

Privacy Impact Assessment

NASS Data and Applications Major Application

National Agricultural Statistics Service

- Version: 3
- Date: April 3, 2020
- Prepared for: USDA NASS





Privacy Impact Assessment for the NASS Data and Applications Major Application (NASS DA MA)

April 3, 2020

Contact Point

Paul Williams
National Agricultural Statistics Service
(202) 720-7500

Reviewing Official

Renato Chan
Deputy Assistant CISO, USDA/REE
Agricultural Research Service
United States Department of Agriculture
(202)720-4068

Abstract

This document contains the Privacy Impact Assessment (PIA) of the National Agricultural Statistics Service (NASS) Data and Applications Major Application (DA MA). The NASS DA MA is a UNIX-based application farm that is comprised of a number of various applications. These applications generally support the mission of NASS.

The NASS is conducting this PIA on the NASS DA MA because the system processes and stores personally identifiable Information of all participating farmers and ranchers in the US which include name, address, phone number, size of operation, gender, and race. In addition, the system processes and stores agribusiness information, including: Firm names, manager names, address, phone number, size of operation in various categories and tax EINs.

Overview

The NASS DA MA is hosted by the NASS Infrastructure (INF) General Support System (GSS) which is physically located at two separate locations, the NASS Headquarters (HQ) in Washington, D.C. and the USDA National Information Technology Center (NITC), in Kansas, City. The architecture consists of servers operating under both AIX and Linux Operating Systems. All NASS DA MA applications are managed and maintained by various NASS System Administrators, Database Administrators and Developers located at NASS HQ and Colorado Field Office (FO).

The NASS DA MA mid-range server environment is distributed at the NASS INF GSS locations. The architecture consists of servers operating under both AIX and Linux operating systems. Our UNIX environment resides on IBM pSeries equipment. All NASS INF GSS servers are managed from NASS HQ.

Servers located at NASS HQ are more specialized since consolidation is not as far along at this facility. There are six production servers in NASS HQ supporting the following production processes 1) public agricultural statistics reports and geospatial data, 2) NASS intranet backup, 3) web data collection public front end, 4) web data collection back-end database, 5) auto-matching to build the list and sampling frame, 6) replication of data across enterprise databases.

NASS DA MA applications work from an enterprise transactional and analytical database environment to provide access to a database on the NASS Infrastructure (INF) GSS. NASS DA MA has a "census" processing system that is used every five years and consists of multiple components, i.e. data editing component, data analysis component, data tabulation/summary component, and a data disclosure review component. NASS DA MA also includes some isolated "survey" systems that are migrating to the UNIX environment, i.e. web data collection and livestock slaughter applications. NASS DA MA also has some "support" applications that service both the census and surveys, such as the sampling system, web public agricultural statistics, public special tabulations, geospatial application, electronic images of questionnaires, and an intranet application. Functions of the NASS DA MA applications are described in the following paragraphs.

1. PRISM3 (Project to Reengineer and Integrate Statistical Methods): PRISM is a major reengineering and integration effort for the Census of Agriculture designed to

streamline and improve the quality of census and survey processes.

2. **Livestock Slaughter:** The purpose of Livestock Slaughter is to edit, analyze, summarize and publish Livestock Slaughter statistics on a monthly and annual basis. The *Livestock Slaughter* report is a monthly outline of animals that have been slaughtered in the U. S. This report provides the number of heads slaughtered, live weight, and dressed weight of cattle and calves. Similar statistics are reported for sheep, lamb, hogs and pigs. For federally inspected plants, statistics are reported by class and by state. In addition, total red meat production by species is reported by state and for the U. S.
3. **Poultry Slaughter:** The purpose of Poultry Slaughter is to edit, analyze, summarize and publish Poultry Slaughter statistics on a monthly and annual basis.
4. **Genesis (Generalized Enhanced Sampling and Information System):** To replace all of the disparate sampling programs, NASS developed the Generalized Enhanced Sampling and Information System (GENESIS). As an internal tool to the NASS survey process, GENESIS has improved the quality of NASS samples. It has also improved the efficiency of the sampling process in terms of cost, staff time, and calendar time.
5. **ELMO (Enhanced List Maintenance Operations):** ELMO is a system which is used to manage the farm register database. The system allows the user: to search for records based on certain name and address information, to update name, address, and control data information either individually or in a batch mode, and to extract lists of records in different formats.
6. **Record Linkage:** NASS designed Record Linkage to make the record linkage process as simple and user friendly as possible. NASS developed record linkage system with AutoMatch as the core.
7. **EDR (Electronic Data Reporting):** NASS decided that a Web-based EDR with a secure environment would be the most suitable and effective method for NASS. It can be used appropriately for most NASS surveys and is considered technically superior to the other methods reviewed.
8. **Quick Stats:** Quick Stats is composed of two basic tools: 1) Quick Stats Query Tool LAN and 2) Quick Stats Web App. Quick Stats Query Tool LAN is an internal application designed to allow USDA employees to perform statistical queries on the Agricultural Statistics Data Base. Quick Stats Web App is a web-based publicly accessible read-only system that allows the public to view results from queries against the Agricultural Statistics Data Base.
9. **SPS (Survey Processing System):** SPS is used to analyze and summarize the data in the Statistical Analysis System (SAS) datasets.
10. **ELMA (Enhanced List Maintenance Assistant):** supports the centralized list frame activities from the National Operations Center. ELMA provides an automated process to capture and review list frame update information presented in the List Frame Actions and Review paper reports (generated within all electronic data collection instruments) as well as list frame update information submitted by NASS

