In some cases, the call center selected the wrong forms for reporting, because the caller did not know the correct form number and title, or the form was not on the forms matrix;
- 88 change requests were required during implementation, because the program started late and did not benefit from prior field testing<sup>6</sup>; and
- Callers reported non-PII or Title 13 issues (i.e., dog bite, car accident, wanted their W-2 form, etc.).

There were many cases of missing maps. Most of the callers indicated that they had never opened the “map pouch” thus they could not have lost the maps. However, they were supposed to inventory their materials prior to starting work. Most of the calls indicated that they had not done so, thus, they were not sure whether they had lost the maps during work or not. Thus, it

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<sup>6</sup> Data maintained by the PIMS Change Control Board

appears there could have been two issues: 1) enumerators did not inventory their materials prior to going out into the field, 2) quality assurance could be improved in the process of preparing the enumerator “kits” to ensure all materials are included. Without absolute numbers, it is difficult to know what the percentage was for missing maps.

#### 5.1.2 How many forms were miscoded?

The actual number of miscoded forms is unknown. Initially some lost/missing/stolen forms were miscoded because the caller did not have all the pertinent information available when they called the call center, for example the caller did not always know which operation the form in question was for. This type of question was resolved during field investigations.

#### 5.1.3 What was the impact of the miscoded forms?

Miscoded forms required the FLD investigation team to coordinate their efforts with the RCC point of contacts (POCs); in turn the RCC POCs had to locate the enumerator(s) to acquire new/updated information concerning the investigation. Once updates were noted, the RCC POC or the enumerator had to contact Decennial CIRT to provide them with the additional information. Miscoded forms increased the time it took analysts to conduct investigations and close out the cases.

If the form in question was not on the forms matrix, the call taker either had to use the “other paper” option, or use a similar form (one used for a similar operation at a different time). This required instructing all stakeholders in this work around process. Once the forms were added to the matrix, the PCT had to go back to “other paper” incidents and update them with the correct form selection.

Because the number of miscoded forms could not be determined, the data could not be analyzed to determine what types of forms suffered the most losses per operation. Only generalized conclusions can be drawn based on the number and percentage of losses for personnel forms as compared with decennial census operational forms.

#### 5.1.4 Was the PIMS delivered on schedule and all required elements delivered by the contractor?

The request for a tracking system was made very late and too close to ramping up for the 2010 Census operations. A custom system was preferred, but as a result of the narrow time frame, there was not enough time to contract for a custom designed tracking system. The Census Bureau used a smaller system that was already in place as the basis for this system. The contractor was not awarded the contract until October 2008. The TCCO of the NPC and the Tucson Telephone Center (TTC) staff tested the application as it was being developed. Concurrently, the TCCO was writing/creating the training package. Basically, the contractor had six weeks to program a difficult application. Census Bureau staff had three weeks to test and to write/produce the training package. Staff had to provide work-arounds and enhancements to make the system

accomplish its goal. As a result the PIMS was delivered on schedule, but there was not enough time for comprehensive training for all staff required to use the PIMS. Some of the functionality of the FootPrints software was not explained and therefore not used. For the 2020 Census, it is suggested that a system be created by 2017 and be ready for testing well before census operations begin.

#### 5.1.5 Were requirements defined with adequate time for delivery?

Ultimately, no. Because of the short turn-around time for building the system (see 5.1.4) there was not sufficient time to work out the many details before the system had to go into operation. The FootPrints software application was not the optimal software to use for the operation we were conducting.

#### 5.1.6 Did the PII Incident Management System (PIMS) create and distribute summary reports to HQ managers and FLD Managers as it was designed?

As the system was designed – yes. As required by staff – no. The system created reports that were automatically forwarded to the RCC managers and FLD PII Staff. Some HQ staff was required to create custom reports, because the system could not produce the required reports. The reports were manually distributed to team members and managers. Each day, on a rotational basis, a FLD employee produced an email response for Executive Staff for high risk incidents (2-3 hours) of time was required for each report and a bi-weekly report of all incidents in the most recent time period and a cumulative report was produced for FLD Managers (6-8 hours).

#### 5.1.7 Was the PIMS user-friendly?

No. The application had to be manipulated to meet our requirements. PCT analysts frequently experienced web browser error messages when creating custom reports. However a work-around was developed to produce custom reports which eliminated this error. To some, after familiarizing themselves with the layout of the system, it became user-friendly. Additionally, to produce a legacy database, the FootPrints system administrator had to run multiple batch queries and assimilate the records one batch at a time into a spreadsheet for use.

#### 5.1.8 Was the search tool (Advanced, Saved Searches, and Cross Project) user friendly?

Overall, the search tool was user friendly. However, one noteworthy limitation of the system concerned personally saved searches. Personally saved searches could not be shared with peers. The FLD PII Staff had to replicate this effort on the other end-users' computers, so that each staff member would have the same saved search parameters. The PCT noted that both Advance and Saved Searches were used with relative ease with the exception of requesting output for more than 20,000 records within a single query.

#### 5.1.9 Were internal customers able to use these tools for their detailed searches?

Yes, the search function seemed to work fine. Team members were able to use the search tools with ease after they understood how it worked and its functionality.

5.1.10 Were updates to the system or script easily/quickly added to the system by the Control Board?

No. As noted, there were approximately 88 change control requests (CCRs). Most change requests took a relatively long time to be approved by the board. This was especially true if a member on the Board did not understand why the change was needed. This was a frequent occurrence, which caused the FLD PII Staff an extraordinary amount of time and resources to continually resolve these types of questions. For example, as a result of a W-2/earnings statement incident, one of the CCRs was to provide all FLD HQ employees with the same PII reporting telephone number used by field staff. This incident affected the earnings statements of 344 LCO employees (157 from Boston, 96 from Chicago, and 91 from Denver). The W-2s of 187 employees were involved.<sup>7</sup> At the time the incident occurred, there was no process in place for reporting this type of incident. Due to design issues, many changes took a long time to implement by the system administrator. Once implemented, testing had to occur in the development environment and then the test environment. For example, when updating the forms matrix to add last-minute forms, each form had to be coded to check that it rated properly. This type of line item testing took an enormous amount of time because there were limited personnel available to do the testing.

The initial developer stated that the matrices used to rate the incidents would be easy to update with new additions. This was a requirement that was identified and communicated to the developer. However, the resulting matrices proved to be cumbersome to implement and even harder to update. This was a critical issue for the forms matrix which, while it contained nearly 850 reviewed and rated forms and manuals, never contained the entire suite of forms used for operations or needed for a completely effective recording of incidents.

5.1.11 Did the system provide access to all users having a need to access/use/input specific for their needs (FLD PII, Privacy, OAES, ITSO, TTC, the Safety and Security Offices, and ACSD's Property Management Office)?

Overall, yes, once the system administrator setup individual accounts, but some areas had limited access. For example, Property Management had limited access. The Safety and Security Staffs required special assistance from the FLD PII Staff to retrieve police reports, BC-1206s, and other documents required to close these issues. This caused FLD PII to commit time to accomplishing tasks related to providing secured documentation for these areas.

5.1.12 Did the system provide easily accessible reports to provide total incidents, incident by type, incidents by region, etc.?

The system provided the following reports:

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<sup>7</sup> Records maintained by the Field Division Decennial Administrative Branch. This represented .03 percent of the total number of employees hired for the Decennial Census.

- F0002 Daily – This report listed the incidents that occurred, by location, for the previous 24 hours. It was produced at 08:00 pm and sent in HTML format. The incident number was a hyperlink that connected the report to the PIMS;
- F0003 Cumulative (Monday and Thursday) – This report summarized, by location, the number of items lost, missing, or stolen “to date.” It had a separate table with details about forms. The number of items included those reported in open and closed incidents;
- F0004 Window (Monday and Thursday) – This report looked similar to the F0003 report, but summarized the number of items lost, missing, or stolen since the previous report was run, by location;
- F0005 Open (Monday and Thursday) – This report summarizes the number of items lost, missing, or stolen by location in open incidents; and
- Field Division also provided daily High Interest Events to Operating Committee members by email, as well as RCC referral reports.

Overall, the reports were easily accessible. Again, the problem was that when the reports were generated, the system could not bring up more than 20,000 records or more from a single customized query. Analysts at times were forced to divide the total number of records in half and manually manipulate the data to produce a single report. The difficulty of the FootPrints software to record Master Incidents and then associated subtasks hampered the ability to report cleanly on the true numbers of incidents compared to the types of losses per incident. The master/subtask or parent/child relationship was not an ideal design for the operation.

#### 5.1.13 Did the system provide adequate use of report columns, wrapped, metric/graphics, and how to export?

Overall, yes. Staff did not have difficulty with report features. The system provided adequate accessibility to reports using the columns, wrap, and metric/graphic options. The export option was not utilized by FLD PII. For the PCT, for the overall reporting on the total number of losses, the “recover without a loss” (RWOL),<sup>8</sup> etc., required more functionality than the FootPrints software was capable of providing. Thus the only way to produce usable reports was to export the data into another report tool. This was difficult and time consuming given the limitation of 20,000 records per query.

#### 5.1.14 Was the Knowledge Base utilized?

This function was used by technical staff to share information on equipment reporting and the use of remedy tickets. This function was not used by PCT analysts, because they were not aware of this function, its use, or trained on it.

#### 5.1.15 Did the Knowledge Base Tool provide the needed information it was supposed to provide?

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<sup>8</sup> PII losses recovered in secured space.

No, it did not resolve the issue of a caller’s inability to identify the name or number of a lost form. This remains an issue for the 2020 Census.

5.1.16 Could users display HTML reports or export?

Yes, staff was able to display HTML reports or export reports as needed, with the exceptions previously noted.

5.1.17 Was the Dashboard (Personal and Project) Tool user-friendly and utilized by users?

Yes. Generally, staff did not have problems when using this function. Typically, staff configured Dashboard settings to meet their work assignments with relative ease. However some users experienced computer slowdowns when the Dashboard was activated.

5.1.18 Did HQ and the Regional Census Centers utilize the Calendar Tool?

This function was not used.

5.2 What were the numbers and characteristics of the PII incidents report?

5.2.1 What was the percent of “n/a”, “low”, “medium”, and “high” risk losses compared with the total number of losses?

The following table provides this information based on total calls to the telephone centers. However, one call could have been about multiple forms or equipment. See Appendix J for more detailed information concerning lost/missing/stolen equipment and Appendix K for information concerning lost/missing/stolen paper.

**Table 1.** Percent Rates of 2010 Census PII Incidents by Type<sup>9</sup>

<i>2010 Census PII Ratings</i>	<i>Total</i>	<i>% Total</i>
High	554	0.90%
Medium	217	0.40%
Low	34,330	57.30%
N/A	10,245	17.10%
Immediate Hang-ups (includes all Call Scope Categories)	14,618	24.40%
<b>TOTAL</b>	<b>59,964</b>	<b>100.10%</b>

Data Source: TCCO weekly summaries of Call Center data.

Note: Totals may not sum due to rounding.

<sup>9</sup> For “N/A,” the call is neither an immediate hang-up nor a call related to an actual or suspected loss of PII paper or equipment, or it did not yield a new incident.

The 2010 Census incidents were all given a rating. The rating represents the risk associated with the loss. The ratings were High, Medium, Low, and N/A. The majority of the calls were rated “Low.” Less than 1 percent of the calls were for a “high risk” incident.

5.2.2 What were the percent of electronic compared with paper losses?

Several call scopes were available to the telephone call takers to document the type of calls received during the 2010 Census. The most common types of call or call scopes were Electronic Hardware/Software and Paper. The table below shows the number of Hardware/Software incidents compared to the number of Paper incidents received. Other Call Scopes includes miscellaneous calls; for example: hang-ups, calls where the employee is searching for their W-2 form, employees calling to verify that this is the correct number to call if/when they lose something containing PII, etc.

**Table 2.** Percent of Electronic and Paper Losses

<i>Media Type</i>	<i>Total</i>	<i>% Total</i>
Hardware/Software	1,400	2.3%
Paper	40,533	67.8%
Other Call Scopes	17,876	29.9%
<b>TOTAL</b>	<b>59,809</b>	<b>100.0%</b>

Data Source: Privacy Office

5.2.3 Was the number of PII incidents more or less than expected—by agency estimates and industry standards?

Original agency estimates were a 5 percent loss rate for paper and a 3 percent loss rate for equipment. Actual loss rates were reduced to a 2 percent loss rate for paper and a 1 percent loss rate for equipment.<sup>10</sup>

As a basis for industry standards, according to the Wentworth Institute of Technology:

- 2.6 percent of Americans suffer “identify theft” each year; and
- 1.4 percent of laptops are stolen each year.<sup>11</sup>

NPC is expected to return \$30,826,251 to DMD or 88 percent of the original telephone center budget.<sup>12</sup>

<sup>10</sup> DMD estimate.

<sup>11</sup> <http://myweb.wit.edu/DTS/Security/dlp/index.html>

<sup>12</sup> NPC Budget Office.



The number of PII incidents was much lower than originally anticipated/expected. See Appendix J for more detailed information concerning lost/missing/stolen equipment and Appendix K for information concerning lost/missing/stolen paper.

**Table 3.** Number of Estimated Incident Calls and Actual Incident Calls

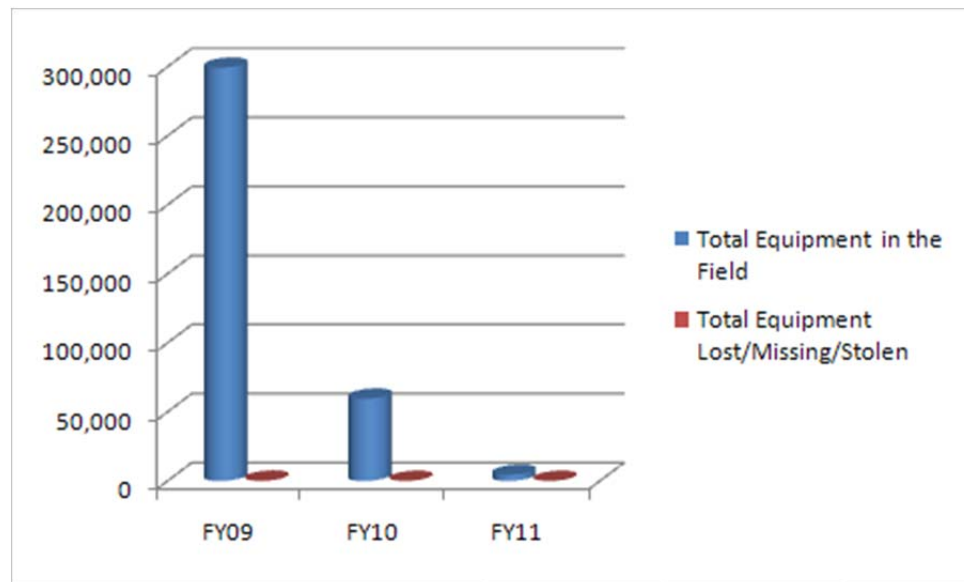
<i>Time</i>	<i>Estimate</i>	<i>Actual</i>	<i>% of Estimate</i>
January 2009 - December 2009	65,550	5,639	8.60%
January 2010 - December 2010	822,935	38,401	4.67%
January 2011 - June 2011	33,966	813	2.39%
<b>TOTAL</b>	<b>922,451</b>	<b>44,853</b>	<b>4.86%</b>

Data Source: Field Division Summary of PIMS data

5.2.4 Was the number of losses of equipment (never recovered) more or less than expected?

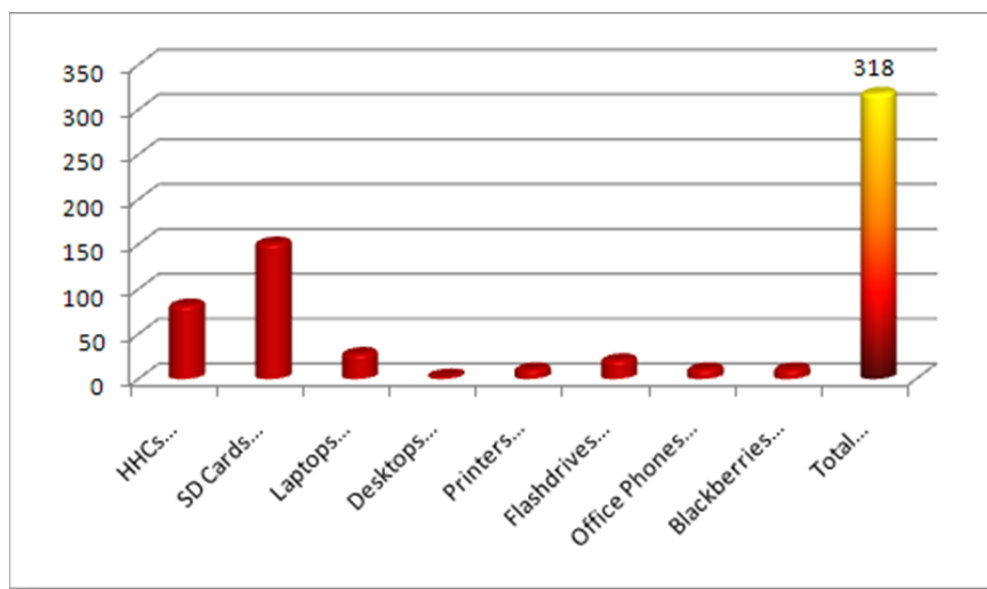
The loss of equipment was much less than expected, especially the number of handheld computer losses. A large percentage of the lost/missing/stolen equipment was initially listed as such, because the employee did not return it in a timely fashion. Most of this equipment was eventually recovered, either voluntarily or as a result of ‘demand’ letters or via a cooperative effort with the FPS. The FPS also assisted with the recovery of stolen HHCs and laptops. See Appendix J for list of equipment losses.

**Graph 1.** Total Equipment in the Field compared with Total Equipment Lost/Missing/Stolen



Source: “Estimated Equipment Losses,” Field Division; PIMS Data.

**Graph 2.** Equipment Lost from Fiscal Year 2009 through 2011 by Type



Source: FY 09, FY 10, FY 11 Equipment Final Statistics, Field Division.

5.2.5 Was the volume of highly rated forms the number that was expected?

The number of forms rated ‘high’ (with PII) and equipment (containing PII) was much less than expected. See Appendix K for more detailed information. Emergency measures were not needed. These emergency measures would have involved the use of NPC to send PII credit-monitoring letters.

5.2.6 In the notification process, did the number of notifications of high-risk losses ever reach the point where NPC was utilized (as planned) to send notification letters? What were the problems associated with the reporting of form losses?

No. The number of high-risk losses was much lower than anticipated; therefore it never became necessary for NPC to send notification letters.

5.3 Were there any issues related to the PII reporting processes and operations?

5.3.1 Were there any reports of burden associated with the forms?

In some instances, enumerators were unable to provide the correct number of forms lost when they made the initial call. Also, some forms used during the 2010 Census were not listed on the forms matrix, therefore the correct form could not be selected. In these cases, call takers were instructed to use the “Other Paper” option or to select a form that was similar (same basic form used for an operation at a different time. This eliminates the ability to do accurate reporting for

forms or “other paper”. As previously noted, it was difficult and time consuming to update the forms matrix. The use of the matrices was only possible because the 2010 Census operation ultimately is finite in terms of the forms and equipment in use and the information that could be lost. Thus, it was feasible to list and code each item in a matrix to obtain an initial assessment, except for the timing issues. The PIMS still had to allow for recording calls where the information was not necessarily known. However, in an unlimited environment, it is not feasible to use such matrices to initially assess losses.

5.3.2 What were the costs associated with mailing notification and the associated credit monitoring?

Total spent for mailings and credit monitoring was \$ 10,707.

**Table 4.** Costs for Mailing and Credit Monitoring

<i>Process</i>	<i>Number</i>	<i>Cost</i>	<i>Total</i>
First Response Letters Sent	1,314	\$ 5.98 per letter	\$7,858
Credit Monitoring Letters	135	\$ 4.98 per letter	\$672
Credit Codes Activated	67	\$ 32.49 per person	\$2,177
<b>TOTAL</b>	<b>1,516</b>		<b>\$10,707</b>

Data Source: Privacy Office

5.3.3 Were there enough licenses for FootPrints?

Initially, each region was assigned two licenses. After regional review showed that this was inadequate, six licenses were then assigned to each region, which proved sufficient.

5.3.4 Was there an adequate level of staff given access to close incidents? Was it usually possible to close incidents in a timely fashion?

Yes, because the number of incidents fell far short of estimates. NPC was prepared, and funded, for much higher staffing if necessary, and prepared to expand to all three of its telephone centers. HQ and RCC staff was not. However, Field Division would be interested in considering whether “low risk” paper incidents and “N/A” cases could be handled at a more local level in the future. During the 2010 Census operations, ITSO delegated the responsibility of closing HHC cases to the FLD PII and Security Team. Perhaps this is a model that could be utilized more in the future.

5.3.5 Was there an adequate number of staff on each team to investigate incidents?

For FLD PII, the number of staff was sufficient. When the 2010 Census workload increased, staff was added accordingly. Each Regional Office (RO) had two people work on Lost/Missing/Stolen investigations, but there was no direct funding for these investigators. The investigators had primary jobs; if and when time was available they conducted investigations. The job of acting as “points of contact” for investigations fell under “other duties as assigned.”

For the 2020 Census, we recommend that there are fully funded positions for investigators in the regions.

TCCO (staff of two) felt their staffing level was not sufficient to keep up with the volume of work.

There was only an initial few PCT staff when production started. Additional staff was added over time. This was problematic because staff had to come up to speed quickly while handling real-time events and resolve the ongoing issues related to system limitations and programming changes. All staff should be in place prior to the start of the operation.