Field Offices. Field Office staff utilize ELMA to interactively request list frame updates to the sampling frames database, including name, address, telephone number, comments, and data collection mode and to request new farm/ranch operation additions to ELMO. Employees at the National Operations Center utilize ELMA to process ELMO updates/requests on an interactive basis.

11. RECAP (Review Estimates & Comments, Approve & Publish): RECAP provides a generalized set of review screens which allow employees to review the survey indications and comments from the Field Offices and/or Headquarters, and then either approve the estimate for public dissemination or request additional analysis be conducted before approving the estimate.
12. CAPI (Computer Assisted Personal Interview): CAPI leverages private cloud technology, broadband transmission, and use of computer tablets for data entry without storing data on the tablet hard drive.
13. CAWI (Computer Assisted Web Interview): CAWI leverages private cloud technology, broadband transmission, and use of computer tablets for data entry without storing data on the tablet hard drive.
14. Feith: Feith software is used to display questionnaire images, for use in data review. Through the use of Feith software, the image of a questionnaire can be easily retrieved to assist with the data review process, and navigation through the questionnaire using the software capabilities is relatively effortless. Feith uses an Oracle database running on a UNIX server under AIX for storing and retrieving the images, with very little downtime throughout the entire data review process.

Section 1.0 Characterization of the Information

The following questions are intended to define the scope of the information requested and/or collected as well as reasons for its collection as part of the program, system, rule, or technology being developed.

1.1 What information is collected, used, disseminated, or maintained in the system?

Customer information – Information on all participating farmers and ranchers in the US which include name, address, phone number, size of operation, last four digits of SSNs, gender, race.

Other – agribusiness – Firm names, manager names, address, phone number, size of operation in various categories, last four digits of tax EINs.

All information collected and processed by this system, including personally identifiable information, is protected by US Code: Title 7, 2276 – Confidentiality of Information.

1.2 What are the sources of the information in the system?

The population of farmers, ranchers, agri-businesses, and other federal agencies (FSA, IRS, Census [NPC], FSIS) and InfoUSA. Third party sources include InfoUSA, Universities (extension), commodity organizations, trade magazines.

FSA, IRS, FSIS and Bureau of Census provide data for use in the system.

1.3 Why is the information being collected, used, disseminated, or maintained?

The information is used to support the Agency's mission of providing timely, accurate, and useful statistics in service to U.S. agriculture.

1.4 How is the information collected?

Through interviews done by telephone, paper, and electronic data collection.

FSA and FSIS provide data that are entered into the system. These are done periodically through operator intervention (a business person with support from admin).

1.5 How will the information be checked for accuracy?

Criteria/Auditing questionnaires are provided to the individual under review asking them to fill in the specifics for them.

Name information is not verified by inference from a source. Instead that is used to start a questionnaire as identified above.

1.6 What specific legal authorities, arrangements, and/or agreements defined the collection of information?

Title 7 United States Code, Section 2204; Title 44 United States Code, Section 3501; and the Confidential Information Protection and Statistical Efficiency Act (CIPSEA) of 2002.

1.7 Privacy Impact Analysis: Given the amount and type of data collected, discuss the privacy risks identified and how they were mitigated.

There is always the risk of unauthorized disclosure. NASS requires all its employees sign confidentiality statements on an annual basis. In addition, systems containing privacy information employs additional security mechanisms to mitigate potential risks.

Section 2.0 Uses of the Information

The following questions are intended to delineate clearly the use of information and the accuracy of the data being used.

2.1 Describe all the uses of information.

The data will only be used to support the Agency's mission of providing timely, accurate, and useful statistics in service to U.S. agriculture.