#### 5.3.6 How many people did it require and at what grade levels to do investigations?

FLD HQ had two full-time equivalents (FTEs) in FY09, six FTEs in FY10, and two FTEs in FY11. The RCCs required two FTEs per region; however these 24 FTEs were not funded.<sup>13</sup>

The Privacy Office had at a maximum three GS-14 supervisors, three GS-13 analysts, one GS-12 analyst, one GS-9 analyst, and one GS-7 assistant. After initial training, analysts needed considerable guidance, especially for complex cases. Some of the difficulty was due to the design of the software system and that most of the analysts did not have extensive software experience.

#### 5.3.7 Was an adequate number of staff retained to complete the mission of closing incidents?

Funding for PII and Security Staff ended August 28, 2010. One grade 12 and one grade 13 were retained until September 30, 2011 to handle FY 11 incidents and related activities.

The PCT was understaffed for the final close out of the operation. There was only one GS-14 and two GS-12s which was not enough staff to verify the database, analyze the data, run reports and prepare presentations.

#### 5.3.8 Were agents updated as users were hired and released from employment?

The teams monitored the status of employees and updated contact lists for staff. New employee requests for access to PIMS were submitted and passwords provided in a timely manner to keep the system as current as possible.

#### 5.3.9 Did the call centers capture all information available at the time of the contact from the affected individual?

TCCO made every effort to ensure that call center staff was trained and informed of new updates, enhancements, or changes/corrections. Every call center interviewer received 24 hours of training.

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<sup>13</sup> Census Bureau Financial Management Report, Project 5310188.

### 5.3.10 Did Field HQ staff engage the RCCs to resolve investigation issues of incidents?

Most incidents were resolved with FLD PII working through the RCCs. On occasion the FLD PII worked directly with the LCO.

### 5.3.11 Did the FLD HQ staff work with Property Management and RCC staff to resolve lost, missing or stolen property incidents?

FLD PII worked with the RCCs and LCOs to resolve issues for ACSD regarding losses of asset management equipment assigned to personnel. Much of the work involved the FLD PII Chief and a member of the Laptop Control Board. The RCCs submitted the following materials for Lost/Missing/Stolen equipment:

- BC-52 (Report of Review of Property);
- CD-50 (Personal Property Control Report);
- BC-1206 (Security Incident Report);
- Police Report (when available for stolen equipment); and
- PIMS Report.

## 5.4 Was the training that was provided adequate and well-engaged?

### 5.4.1 How much training was provided?

See Appendix A, C, D, G and H. The TTC staff received eight hours of initial training at the beginning of the operation in late December 2008. Production started January 4, 2009. After each system change control implementation, the staff received additional training or refresher training. Twenty-two Telephone Center memos were issued in addition to updating the Interviewer Manual. As a result of the 88 CCRs and changes/updates to the system, the training package was totally revamped to be more robust. In early March 2010, the Hagerstown Telephone Center (HTC) supervisors received 18 hours of classroom training and requested six more hours to be added for the interviewer classroom training. In mid-March 2010, the HTC interviewers received 24 hours (four six hour days) of classroom training before they were allowed to begin receiving telephone calls. In April, the TTC staff received the same 24 hours for classroom training. These training sessions were also offered to the PCT Staff, so they could understand how the TCCO operators were inputting the data. In addition, each PCT analyst was given one-on-one training and provided a mentor for the editing of data records. Team meetings were also conducted twice a week to review records and discuss appropriate investigation questions and resolution statements.

### 5.4.2 Was the training provided adequate?

Yes (see Appendix C, D, F, and G). All RCC and LCO management staff completed PII training through the Census Learning Center. All LCO office and field staff completed a paper-based training with certificates of completion on file in each LCO. Every RCC and LCO employee

received an Emergency Contact Information Card containing the procedures and toll-free number to report PII losses (see Appendix I). Instructions for safeguarding PII were placed in 93 2010 Census training and operational manuals (see Appendix A). Four Knowledge-Based Articles (see Appendix H) related to the protection of PII in the field were developed and made available to RCC and LCO staff. For telephone center staff, once the training was made more ‘robust’, they felt that all staff was trained adequately. Interviewers were given refresher training, as well as one-on-one training in addition to the classroom training.

Based on RCC debriefings, the regions felt that in general, employees had knowledge of confidentiality requirements and PII reporting. However, the RCCs frequently requested HQ clarification on exactly what constitutes PII and suggested that this information be included in Job Aids. The RCCs and LCOs erred on the side of caution, often reporting non-PII incidents. In addition, the RCC Debriefings resulted in the RCCs requesting that a designated PII lead contact be designated at LCOs and RCCs. They also thought it would be beneficial that a full time FTE be created for RCC PII reporting.

The PCT Staff believe that analysts would benefit from official training on the system in use, as well as decennial census operations, in advance of the start dates.

The PCT Staff did not seem to completely understand what appropriate resolutions were for records. Although supervisors coached their staff and shared methods for resolving cases, the analysts still seemed to handle similar cases differently. There was a great deal of differences in the information provided by callers and the system allowed for this variation in input. In the future, the system should limit the information and combinations of information to provide more consistent information for analysts who can then structure resolutions to be more similar.

#### 5.4.3 Were all users trained on how PIMS FootPrints tools can be used?

Yes, all users with a need to participate in the PII tracking, recovery, and investigation at HQ and in the field were trained. Much of the training involved a large amount of information in a very short time. It would have been helpful to have more ‘refresher’ training once the users began to work in the actual system.

#### 5.4.4 Did all users have adequate knowledge to investigate incidents?

Yes. Every user in the field and HQ had adequate training and knowledge to investigate. Responding to a recommendation by ITS0, FLD PII staff also completed online investigation coursework. This on-line course work was not identified to the PCT.

#### 5.4.5 Did internal customers easily use the “customer reports”?

Yes. FLD PII used custom reports daily, weekly, and on an as needed basis to provide updates to the regions. The only daily report that could be used by the PCT was the email alert. Customers of both reports were satisfied with ease of use.

5.4.6 Were the metrics and cross project reports valuable as a tool; did HQ users easily use them?

FLD PII staff produced metric updates easily and provided them on a regular basis to regional managers, the Director, the Under Secretary for Economic Affairs (Economics and Statistics Administration), and the FLD Associate Director, as well as upon request. Headquarters customers, including the Deputy Director, complimented the ease of use. FLD did not produce cross project reports. FLD did however produce reports from each project separately for FLD PII and FLD surveys. The FootPrints software did not allow cross project reports to be created.

5.4.7 Were the regions adequately trained to use the PIMS to carry out their mission?

FLD PII staff provided many training sessions for those who needed refreshers or new staff members throughout 2010 Census operations (see Appendix G).

5.4.8 Did staff in the field (enumerators, crew leaders, field operations supervisors, LCO office staff, LCO management, and RCC staff) have adequate awareness of PII?

All FLD training manuals provided sections on PII, Safety, and Security, how to handle specific situations, who to contact, and paperwork needed. See Appendix C and D. The Emergency Notification System was set up to provide employees with emergency information in a timely manner (see Appendix I). The Business Recovery Plan allowed each RO/RCC to provide effective plans with alternate resources for all staff and equipment during emergency situations and the safeguarding of PII. Additional cell phones were secured at HQ in the event of an emergency shutdown of LCOs, RCCs, ROs, or a region-wide or national disaster.

Awareness of PII in the field was more than adequate, as shown by the lower than expected losses which in turn meant fewer investigations. Fewer than expected PII calls resulted in a surplus of \$30,826,251, which is expected to be returned to DMD for the 2010 Census PII project.

**Table 5.** Costs for Mailing and Credit Monitoring by Fiscal Year

<i>Fiscal Year</i>	<i>Funding Returned</i>
FY09	\$0
FY10	\$29,950,000
FY11	\$876,251
<b>TOTAL</b>	<b>\$30,826,251</b>

Data Source: NPC Budget Office

All PCT staff was well trained on PII and other protected data requirements.

5.4.9 Were all HQ offices provided training manuals, forms, and materials to keep abreast of how operations occurred in the FLD? Did they read the manuals and fully understand operations?

Yes, FLD PII Staff archived 2010 Census operations manuals (see Appendix C and D). The PII Staff received training before each operation and provided manuals for review to other headquarters staff. An internal training manual was developed for and used by staff assigned to investigate PII and Title 13 data breaches throughout 2010 Census operations. FLD PII staff studied those sections of the manuals that provided PII, Safety, and Security Training and as well as all memos (see Appendix E) to FLD managers concerning these topics.

PCT staff was not familiar with any of the FLD manuals. The PCT did have a manual for the use of the PIMS and how to investigate and resolve incidents.

5.4.10 Were all HQ staff provided the opportunity to observe operations in the field and observe how the LCOs and RCCs operate, their timelines and the nature of decennial census staffing in the field?

The FLD PII staff was sent to the field to observe the nonresponse followup operation.

No PCT staff was able to observe field operations. This would have been extremely helpful to staff. It is recommended that observation/training be an integral part of training for the 2020 Census, aided by an earlier start to the decennial census PII program.

5.4.11 Did all HQ staff engage to understand the process of a census-taking environment?

Informational materials, including all procedural manuals, were available to all HQ staff on the Intranet as a reference, as well as all of the information available on the DMD 2010 Census portal. The FLD PII Staff utilized these resources. The PCT Staff was not aware of these activities or materials.

5.4.12 Did all HQ Staff have knowledge that training materials are still being approved sometimes just before or during operations as guidance is provided by 2010 Census subject matter and management offices?

It was understood by FLD PII staff and RO/RCC staff that training materials would be updated until the training was actually given. Errata sheets were inserted into manuals during and after training was delivered. Errata sheets were provided to the appropriate managers and distributed to regional field staff, then archived at all RO and RCC offices.

5.4.13 Did all HQ offices understand and utilize the 2010 Census operations schedule, deadlines, and openings and closings schedules of the Local Census Offices (LCOs) when considering the investigation and closing of incidents?



Yes, the 2010 Census operations schedule was tracked continuously. The 2010 Census operations schedule was available to everyone at the Census Bureau. FLD PII closely followed and adhered to the operational schedule. They understood and followed the LCO operational schedule, closing schedule, and final move of the RCC staff back to the ROs to close out operations and close offices. Team leaders frequently updated staff and advised them of the 2010 Census operations schedule to manage workloads.

The PCT staff did not have previous experience with decennial census operations. All staff were provided a printed schedule of operations, however the census is very dynamic and some operations ended/started early. PCT staff usually was not aware of when a new operation started early until an incident came in reporting a new form not used before. The PII operation was developed so late in the decennial census process that perhaps many decennial census staff was not aware of the involvement of the PO in tracking incidents. The staff tracking decennial census incidents should be fully integrated into future decennial census planning and ongoing reporting.

5.4.14 Were HQ staff informed of the process of developing and finalizing forms used by the regions to carry out their mission?

As in every census, some forms were finalized late in the process. This is a problem that affects many divisions and offices involved in the census and it affected the offices working with PIMS. Thus, a number of 2010 Census forms were not available in time to be included in the initial development of the system. FLD PII staff was updated on the status of forms, and then informed all other users of the system. New forms were assessed and incorporated into batches then entered into the system. However, incorporating the changes and testing the changes was extremely time consuming, thus, updates to the forms were limited resulting in overuse of the “other paper” selection when forms were not on the automated list.

5.4.15 Did all HQ offices understand the nature of how staff is utilized in the field as a census is conducted?

Overall, yes. FLD PII Staff fully understood all roles of the RCC managers and regional field staff by means of training and acting as liaisons between HQ and regional field staff during the 2010 Census operations with the intent to protect PII.

The PCT Staff was not familiar with decennial census operations. Some employees were new to the Census Bureau, but even other long-time Census Bureau employees did not understand the relationship between the RO, LCO and RCC. Although this was not very detrimental to operations, it took a while to understand how staff was assigned at the RCCs to do follow-up on incidents when incident details were needed. In addition, it also took awhile for the regions to determine how to associate staff time with this activity. This did limit the ability of the PCT Staff to get timely resolution to incidents as RCC staff often waited until the end of the day before addressing emails from the PCT Staff. This situation also informs the recommendation herein for dedicated PII staff in the field for the 2020 Census.

#### 5.4.16 Were all HQ offices made aware that RCC and LCO staff do not always conduct business in the same way as a permanent HQ Staff?

For most of the HQ staff, the answer is yes. The decennial census is a larger scale undertaking than any other public or private sector data-gathering venture in the U.S., where temporary workers are hired as operations gear up and released as operations are completed. FLD HQ staff understood that hiring a large temporary workforce and using a paper operation required delivering training, collecting information in difficult areas, and protecting employees and respondents' personal information and can be a daunting task that might not occur in other smaller surveys. For most PCT staff, it was understood and accepted that field operations are different from HQ. This did not prove detrimental to the operations.

### **6. Related Evaluations, Experiments, and/or Assumptions**

This section does not apply.

### **7. Conclusions and Recommendations**

#### 7.1 Conclusions

- FLD developed an agreement with the Federal Protective Service, and an MOU with DOC, on equipment recovery, which was extremely successful.
- Initial DMD estimation of incident scope was a 3 percent equipment loss, and a 5 percent paper loss. These numbers were subsequently reduced to a 1 percent equipment loss and a 2 percent paper loss, representing industry standards. Actual losses were substantially lower.
- In FY10, peak workloads were reached of over 4,000 phone calls per week to Decennial CIRT, during the Non-Response Follow-up Operation.
- With the start of FY11, staffing of the FLD PII Staff of 14 was significantly reduced, to accommodate an extreme reduction in calls (from a peak of 4,000 calls a week in FY10, the agency received an average of fewer than 50 calls a week during FY11).
- Property Board of Review results were announced. Of 130,000 handheld computers in use during address canvassing, about 380 were reported as lost, missing, or stolen. About 300 of those were recovered. Of the 80 not recovered, the PBR determined several instances of negligence among employees (particularly for "lost" handhelds).
- For the 2020 Census, an earlier start will relieve many of the system limitations described herein.
- Use of an electronic applicant and hiring process would resolve most of the "high risk" paper losses experience in the 2010 Census.
- The use of a Global Positioning System tracking in electronic equipment will reduce still further any equipment losses in the 2020 Census.
- Demand letters for the return of materials/equipment from separated employees was a best practice.
- Using FPS to make calls for equipment recovery was a best practice.
- The extreme level of awareness at all levels of the organization was a best practice.

- The use of RCC “Points of Contact” worked well, making the investigation process much easier to carry out and more efficient.
- Constant reminders and frequent training by FLD HQ kept awareness levels high in the field, which resulted in the actual number of losses being much lower than expected.
- The laminated contact card was carried by all employees and proved very useful.
- Utilization of an experienced regional manager for the early identification of high-profile cases provided both an “early warning” system and facilitated the best use of resources.
- RCCs reported that they liked the CIRT process and call-in and quick notification up the chain of command, since it provided them with immediate information they would not have had otherwise.

## 7.2 Recommendations from RCC Debriefings

- Designate a PII Lead contact at each LCO as well as at each RCC.
- Improve call center scripts.
- Define more clearly what is and is not PII, and provide this information in Job Aids.
- Provide the RCCs more guidance on how to recover lost items: either from tele-center calls, or from managers at HQ.
- Laminate a checklist on what is PII.
- Allow the area manager, not HQ, to decide when research on a case is exhausted.
- Create full-time RCC positions for PII reporting “on the ground” in the RCCs.
- Provide more specific instructions for what to report initially.
- Provide RCC staff with immediate access to PIMS, and the ability to generate ad hoc reports in real-time.
- Merge SIRS/Decennial CIRT/FootPrints and allow more access.
- Provide a hotline (LCO-based) for employees to call for information in emergencies.
- Coordinate POCs with those who handle the BC-1206 security forms.
- Upfront training on what is necessary to close out a case.
- Automate the BC-1206.
- Ask all questions on first call rather than making callbacks as investigations and review unfold at HQ.
- Add a classification to lost/missing/stolen: “Mistake.”
- Have field staff report PII losses to LCO managers as well as to Decennial CIRT and their immediate supervisor.
- Improve skip patterns and scripts for telephone operations.
- Allow more FootPrints accounts, like for area managers.
- Provide better training for call center staff about full scope of what is PII: like “binders”.

## 8. Acknowledgements

Many persons participated in developing the 2010 Census Personally Identifiable Information (PII) Assessment Report. The report was prepared under the direction of Mary Frazier, CPO, and Jay Keller, Special Assistant to the Associate Director for Field Operations. Initial planning, management, implementation, and coordination of this report were under the supervision of Iris Boon, PII Coordination Team Supervisor. Primary staff assistance was provided by Rachel

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Executive staff members who guided the campaign include: Arnold Jackson, Associate Director for Decennial Census; Brian McGrath, Associate Director for Information Technology and Chief Information Officer; Daniel Weinberg, Assistant Director Decennial Census; Marilia Matos, Associate Director for Field Operations; Tom Mesenbourg, Deputy Director and Chief Operating Officer.

## **Data Stewardship Program**

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### **DS022A: Procedures for Reporting and Responding to a Data Breach for the 2010 Census**

#### **I. PURPOSE/STATEMENT OF PROBLEM**

These procedures establish the process for reporting and responding to a breach (actual or suspected) of protected information that is related to or involves 2010 Census operations, including personally identifiable information (PII) and Title 13 data. In the event that a data breach is discovered or suspected, this policy establishes procedures for action to be taken, by whom, and for providing notification to affected individuals and other stakeholders.

#### **II. LEGAL AUTHORITIES**

These procedures implement DS-022 “Data Breach Policy,” and thus share the same legal authorities as that document. Additionally, these procedures relate to:

- Department of Commerce Breach Notification Response Plan dated September 28, 2007.

#### **III. SCOPE**

These are procedures for reporting and resolving all incidents related to 2010 Census activities, including those at Census Bureau facilities, as well as any incidents related to 2010 Census activities that occur at non-Census Bureau facilities (such as some 2010 Census testing activities). These procedures do not apply to the reporting of any incidents related to on-going survey operations, or to any other non-decennial census operations.

#### **IV. BACKGROUND**

The Data Stewardship Executive Policy Committee (DSEP) approved a Data Breach Policy in December 2006; the most recent procedures implementing this policy were approved on October 15, 2007. With the approach of the 2010 Census, DSEP has implemented the following procedures specific to the 2010 Census. DSEP expects to examine and revise the non-decennial policies and procedures in late 2010 in light of the 2010 Census experience.

## V. IMPLEMENTATION

### *REPORTING*

All actual and suspected breaches occurring during the course of 2010 Census operations must be reported within one hour of the incident discovery to the D-CIRT, the Decennial Computer Incident Response Team, via a toll free telephone number, 1-877-744-1522. Staff should also notify their immediate supervisors whenever a breach has been discovered, or is suspected. Calls not involving the 2010 Census should also be reported within one hour, **but to the BOC CIRT, at (301) 763-5141, or (877) 343-2010**

D-CIRT calls are handled by telephone operators located in the Census Bureau's Field Directorate (FLD) Telephone Centers in Tucson, Arizona and Hagerstown, Maryland. Call Center operators use the PII Incident Management System (PIMS) to record the details of the calls as they are talking to the caller. Various types of incidents that might occur during activities related to the 2010 Census have been identified and pre-assessed. The PIMS is configured to use the information recorded during the telephone call to assign a preliminary rating to the incident, and to assign the incident to the appropriate teams for follow-up investigation. The PIMS provides the operators with prompts, drop down lists, and radial boxes to assist in the recording of the call. The system assigns a system-generated sequential number to the incident. A contingency plan has been developed for the telephone centers to record cases manually in the event the automated system is down for any period of time.

### *RISK RATING*

PIMS automatically assigns a risk rating to incidents based on the information entered into the system. Once PIMS has assigned an automated risk rating, the PII Coordination Team (PCT) assesses any unique circumstances surrounding the incident, and verifies that the PIMS rating is correct. Risks are rated as follows:

Low. Risks are rated low if there is little chance that the breach could result in harm to the individual whose data are lost. Low risk incidents include phonebook type of information such as name, address, phone number, etc. Incidents involving 2010 Census short forms are also rated low risk.

Medium. Medium is usually assigned to incidents involving equipment where an initial determination could not be made regarding the type of information lost. Most medium equipment incidents will be reassigned as a low or a high, upon further investigation, depending on the information involved.

High. Incidents involving the loss of SSN in conjunction with the individual's financial information are always rated as high, regardless of where the loss took place. Incidents

involving SSN without financial information are only rated high if they occur outside of secure Census facility space.

## ***V.1 INVESTIGATION/UPDATING INFORMATION***

After an incident is reported and rated, the Census Bureau investigates it. The Field PII and Security Staff investigates all losses of PII, Title 13, and IT equipment. The staff works with managers in each of the 12 Regional Census Centers, who in turn follow up with employees and their supervisors in the Local Census Office where the incident/loss occurred. The Field PII Security Staff also works closely with the PCT and ITSO to provide clarifying information and updates regarding incidents.

The PCT is responsible for resolving all incidents of lost PII and Title 13 information. This includes determining any violation of privacy policies, as well as any impact on the agency and the individual. The ITSO is responsible for resolving all incidents of lost IT equipment, resources, or computer network information. This includes determining if the incident involved the unsecure transmission, storage, or processing of sensitive data. When an incident involving IT equipment, resources, or network information is determined to involve PII or Title 13 information, ITSO will add the PCT as an assignee in the system. Both the PCT and the ITSO determine when sufficient information has been collected, and when an incident can be closed.