2.2 What types of tools are used to analyze data and what type of data may be produced?

The NASS DA MA utilizes both transactional and analytical databases used in all Census, Survey, Support and Estimation and Dissemination applications used within the system and listed as follows: ELMO, Genesis, Record Linkage, PRISM, Quick Stats, CPCS, Livestock Slaughter, Poultry Slaughter, and Feith.

Data are used only in support of creating statistical information for such purposes as are necessary for the publication of statistical reports.

Source Agencies: NASS, FSA, FSIS

2.3 If the system uses commercial or publicly available data please explain why and how it is used.

Commercial and publicly available data is used to assist in identifying duplication of names between various probability list samples and NASS area frame surveys. They are also used when matching names currently on NASS list sampling frame with lists maintained by other governmental agencies as part of the NASS list building and maintenance process.

2.4 Privacy Impact Analysis: Describe any types of controls that may be in place to ensure that information is handled in accordance with the above described uses.

All authorized NASS users are required to sign a pledge of confidentiality that carries severe legal penalties for violating the pledge. NASS employs physical security controls, logical access controls, technological controls, auditing and monitoring of controls.

Section 3.0 Retention

The following questions are intended to outline how long information will be retained after the initial collection.

3.1 How long is information retained?

Data are retained as long as the information is needed for list building. Census data are retained for ten to fifteen years in electronic form.

3.2 Has the retention period been approved by the component records officer and the National Archives and Records Administration (NARA)?

Yes

3.3 Privacy Impact Analysis: Please discuss the risks associated with the length of time data is retained and how those risks are mitigated.

There is always the risk of unauthorized disclosure. NASS requires all its employees sign confidentiality statements on an annual basis. In addition, systems containing privacy information employs additional security mechanisms to mitigate potential risks.

Section 4.0 Internal Sharing and Disclosure

The following questions are intended to define the scope of sharing within the United States Department of Agriculture.

4.1 With which internal organization(s) is the information shared, what information is shared and for what purpose?

The USDA FSA and ERS have limited access to some of the data stored in the system and are controlled by use of both hardware and software security controls, including use of two-factor authentication via PIV.

4.2 How is the information transmitted or disclosed?

The information is transmitted through direct use of the system. User access is determined based on the person's job role.

4.3 Privacy Impact Analysis: Considering the extent of internal information sharing, discuss the privacy risks associated with the sharing and how they were mitigated.

There is always the risk of unauthorized disclosure. NASS requires all its employees sign confidentiality statements on an annual basis. In addition, systems containing privacy information employs additional security mechanisms to mitigate potential risks.

Section 5.0 External Sharing and Disclosure

The following questions are intended to define the content, scope, and authority for information sharing external to USDA which includes Federal, state and local government, and the private sector.

5.1 With which external organization(s) is the information shared, what information is shared, and for what purpose?

Information is not shared with any external organizations

5.2 Is the sharing of personally identifiable information outside the Department compatible with the original collection? If so, is it covered by an appropriate routine use in a SORN? If so, please describe. If not, please describe under what legal mechanism the program or system is allowed to share the personally identifiable information outside of USDA.

Not applicable, PII is not shared outside the Department.

5.3 How is the information shared outside the Department and what security measures safeguard its transmission?

Not applicable, PII is not shared outside the Department.

5.4 Privacy Impact Analysis: Given the external sharing, explain the privacy risks identified and describe how they were mitigated.

Not applicable, PII is not shared outside the Department.

Section 6.0 Notice

The following questions are directed at notice to the individual of the scope of information collected, the right to consent to uses of said information, and the right to decline to provide information.

6.1 Was notice provided to the individual prior to collection of information?

Yes

6.2 Do individuals have the opportunity and/or right to decline to provide information?

Yes

6.3 Do individuals have the right to consent to particular uses of the information? If so, how does the individual exercise the right?

Yes

6.4 Privacy Impact Analysis: Describe how notice is provided to individuals, and how the risks associated with individuals being unaware of the collection are mitigated.

The collection process is covered by the following NASS SORNs: Agricultural Survey Records, USDA/NASS-1; List Sampling Frame, USDA/NASS-2; and Census of Agriculture Records, USDA/NASS-3; which are available to the individuals through the Federal Register.

Section 7.0 Access, Redress and Correction

The following questions are directed at an individual's ability to ensure the accuracy of the information collected about them.

7.1 What are the procedures that allow individuals to gain access to their information?

Any individual may request information as to whether the system contains records pertaining to him or her by contacting the system manager at the address specified on the SORN. The request for information should contain: name, address, System of Record name, and year that the agricultural survey questionnaire was completed.

7.2 What are the procedures for correcting inaccurate or erroneous information?

A request is sent to the NASS Customer Service department.