Typically, not all information about an incident is available at the time of the initial report. Call center operators instruct callers to call the D-CIRT back with updated information including police report numbers and FEDEX tracking numbers. Through an agreement with the Federal Protective Service (FPS), equipment losses are also reported by the RCCs to the appropriate FPS regional office to assist in stolen equipment recovery. The call center operator can access the existing incident and enter updated information. When the call is completed, PIMS will send an updated report as required. The ITSO and the PCT also have the capability to update the incident records as new details are discovered. The FLD PII and Security Staff and managers at the Regional Census Centers have rights to enter notes in the Investigative Notes section only.

## ***NOTIFICATION***

The Census Bureau notifies all individuals whose information is involved in incidents rated High and Medium. Losses rated Medium usually warrant notification only, while losses rated High are also provided credit monitoring. Cases rated Low do not require notification to the individual. However, the unique circumstances of all cases are reviewed and the final action is modified based on the details. For example, some exceptional cases rated Low may require notification of the individual, and some Medium cases may result in credit monitoring being offered.

The Census Bureau Privacy Office notifies the individual as soon as possible following the discovery of a breach. Procedures have been developed for LCO and RCC staff to determine the addresses for notification letters if they are not otherwise available. Notification may be delayed for a short time to: 1) meet the legitimate needs of law enforcement and national security, 2) allow the Census Bureau to determine the scope of the breach and, 3) if applicable, to restore the reasonable integrity of the system/process that was compromised. These delays should not exacerbate risk or harm to any affected individual(s) or be tied to the completion of the investigation, but rather be based on whether notification would seriously impede the investigation to provide the notice promptly. The notification is signed by the Chief Privacy Officer. If the breach involves a Federal contractor or public-private partnership, the Census Bureau response will consider the specific relationship and any signed agreements.

The notice to the individual is clear, concise, conspicuous, easy-to-understand, in plain language and includes the following elements:

- A brief description of what happened, including the date(s) of the breach and its discovery.
- A description of the types of personal information that were involved in the breach (e.g., full name, Social Security number, date of birth, home address, account number, disability code) to the extent possible.
- What steps, if any, an individual should take to protect themselves from potential harm.
- What the Census Bureau is doing, if anything, to investigate the breach, to mitigate losses, and to protect against any further breaches.
- Who and how affected individuals should contact the Census Bureau for more information, including a toll-free telephone number, e-mail address, and postal address.
- Direction to additional guidance available from the Federal Trade Commission at: <http://www.consumer.gov/idtheft/>; Minimizing your risk at: [http://www.consumer.gov/idtheft/con\\_minimize.htm](http://www.consumer.gov/idtheft/con_minimize.htm); Publications at: [http://www.consumer.gov/idtheft/con\\_pubs.htm](http://www.consumer.gov/idtheft/con_pubs.htm).

For large mailings, the NPC will be used to print and mail the letters. The FLD PII and Security Staff, PCT, and the NPC have access to a secure folder space used to store the names and addresses of individuals to be notified. At the direction of the PCT, the NPC will conduct the mail operation. The NPC notifies the PCT when mailings are completed so the PCT can close the incident.

In general, the primary means of notification is by certified mail. The PCT will handle requests for credit monitoring. Responses to requests for credit monitoring are sent via FedEx.

### *COMMUNICATIONS AND REPORTING*

PIMS sends real-time email alerts to the ITSO, PCT Supervisors, CPO, FLD PII and Security Staff, and selected HQ and regional managers when an incident is entered into the system.



Similarly, the PIMS also sends reports to the DOC-CIRT within one hour of an incident being entered into the system. The Field Directorate prepares daily summaries of all high and exceptional cases. This summary is reviewed by the Assistant to the Associate Director for Field Operations. Once approved, FLD distributes the summary to the Field Division Chief, ITSO Division Chief, Associate Director for Communications, Chief Financial Officer, Chief Privacy Officer, Chief Information Officer, and Deputy Director.

ITSO briefs BOC and DOC officials on breaches involving IT equipment, systems, and networks, and includes the CPO in all communications related to these incidents that also involve PII or Title 13 information. ITSO sends a report to US Cert twice a month on all paper-related PII incidents.

The CPO briefs the following officials on exceptional cases as they occur. BOC Deputy Director, BOC Associate Director and Assistant for Communications, Associate Director and Assistant Associate Director for Field Operations, Associate Director and Division Chief of the involved business unit, the BOC CIO, BOC Chief of IT Security and selected staff, Under Secretary and Deputy Secretary for ESA, the DOC CIO and selected staff, the DOC OPA and OGC, the DOC Chief of Staff.

We have found over time that the rapidly changing information about incidents can result in unclear lines of communication. Accordingly, for decennial-related incidents involving PII and Title 13, the CPO should be considered as the “single point of contact” for communications between the Communications Directorate, the Department of Commerce, and senior management at BOC about the details of the incident. The CPO will coordinate and communicate as necessary to keep stakeholders involved; however, the CPO should be viewed as the ultimate repository of up-to-date information about the status of the breach investigation.

## **EXCEPTIONAL CASES**

While the Census Bureau takes seriously all breaches, the majority of incidents that occur during decennial census operations are routine and low risk, of the sort that are inevitable in the course of hiring over a million temporary employees who are carrying paper questionnaires. Although the majority of incidents will be resolved using the incident handling process described herein, there are times when incidents must be dealt with manually. The PCT reviews all incidents reported through the D-CIRT on a continual basis and determines which cases to bring to the attention of the Chief Privacy Officer (CPO). Incidents are put into manual processing mode when the CPO determines that the incident has circumstances beyond those identified as being typical for losses associated with the 2010 Census operations, or have the potential to have broad and significant impact if widely disseminated. Cases that are considered exceptional are

escalated to appropriate management for additional action. For example, the case may be selected for manual processing if any of these conditions occur:

- The data are the target of the theft, rather than equipment
- Large losses occur in small geographic area
- The incident involves the media – known or suspected
- Any other unusual or exceptional circumstance

Once an incident has been identified as an exceptional case, and selected for manual processing, the CPO, with the support of the PCT, then determines whether the incident is serious enough that the Census Bureau Breach Notification Team (BNT) must be called together to review and investigate the incident. When appropriate, the CPO is also responsible for notifying higher echelons of Census Bureau and Department of Commerce management of exceptional cases.

## **VI. ROLES AND RESPONSIBILITIES**

This section identifies the roles and responsibilities of the major stakeholders involved in managing the incident response process for the 2010 Census. The stakeholders include:

### Decennial Management Division

DMD is the sponsor of the Project Management Incident System (PIMS) and provides project management, operational guidance and necessary resources.

### Chief Privacy Officer

The CPO has overall responsibility for managing and resolving PII incidents resulting from Decennial operations. The CPO will review periodic reports from PIMS and PCT Supervisors to identify broader trends, as indicated by the location, frequency and severity of incidents. The CPO also manages the operation of the PCT and approves the assessment assigned by the PIMS or the manual assessment by the PCT. The CPO is responsible for keeping the Bureau of the Census executive management informed of exceptional breaches. The CPO will review exceptional incidents in accordance with DS022 and the associated Implementation Guide. The CPO will generate summary reports and approve recommended remediation actions. The CPO can hold any incident for manual processing, regardless of the automated assessment. Once an incident has been converted for manual processing, it must be resolved and closed manually.

### PII Coordination Team

The PII Coordination Team (PCT) resides in the Privacy Office. The PCT is responsible for coordinating and resolving all PII and Title 13 incidents. The PCT will consult and coordinate with the FLD Directorate to conduct follow-up investigations and fact-gathering.

### Field Division PII and Security Staff

The FLD PII and Security Staff office works under the direction of Field Division in investigating incidents occurring in the field, including all field offices. The ITSO delegated the closing of Hand Held Computers (HHC) incidents to the FLD PII and Security Staff. The FLD PII and Security Staff also ensures that instructions for the protection of PII and reporting of incidents are in every training and procedural manual utilized in the census, and for ensuring that all decennial census field staff have the appropriate contact cards for reporting to D-CIRT. The Staff also provides regular training to key officials in the RCCs to assist with investigations. In the case of equipment, the Staff also ensures that police report numbers are associated with each incident, that Census Bureau inventories are appropriately updated and consistent with reported losses, and that the Security Office at the Census Bureau, and the Federal Protective Service, are notified in cases of stolen equipment.

### TCCO

The Telephone Center Coordination Office of the Field Directorate (TCCO) has the responsibility for developing the specifications for the Decennial CIRT application for incoming PII calls. TCCO also designs the training for telephone center interviewers; currently, interviewers receive 24 hours of training. TCCO creates system modifications as necessary, and alerts the telephone centers of each application modification and how the interviewers should proceed. TCCO monitors call center volume, including variations in volume by time of day, and determines necessary staffing levels by shift. TCCO is also responsible for the manual contingency plan in the event the automated system is down, and for training on the contingency plan.

### Information Technology Security Office

For lost and/or missing equipment and IT incidents occurring during Decennial operations, ITSO is responsible for coordinating with the PCT and the FLD PII and Security Staff to investigate and close incidents. The ITSO will notify the PCT if computer related incidents involve PII and will add the PCT as an assignee to the incident. ITSO will notify the PCT if a PII or Title 13 incident is reported to the BOC-CIRT and needs to be entered into the D-CIRT. In these cases, the PCT will work with the TCCO to enter the incident into the D-CIRT.

### Census Bureau Breach Notification Team (BNT)

The BNT will function according to DS-022 “Data Breach Policy” and its associated Implementation Guide.

**VII. OWNERSHIP/CLEARANCE**

The CPO is responsible for maintaining and disseminating these procedures.

**VIII. SIGNATURE**

**IX. DATE**

## Appendix B: Applicant and Employee Eligibility Procedures

- As a part of the **application** process, each applicant must accurately disclose the following information. Failure to disclose this information disqualifies an individual from being hired.
  - Terminations from employment within the last 5 years;
  - Convictions, imprisonment, probation or parole in the last 10 years;
  - Pending criminal investigations;
  - Military court-martials in the past 10 years;
  - Delinquency on any federal debt.
- An applicant's eligibility for employment depends on a favorable Federal Bureau of Investigation (FBI) background check (or "name check") which uses the applicant's name, date of birth, social security number and gender.
  - During the **hiring** process, each employee must accurately disclose the following information for a second time
    - Terminations from employment within the last 5 years;
    - Convictions, imprisonment, probation or parole in the last 10 years;
    - Pending criminal investigations;
    - Military court-martials in the past 10 years;
    - Delinquency on any federal debt.
- We submit each employee's fingerprints to the FBI for a fingerprint check. We terminate any employee with an unfavorable fingerprint check.
- We check data supplied to us by each employee against the data contained in the Department of Homeland Security's (DHS) database using E-Verify. If data provided us for any individual do not match their individual data in the DHS database, the employee must resolve the issue within an allotted period of time. If the employee does not resolve the issue, our legal office reviews the case and makes a final decision about the employee's continued employment.

## **Appendix C: Training For The Protection Of PII And Title 13 Materials**

### **Personally Identifiable Information (PII) and Title 13 Data Protection Materials and Training**

- Materials containing policies and procedures for protecting PII, including the toll-free number for reporting incidents of breaches:
  - All Administrative Manuals
  - Each Employee Handbook
  - All Operational Training materials
- All employees receive training on PII protection.
  - Regional Census Center (RCC) managers and other employees complete PII Training through the Census Learning Center.
  - Local Census Office (LCO) managerial staff complete PII Training through the Census Learning Center.
  - LCO non-managerial staff office employees receive PII Training through the approved paper-based PII Training. All employees must complete a paper-based certification that they have completed the training. The certificates are on file in the LCO office.
  - LCO field staff (Field Operation Supervisors, Crew Leaders, Enumerators, and Recruiting Assistants) receive the PII Training during the operational training. Each employee must complete a paper-based certification that they have completed the training. The certificates are on file in the LCO office.
- Each RCC and LCO employee receives an Emergency Contact Information Card which contains the procedures and the toll-free number to report lost of equipment, materials, or data.

## **Appendix D: Training Manuals & Materials Containing Procedures for Protecting PII and Title 13 Information**

- AC Lister Manual (D-675)
- AC Guide for Training (D-635)
- AC QC Guide for Training (D-635-QC)
- AC QC Lister Manual (D-675 - QC)
- AC Crew Leader Manual (D-641)
- AC FOS and QC FOS Manual (D-530)
- AC FOS Guide for Training (D-531)
- AC QC FOS Guide for Training (D-531 - QC)
- AC Guide for Training Crew Leaders (D-641.1)
- AC Guide for Training Quality Control Crew Leaders (D-641.1 - QC)
- GQV Lister Manual (D-1028)
- GQV Guide for Training Listers (D-1028.1)
- GQV Crew Leader Manual (D-1026)
- GQV Guide for Training Crew Leaders (D-1026.1)
- GQV Supervisor Manual (D-1024)
- GQV Guide for Training GQS (D-1024.1)
- GQV Office Manual for Field Supervisors (D-1091)
- GQV Guide for Training Office Clerks (D-1093)
- GQV Guide for Training Office Clerks (D-1094)
- GQV Clerk Manual for Field Operations (D-1093)
- Remote Alaska Enumerator Instructions (D-579)
- Remote Alaska Guide for Training Field Operations Supervisors (D-630)
- Group Quarters Advanced Visit and Group Quarters Enumeration 2010 Census Guide for Training Group Quarters Supervisor (D-565.10)
- Group Quarters Advanced Visit and Group Quarters Enumeration 2010 Census Crew Leader Manual (D-572.20)
- Self -Enumerating Group Quarters 2010 Census Guide for Training Facility Contact (D-578)
- Group Quarters Advanced Visit and Group Quarters Enumeration 2010 Census Guide for Training Crew Leaders (D-672.20)
- Group Quarters Advanced Visit and Group Quarters Enumeration 2010 Census Crew Leader Workbook (D-272.21)
- Update/Leave Crew Leader Manual (D-654)
- UE Manual (D-1202)
- UE Training Guide (D-1204)
- NON-FDCA Procedures (D-986.1)
- LCO Admin Manual (D-501)
- Regional RCC Administrative Manual (D-520)
- Census Coverage Measurement & Independent Listing & Independent Listing Quality Control Office Manual (D-1316)

- Enumeration of Transitory Locations (ETL) Guide for Training Crew Leaders (D-644.1)
- Enumeration of Transitory Locations (ETL) Enumerator Manual (D-661)
- Enumeration of Transitory Locations (ETL) Guide for Training Enumerators (D-661.1)
- Enumeration of Transitory Locations (ETL) Crew Leader Manual (D-682)
- Field Operations Supervisor Manual (D-530)
- NRFU Enumerator Manual (D-547)
- NRFU Enumerator Workbook (D-547.2) - PR
- NRFU Guide for Training Enumerators (D-647)
- NRFU Guide for Training Enumerators (D-647) - PR
- NRFU Crew Leader Manual (D-533)
- NRFU Crew Leader Manual (D-533) - PR
- NRFU Crew Leader Final Review Exercise (D-553.2)
- NRFU Crew Leader Final Review Exercise (D-553.2) - PR
- NRFU Guide for Training Crew Leaders (D-653)
- NRFU Guide for Training Crew Leaders (D-653) - PR
- NRFU FOS Manual (D-530)
- NRFU Guide for Training FOSs (D-630)
- NRFU RI Enumerator Manual (D-556)
- NRFU RI Enumerator Manual (D-556) - PR
- NRFU RI Enumerator Workbook (D-556.1)
- NRFU RI Enumerator Workbook (D-556.1) - PR
- NRFU RI Guide for Training Enumerators (D-656)
- NRFU RI Guide for Training Enumerators (D-656) - PR
- NRFU RI Crew Leader Manual (D-1126)
- NRFU RI Crew Leader Manual (D-1126) - PR
- NRFU RI Crew Leader Final Review Exercise (D-1126.2)
- NRFU RI Crew Leader Final Review Exercise (D-1126.2) - PR
- NRFU RI Guide for Training Crew Leaders (D-1226)
- NRFU RI Guide for Training Crew Leaders (D-1226) - PR
- NRFU RI FOS Manual (D-1147)
- NRFU RI Guide for Training FOSs (D-1146)
- NRFU VDC Guide for Training Enumerators (D-1061)
- NRFU VDC Guide for Training FOS/CL (D-1063)
- Questionnaire Assistance Center - Training Guide (D-466)
- Questionnaire Assistance Center - Job Aid (D-698)
- Be Counted - Job Aid (D-687)
- Be Counted -- Training Guide (D-688.1)
- Questionnaire Assistance Center - Training Guide (D-466) - PR
- Questionnaire Assistance Center - Job Aid (D-698) - PE
- Be Counted - Job Aid (D-687) - PR
- Be Counted -- Training Guide (D-688.1) - PR
- BC/QAC Office Manual (D-1091)
- QAC FOS Manual (D-530)
- NRFU MaRCS Manager Manual (D-838A)



- NRFU MaRCS Training Guide (D-828)
- NRFU MaRCS LCO Manual (D-838)
- UE MaRCS LCO Training Guide (D-1264.1)
- UE MaRCS LCO Manual (D-1264)
- UE MaRCS Manager Manual (D-1264A)
- Interviewer Manual (D-1317)
- GFT Interviewers (D-1310)
- 2010 Laptop User Guide (D-1353)
- Crew Leader/RI Crew Leader Manual (D-1327)
- FOS/RI FOS Job Aid (Form D-1358)
- Lead Support Coordinators Manual (D-1244)
- AMT Training Guide (D-650)
- AMT Workbook (D-650A)
- FDCA and Non-FDCA Property Management Manual (D-986-1)
- Safeguarding Data During Visits and Observations (D-508.8)

## **Appendix E: 2010 Census Memoranda on PII and Title 13 Guidance**

- FLD PII and Security Memorandum Series 08-02
- 2010 Census Field Implementation Memorandum No. 09-20
- Emergency Contact Form D-449 for the RCC and E/LCO Staff
  
- FLD PII and Security Memorandum Series 09-05
- 2010 Census Field Implementation Memorandum No. 09-14
- 2010 Census Lost/Missing/Stolen Mobile Computing Equipment
  
- FLD PII and Security Memorandum Series 09-09
- Business Recovery Plan Training Instructions
  
- FLD PII and Security Memorandum No. 2010-01 Revised
- Emailing Encrypted Files Containing Personally Identifiable Information (PII) and Title 13 Information

**Appendix F: Operational Mini Meetings for Regional Census Center staff that included discussion of the PII Incident Management (PIM) System, Business Recovery Plans (BRP), and Employee Notification System (ENS).**

- #1 – Detroit, Michigan; July 20 - 23, 2009
- #2 – Annapolis, Maryland; August 3 - 6 , 2009
- #3 – Golden, Colorado; August 17 - 20, 2009
- #4 – National Harbor, Maryland; August 31 – September 3, 2009
- #5 – 2009 Make-Up Mini-Meeting; September 15 - 17, 2009

## **Appendix G: Presentations to Regions**

- Data Stewardship Week, March 4, 2009 by Policy Office.
- Training on PIM Footprints database to Regions, August 26, 2009, hosted by Privacy Office and the FLD PII and Security Staff.
- Training on PII procedures via VTC for GS 14s and above in the field, February 4, 2010, presented by the Deputy Director.
- Regional Directors (RDs) conference call, February 9, 2010, reminding RDs to stress the importance of immediately reporting incidents of breaches in security for PII and to discuss with LCO managers again.

**Appendix H: Knowledge Base Articles (KBAs) Summarizing All Requirements Related to Protecting PII in the field:**

- KBA 473 - Lost, Missing, or Stolen FDCA Accountable Property
- KBA 1205 – How to report Lost, Missing, or Stolen BOC equipment
- KBA 1206 – Lost/Missing/Stolen Mobile Computer Equipment: Working with the Federal Protection Service
- KBA 1294 – Lost, Missing, or Stolen (L/M/S) Materials and Forms Containing Personally Identifiable Information (PII) or Title 13 Data

## **Appendix I: Employee Notification System Messages Relating to Protecting PII and Title 13 Information in the Field:**

Employee Notification System (ENS) flyer made available on February 22, 2010, to all FLD decennial census staff. Flyer was utilized for new hires. A similar flyer was subsequently provided for ROs, SFRs, and FRs.

On February 5, 2010, beginning at 6:00 PM, FLD HQ sent out an ENS message to 5,415 field representatives (FRs) and supervisory field representatives (SFRs), and 23,403 Local Census Office and Field staff located in all twelve regions. The broadcast message was sent to remind FLD employees of the importance of reporting lost, missing, or stolen PII. The notification process was successful. The broadcast messages are shown below:

**Broadcast message released to SFRs and FRs:** This is an important reminder from the Census Bureau about the requirement to report lost, missing, or stolen personally identifiable information. Be sure to alert your supervisor and the B.O.C. CIRT within one hour of discovery of a loss.

**Broadcast message released to LCO Offices and Field Staff:** This is an important reminder from the Census Bureau about the requirement to report lost, missing, or stolen personally identifiable information within one hour of discovery of a loss. Be sure to carry your Emergency Contact Information Card with you at all times.”