7.3 How are individuals notified of the procedures for correcting their information?

By contacting the system managers listed on the following NASS SORNs: Agricultural Survey Records, USDA/NASS-1; List Sampling Frame, USDA/NASS-2; and Census of Agriculture Records, USDA/NASS-3.

7.4 If no formal redress is provided, what alternatives are available to the individual?

Not Applicable

7.5 Privacy Impact Analysis: Please discuss the privacy risks associated with the redress available to individuals and how those risks are mitigated.

There are no significant risks involved with the redress process.

Section 8.0 Technical Access and Security

The following questions are intended to describe technical safeguards and security measures.

8.1 What procedures are in place to determine which users may access the system and are they documented?

Access to data is limited only to users authorized by NASS to modify, maintain and review the data. This includes authorized managers, system administrators and developers. Each user also signs a pledge of confidentiality that carries severe legal penalties for violating the pledge. Business function managers define the access need for the user based on user requirements. Local manager verifies the authenticity and veracity of the individual who is being approved for access. Access request as well as approval is documented accordingly by management and the Technical Services Branch. The Computer Security Staff audits access routinely.

8.2 Will Department contractors have access to the system?

No

8.3 Describe what privacy training is provided to users either generally or specifically relevant to the program or system?

All authorized NASS users are required to sign a pledge of confidentiality that carries severe legal penalties for violating the pledge.

8.4 Has Certification & Accreditation been completed for the system or systems supporting the program?

Yes.

8.5 What auditing measures and technical safeguards are in place to prevent misuse of data?

NASS employs physical security controls, logical access controls, technological controls, auditing and monitoring of controls.

8.6 Privacy Impact Analysis: Given the sensitivity and scope of the information collected, as well as any information sharing conducted on the system, what privacy risks were identified and how do the security controls mitigate them?

There is always the risk of unauthorized disclosure of privacy information. NASS restricts access to information to authorized users. NASS requires all its employees sign confidentiality statements on an annual basis. In addition, systems containing privacy information employs additional security mechanisms to mitigate potential risks, to include logical access controls, technical controls and auditing.

Section 9.0 Technology

The following questions are directed at critically analyzing the selection process for any technologies utilized by the system, including system hardware and other technology.

9.1 What type of project is the program or system?

The NASS DA MA is an operational UNIX application farm and is comprised of a number of various applications. These applications generally support the mission of NASS.

9.2 Does the project employ technology which may raise privacy concerns? If so, please discuss their implementation.

The project does not employ technology that raises privacy concerns.

Section 10.0 Third Party Websites/Applications

The following questions are directed at critically analyzing the privacy impact of using third party websites and/or applications.

10.1 Has the System Owner (SO) and/or Information Systems Security Program Manager (ISSPM) reviewed Office of Management and Budget (OMB) memorandums M-10-22 “Guidance for Online Use of Web Measurement and Customization Technology” and M-10-23 “Guidance for Agency Use of Third-Party Websites and Applications”?

Yes.

10.2 What is the specific purpose of the agency’s use of 3rd party websites and/or applications?

There is no 3rd party websites and/or applications in use.

10.3 What personally identifiable information (PII) will become available through the agency’s use of 3rd party websites and/or applications.

N/A

10.4 How will the PII that becomes available through the agency’s use of 3rd party websites and/or applications be used?

N/A

10.5 How will the PII that becomes available through the agency’s use of 3rd party websites and/or applications be maintained and secured?

N/A

10.6 Is the PII that becomes available through the agency’s use of 3rd party websites and/or applications purged periodically?

N/A

If so, is it done automatically?

N/A

If so, is it done on a recurring basis?

N/A

10.7 Who will have access to PII that becomes available through the agency’s use of 3rd party websites and/or applications?

N/A

10.8 With whom will the PII that becomes available through the agency's use of 3rd party websites and/or applications be shared - either internally or externally?

N/A

10.9 Will the activities involving the PII that becomes available through the agency's use of 3rd party websites and/or applications require either the creation or modification of a system of records notice (SORN)?

N/A

10.10 Does the system use web measurement and customization technology?

N/A

10.11 Does the system allow users to either decline to opt-in or decide to opt-out of all uses of web measurement and customization technology?

N/A

If so, does the agency provide the public with alternatives for acquiring comparable information and services?

N/A

10.12 Privacy Impact Analysis: Given the amount and type of PII that becomes available through the agency's use of 3rd party websites and/or applications, discuss the privacy risks identified and how they were mitigated.

N/A



Approval Signatures:

Renato Chan
Chief, NASS Security
United States Department of Agriculture

Date

Paul Williams
Authorizing Official, DA MA
United States Department of Agriculture

Date