**Appendix J: Summary of Lost/Missing/Stolen 2010 Census Equipment by Region**

RCC	FY09					FY10					FY11				
	Total		Not Found			Total		Not Found			Total		Not Found		
	Total	Found	L	M	S	Total	Found	L	M	S	Total	Found	L	M	S
Boston	38	26	4	6	2	14	2	4	4	4	3	0	1	2	0
Boston - PR	6	4	2	0	0	3	0	2	0	1	0	0	0	0	0
New York	28	13	3	5	7	2	0	2	0	0	0	0	0	0	0
Philadelphia	48	33	2	5	8	2	0	1	0	1	0	0	0	0	0
Detroit	50	29	3	6	12	6	0	4	0	2	2	0	0	0	2
Chicago	85	66	5	8	6	4	0	2	1	1	0	0	0	0	0
Kansas City	89	59	5	19	6	6	0	4	0	2	1	0	1	0	0
Seattle	53	44	4	2	3	8	2	3	1	2	2	0	1	1	0
Charlotte	36	19	4	2	11	4	3	1	0	0	0	0	0	0	0
Atlanta	83	56	4	15	8	7	2	2	0	3	1	0	0	1	0
Dallas	114	94	2	5	13	6	5	1	0	0	2	1	1	0	0
Denver	119	70	29	10	10	7	1	3	1	2	3	0	3	0	0
Los Angeles	54	37	3	0	14	5	4	1	0	0	4	1	0	2	1
<b>TOTAL</b>	<b>803</b>	<b>550</b>	<b>70</b>	<b>83</b>	<b>100</b>	<b>74</b>	<b>19</b>	<b>30</b>	<b>7</b>	<b>18</b>	<b>18</b>	<b>2</b>	<b>7</b>	<b>6</b>	<b>3</b>

Source: FLD Summary of PIMS Data

**FY09**

Total Equipment in the Field	299,300
Total Lost/Missing/Stolen	253
Estimated Lost/Missing/Stolen	2,993
Percent of Estimate Realized	8%

**FY10**

Total Equipment in the Field	59,567
Total Lost/Missing/Stolen	55
Estimated Lost/Missing/Stolen	596
Percent of Estimate Realized	9%

**FY11**

Total Equipment in the Field	4,493
Total Lost/Missing/Stolen	16
Estimated Lost/Missing/Stolen	45
Percent of Estimate Realized	36%

Notes: Losses of office equipment in FY 11 are primarily inventory issues.

**FY09-FY10-FY11**

Total Equipment in the Field	363,360
Total Lost/Missing/Stolen	324
Estimated Lost/Missing/Stolen	3,634
Percent of Estimate Realized	9%

Notes: Losses of office equipment in FY 11 are primarily inventory issues.

FY09

RCC	Total					HHCs					SD Cards				
	Total	Found	Not Found			Total	Found	Not Found			Total	Found	Not Found		
			L	M	S			L	M	S			L	M	S
Boston	38	26	4	6	2	17	14	1	1	1	16	10	1	4	1
Boston - PR	6	4	2	0	0	3	2	1	0	0	3	2	1	0	0
New York	28	13	3	5	7	13	7	1	2	3	12	6	1	3	2
Philadelphia	48	33	2	5	8	25	18	1	2	4	23	15	1	3	4
Detroit	50	29	3	6	12	24	15	1	3	5	23	14	1	3	5
Chicago	85	66	5	8	6	35	29	2	1	3	49	36	3	7	3
Kansas City	89	59	5	19	6	36	29	2	2	3	49	28	2	17	2
Seattle	53	44	4	2	3	28	24	2	1	1	23	19	2	1	1
Charlotte	36	19	4	2	11	18	10	2	0	6	16	9	1	1	5
Atlanta	83	56	4	15	8	45	38	2	2	3	31	12	2	13	4
Dallas	114	94	2	5	13	68	58	1	2	7	44	35	0	3	6
Denver	119	70	29	10	10	43	36	1	2	4	73	33	27	8	5
Los Angeles	54	37	3	0	14	22	15	1	0	6	27	19	2	0	6
<b>TOTAL</b>	<b>803</b>	<b>550</b>	<b>70</b>	<b>83</b>	<b>100</b>	<b>377</b>	<b>295</b>	<b>18</b>	<b>18</b>	<b>46</b>	<b>389</b>	<b>238</b>	<b>44</b>	<b>63</b>	<b>44</b>
<b>Actual Equipment in the Field</b>						141,500					141,500				
<b>Actual Lost/Missing/Stolen</b>						82					151				
<b>Estimated Lost/Missing/Stolen</b>						1,415					1,415				
<b>Percent of Estimate Realized</b>						6%					11%				

RCC	Laptops					Desktops					Printers								
	Total	Found	Not Found			Total	Found	Not Found			Total	Found	Not Found						
			L	M	S			L	M	S			L	M	S				
Boston - PR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
New York	1	0	0	0	1	0	0	0	0	0	1	0	0	0	1				
Philadelphia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Detroit	1	0	0	0	1	0	0	0	0	0	1	0	0	0	1				
Chicago	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Kansas City	3	2	0	0	1	0	0	0	0	0	0	0	0	0	0				
Seattle	2	1	0	0	1	0	0	0	0	0	0	0	0	0	0				
Charlotte	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
Atlanta	6	6	0	0	0	0	0	0	0	0	1	0	0	0	1				
Dallas	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
Denver	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
Los Angeles	3	2	0	0	1	0	0	0	0	0	2	1	0	0	1				
<b>TOTAL</b>	<b>22</b>	<b>14</b>	<b>1</b>	<b>1</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>4</b>				
<b>Actual Equipment in the Field:</b>					2,159					3,325					1,650				
<b>Actual Lost/Missing/Stolen:</b>					8					0					4				
<b>Estimated Lost/Missing/Stolen:</b>					22					33					17				
<b>Percent of Estimate Realized:</b>					37%					0%					24%				

RCC	Flashdrives					Office Phones					Blackberries								
	Total	Found	Not Found			Total	Found	Not Found			Total	Found	Not Found						
			L	M	S			L	M	S			L	M	S				
Boston	2	1	0	1	0	0	0	0	0	0	1	0	1	0	0				
Boston - PR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
New York	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0				
Philadelphia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Detroit	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0				
Chicago	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Kansas City	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0				
Seattle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Charlotte	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0				
Atlanta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Dallas	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0				
Denver	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0				
Los Angeles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
<b>TOTAL</b>	<b>4</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>0</b>				
<b>Actual Equipment in the Field:</b>					2,159					6,750					257				
<b>Actual Lost/Missing/Stolen:</b>					2					0					6				
<b>Estimated Lost/Missing/Stolen:</b>					22					68					3				
<b>Percent of Estimate Realized:</b>					9%					0%					233%				



FY10

RCC	Total					HHCs					SD Cards						
	Total	Found	Not Found			Total	Found	Not Found			Total	Found	Not Found				
			L	M	S			L	M	S			L	M	S		
Boston	14	2	4	4	4	0	0	0	0	0	0	0	0	0	0	0	0
Boston - PR	3	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0
New York	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Philadelphia	2	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Detroit	6	0	4	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Chicago	4	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Kansas City	6	0	4	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Seattle	8	2	3	1	2	0	0	0	0	0	0	0	0	0	0	0	0
Charlotte	4	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Atlanta	7	2	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0
Dallas	6	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Denver	7	1	3	1	2	0	0	0	0	0	0	0	0	0	0	0	0
Los Angeles	5	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>74</b>	<b>19</b>	<b>30</b>	<b>7</b>	<b>18</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Actual Equipment in the Field						N/A					N/A						
Actual Lost/Missing/Stolen						N/A					N/A						
Estimated Lost/Missing/Stolen						N/A					N/A						
Percent of Estimate Realized						N/A					N/A						

RCC	Laptops					Desktops					Printers						
	Total	Found	Not Found			Total	Found	Not Found			Total	Found	Not Found				
			L	M	S			L	M	S			L	M	S		
Boston	3	0	0	0	3	1	0	0	1	0	3	2	1	0	0	0	0
Boston - PR	2	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
New York	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Philadelphia	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Detroit	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Chicago	1	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0
Kansas City	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Seattle	2	0	1	0	1	0	0	0	0	0	3	2	1	0	0	0	0
Charlotte	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Atlanta	5	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
Dallas	3	3	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
Denver	2	0	0	0	2	0	0	0	0	0	3	1	1	1	0	0	0
Los Angeles	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>28</b>	<b>10</b>	<b>2</b>	<b>0</b>	<b>16</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>9</b>	<b>5</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>
Actual Equipment in the Field:		11,068					12,950					4,058					
Actual Lost/Missing/Stolen:		18					2					4					
Estimated Lost/Missing/Stolen:		111					130					41					
Percent of Estimate Realized:		16%					2%					10%					

RCC	Flashdrives					Office Phones					Blackberries						
	Total	Found	Not Found			Total	Found	Not Found			Total	Found	Not Found				
			L	M	S			L	M	S			L	M	S		
Boston	6	0	2	3	1	0	0	0	0	0	1	0	1	0	0	0	0
Boston - PR	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
New York	0	0	0	0	0	1	0	1	0	0	1	0	1	0	0	0	0
Philadelphia	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
Detroit	2	0	2	0	0	1	0	1	0	0	1	0	1	0	0	0	0
Chicago	0	0	0	0	0	1	0	1	0	0	1	0	1	0	0	0	0
Kansas City	2	0	2	0	0	0	0	0	0	0	2	0	2	0	0	0	0
Seattle	2	0	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0
Charlotte	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
Atlanta	0	0	0	0	0	1	0	1	0	0	1	0	1	0	0	0	0
Dallas	1	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
Denver	0	0	0	0	0	1	0	1	0	0	1	0	1	0	0	0	0
Los Angeles	2	2	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>15</b>	<b>3</b>	<b>6</b>	<b>4</b>	<b>2</b>	<b>10</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Actual Equipment in the Field:		11,068					20,166					257					
Actual Lost/Missing/Stolen:		12					10					9					
Estimated Lost/Missing/Stolen:		111					202					3					
Percent of Estimate Realized:		11%					5%					350%					

FY11

RCC	Total					HHCs					SD Cards				
	Total	Found	Not Found			Total	Found	Not Found			Total	Found	Not Found		
			L	M	S			L	M	S			L	M	S
Boston	3	0	1	2	0	0	0	0	0	0	0	0	0	0	0
Boston - PR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New York	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Philadelphia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Detroit	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0
Chicago	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kansas City	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Seattle	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0
Charlotte	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Atlanta	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Dallas	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Denver	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0
Los Angeles	4	1	0	2	1	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>18</b>	<b>2</b>	<b>7</b>	<b>6</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Actual Equipment in the Field</b>						0					0				
<b>Actual Lost/Missing/Stolen</b>						0					0				
<b>Estimated Lost/Missing/Stolen</b>						0					0				
<b>Percent of Estimate Realized</b>						N/A					N/A				

RCC	Laptops					Desktops					Printers					
	Total	Found	Not Found			Total	Found	Not Found			Total	Found	Not Found			
			L	M	S			L	M	S			L	M	S	
Boston	0	0	0	0	0	0	0	0	0	0	2	0	1	1	0	
Boston - PR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
New York	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Philadelphia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Detroit	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	
Chicago	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Kansas City	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Seattle	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	
Charlotte	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Atlanta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Dallas	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	
Denver	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Los Angeles	1	0	0	0	1	1	0	0	1	0	0	0	0	0	0	
<b>TOTAL</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>0</b>	
<b>Actual Equipment in the Field:</b>		1,068					600					600				
<b>Actual Lost/Missing/Stolen:</b>		2					1					3				
<b>Estimated Lost/Missing/Stolen:</b>		11					6					6				
<b>Percent of Estimate Realized:</b>		19%					17%					50%				

RCC	Flashdrives					Office Phones					Blackberries					
	Total	Found	Not Found			Total	Found	Not Found			Total	Found	Not Found			
			L	M	S			L	M	S			L	M	S	
Boston	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
Boston - PR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
New York	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Philadelphia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Detroit	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	
Chicago	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Kansas City	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
Seattle	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	
Charlotte	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Atlanta	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
Dallas	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	
Denver	2	0	2	0	0	0	0	0	0	0	1	0	1	0	0	
Los Angeles	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
<b>TOTAL</b>	<b>8</b>	<b>1</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	
<b>Actual Equipment in the Field:</b>		1,068					900					257				
<b>Actual Lost/Missing/Stolen:</b>		7					2					1				
<b>Estimated Lost/Missing/Stolen:</b>		11					9					3				
<b>Percent of Estimate Realized:</b>		66%					22%					39%				

FY09-FY10-FY11

RCC	Total					HHCs					SD Cards						
	Total	Found	Not Found			Total	Found	Not Found			Total	Found	Not Found				
			L	M	S			L	M	S			L	M	S		
Boston	55	28	9	12	6	17	14	1	1	1	16	10	1	4	1		
Boston - PR	9	4	4	0	1	3	2	1	0	0	3	2	1	0	0		
New York	30	13	5	5	7	13	7	1	2	3	12	6	1	3	2		
Philadelphia	50	33	3	5	9	25	18	1	2	4	23	15	1	3	4		
Detroit	58	29	7	6	16	24	15	1	3	5	23	14	1	3	5		
Chicago	88	65	7	9	7	35	29	2	1	3	49	36	3	7	3		
Kansas City	96	59	10	19	8	36	29	2	2	3	49	28	2	17	2		
Seattle	63	46	8	4	5	28	24	2	1	1	23	19	2	1	1		
Charlotte	40	22	5	2	11	18	10	2	0	6	16	9	1	1	5		
Atlanta	91	58	6	16	11	45	38	2	2	3	31	12	2	13	4		
Dallas	122	100	4	5	13	68	58	1	2	7	44	35	0	3	6		
Denver	129	71	35	11	12	43	36	1	2	4	73	33	27	8	5		
Los Angeles	62	41	4	2	15	22	15	1	0	6	27	19	2	0	6		
<b>TOTAL</b>	<b>893</b>	<b>569</b>	<b>107</b>	<b>96</b>	<b>121</b>	<b>377</b>	<b>295</b>	<b>18</b>	<b>18</b>	<b>46</b>	<b>389</b>	<b>238</b>	<b>44</b>	<b>63</b>	<b>44</b>		
Actual Equipment in the Field						141,500						141,500					
Actual Lost/Missing/Stolen						82						151					
Estimated Lost/Missing/Stolen						1,415						1,415					
Percent of Estimate Realized						6%						11%					

RCC	Laptops					Desktops					Printers						
	Total	Found	Not Found			Total	Found	Not Found			Total	Found	Not Found				
			L	M	S			L	M	S			L	M	S		
Boston	5	1	1	0	3	1	0	0	1	0	5	2	2	1	0		
Boston - PR	2	0	1	0	1	0	0	0	0	0	0	0	0	0	0		
New York	1	0	0	0	1	0	0	0	0	0	1	0	0	0	1		
Philadelphia	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0		
Detroit	4	0	0	0	4	0	0	0	0	0	1	0	0	0	1		
Chicago	1	0	0	0	1	1	0	0	1	0	0	0	0	0	0		
Kansas City	5	2	0	0	3	0	0	0	0	0	0	0	0	0	0		
Seattle	4	1	1	0	2	0	0	0	0	0	4	2	1	1	0		
Charlotte	4	3	0	1	0	0	0	0	0	0	0	0	0	0	0		
Atlanta	11	8	0	0	3	0	0	0	0	0	1	0	0	0	1		
Dallas	4	4	0	0	0	2	2	0	0	0	0	0	0	0	0		
Denver	3	0	0	0	3	0	0	0	0	0	3	1	1	1	0		
Los Angeles	6	4	0	0	2	1	0	0	1	0	2	1	0	0	1		
<b>TOTAL</b>	<b>51</b>	<b>23</b>	<b>3</b>	<b>1</b>	<b>24</b>	<b>5</b>	<b>2</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>17</b>	<b>6</b>	<b>4</b>	<b>3</b>	<b>4</b>		
			14,295						16,875						6,308		
			28						3						11		
			143						169						63		
			20%						2%						17%		

RCC	Flashdrives					Office Phones					Blackberries						
	Total	Found	Not Found			Total	Found	Not Found			Total	Found	Not Found				
			L	M	S			L	M	S			L	M	S		
Boston	9	1	2	5	1	0	0	0	0	0	2	0	2	0	0		
Boston - PR	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0		
New York	0	0	0	0	0	1	0	1	0	0	2	0	2	0	0		
Philadelphia	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0		
Detroit	3	0	2	0	1	1	0	1	0	0	2	0	2	0	0		
Chicago	0	0	0	0	0	1	0	1	0	0	1	0	1	0	0		
Kansas City	3	0	3	0	0	0	0	0	0	0	3	0	3	0	0		
Seattle	2	0	0	1	1	2	0	2	0	0	0	0	0	0	0		
Charlotte	0	0	0	0	0	1	0	1	0	0	1	0	1	0	0		
Atlanta	1	0	0	1	0	1	0	1	0	0	1	0	1	0	0		
Dallas	1	1	0	0	0	2	0	2	0	0	1	0	1	0	0		
Denver	4	1	3	0	0	1	0	1	0	0	2	0	2	0	0		
Los Angeles	3	2	0	1	0	1	0	1	0	0	0	0	0	0	0		
<b>TOTAL</b>	<b>26</b>	<b>5</b>	<b>10</b>	<b>8</b>	<b>3</b>	<b>12</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>16</b>	<b>0</b>	<b>16</b>	<b>0</b>	<b>0</b>		
			14,295						27,816						771		
			21						12						16		
			143						278						8		
			15%						4%						208%		

## Appendix K: Summary of Lost/Missing/Stolen 2010 Census Paper

For the purpose of estimating workloads for lost/missing/stolen paper PII, the following were used:

- Operational questionnaires based on operational workloads;
- Applicant Forms based on 3.8 million applicants; and
- Recruiting Forms based on 1.3 million hires.

This base substantially *underestimated* the actual number of forms in use, since it included questionnaires for 14 field operations, two applicant forms, and 10 hiring forms, but did **not** include forms like the D-308 (Daily Pay and Work Record), training aids, observation reports, status reports, progress reports, performance reports, and manuals. In all, there were 1,059 forms utilized in the telephone center “forms matrix” for taking loss information from the field.

The estimate base for paper losses was 96,968,248 forms, of which 20,600,000 were application and hiring forms.

**Table K1.** Total Paper Losses by Fiscal Year

Type of Paper	FY09	FY10	FY11	Total
All Paper Losses	2,526	109,966	4,770	117,262

Source: FLD Summary of PIMS Data

**Table K1.1** Paper Losses – by 2010 Census Forms and Other Paper Losses: FY09–FY11

Type of Paper	FY09	FY10	FY11	Total	% of Total
Decennial Forms Lost	1,692	78,076	2,814	82,582	70%
Other Paper Lost	834	31,890	1,956	34,680	30%
Total...	2,526	109,966	4,770	117,262	100%

Source: FLD Summary of PIMS Data

**Table K1.2** Paper Losses – by High Risk Paper and Non-High Risk Paper Losses: FY09 – FY 11

Type of Paper	FY09	FY10	FY11	Total	% of Total
High Risk PII Paper Lost	446	1,675	730	2,851	2%
Non-High Risk PII Paper Lost	2,080	108,291	4,040	114,411	98%
Total...	2,526	109,966	4,770	117,262	100%

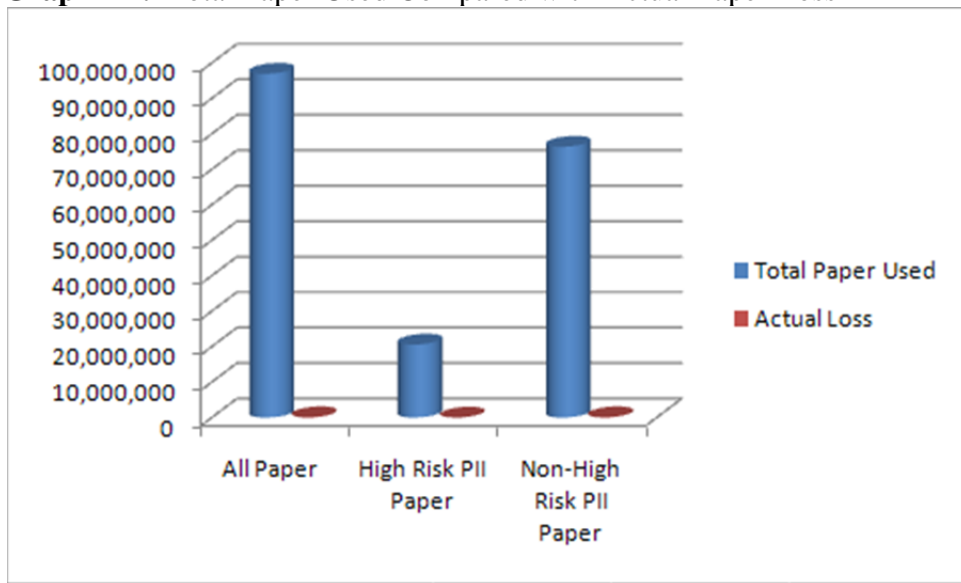
Source: FLD Summary of PIMS Data

**Table K2.** Actual Paper Losses Compared with Estimated Paper Losses

Type of Paper	Total Paper	Actual Loss	Actual Loss Rate	Expected Loss	Expected Loss Rate	Actual Loss as a % of Estimate
All Paper	96,968,248	117,262	0.12%	1,939,365	2.00%	6.05%

Source: FLD Summary of PIMS Data

**Graph K1.** Total Paper Used Compared with Actual Paper Loss



Source: FLD Summary of PIMS Data

**Table K2.1.** High and Non-High Risk Paper Losses Compared with Estimated Paper Losses

Type of Paper	Total Paper	Actual Loss	Actual Loss Rate	Expected Loss	Expected Loss Rate	Actual Loss as a Percentage of Estimated
High Risk PII Paper	20,600,000	2,851	0.01%	412,000	2.00%	0.69%
Non-High Risk PII Paper	76,368,248	114,411	0.15%	1,527,365	2.00%	7.49%
Total...	96,968,248	117,262	0.12%	1,939,365	2.00%	6.05%

Source: FLD Summary of PIMS Data