

2010 Decennial Census
Local Update of Census Addresses (LUCA) Program
User Guide for State Governments

Issued August 2007

Option 2-Title 13 Local Address List Submission



U S C E N S U S B U R E A U
Helping You Make Informed Decisions

U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU

United States™
Census
2010

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CHAPTER 1

INTRODUCTION TO THE 2010 DECENNIAL CENSUS LOCAL UPDATE OF CENSUS ADDRESSES (LUCA) PROGRAM

The 2010 Decennial Census Local Update of Census Addresses (LUCA) Program

Background

The Census Address List Improvement Act

The Census Bureau's Master Address File (MAF)

The Topologically Integrated Geographic Encoding and Referencing (TIGER[®]) Database

LUCA Program Responsibilities

Census Bureau's LUCA Responsibilities

Participant's LUCA Responsibilities

Training and Technical Support

Schedule

Respondent Burden

The 2010 Decennial Census Local Update of Census Addresses (LUCA) Program

The Local Update of Census Addresses (LUCA) Program is an integral part of the 2010 Census activities that utilizes the expertise of tribal, state, and local governments to improve the accuracy and completeness of the address list used to take the census.

The U.S. Census Bureau invited the Governor (Chief Executive/Highest Elected Official), of your state to participate in this program. Your state selected Option 2, Title 13 Address List Submission. This option allows you to:

- Review the Census Bureau's address list including **city-style**¹ and **noncity-style**² residential addresses and address count list for your state. These lists are for reference purposes only.
- Submit your state address list file of single or multiunit structure or **group quarters**³ city-style addresses only, in a predefined Census Bureau computer-readable format. The Census Bureau will only accept your address files (**city-style addresses only**) in the predefined format as explained in Chapter 4.

¹A **city-style address** consists of a house number and street name; for example, 201 Main Street. The address may or may not be used for the delivery of mail and may include apartment numbers/designations or similar identifiers. *See Chapter 2 for a complete definition.*

²A **noncity-style address** does not use a house number and street name. This includes rural route and box number addresses and highway contract route addresses, etc., which may include a box number, post office boxes and drawers, and general delivery.

³A **group quarters** is a place where people live or stay that is normally owned or managed by an entity or organization providing housing and/or services for the residents. *See Chapter 2 for a complete definition.*

- Identify any additions, deletions, or corrections to boundaries, roads, or other physical features by submitting an updated version of the digital maps file (shapefile) provided by the Census Bureau.

Background

The Census Address List Improvement Act

The Census Address List Improvement Act of 1994 (Public Law 103-430) strengthened the Census Bureau's partnership capabilities with tribal, state, and local governments by expanding the methods the Census Bureau could use to exchange address information. Designed to improve the accuracy of the Census Bureau's address list, the Act authorized the Census Bureau to provide individual addresses to officials of tribal, state, and local governments who agreed to conditions of confidentiality. Census 2000 marked the first decennial census for which the Census Bureau could provide its address list for review to governments that signed the required confidentiality agreement. *(See Appendix A for the terms of the LUCA Program Confidentiality and Security Guidelines.)*

The Census Bureau's Master Address File (MAF)

In preparation for Census 2000, the Census Bureau created the Master Address File (MAF) by merging the 1990 Address Control File⁴ with the latest version of the U.S. Postal Service's (USPS) Delivery Sequence File⁵ (DSF). The MAF is a nationwide database of all addresses used to support many of the Census Bureau's operations. Besides containing mailing addresses and ZIP Codes, an address record in the MAF also contains geographic information about the location of addresses. In areas where there are noncity-style addresses (e.g., rural route or post office box number), the address record may contain additional information such as a location description.

The Topologically Integrated Geographic Encoding and Referencing (TIGER[®]) Database

Address records in the MAF are linked to feature segments in the Topologically Integrated Geographic Encoding and Referencing (TIGER[®]) database. The TIGER[®] database includes the geographic coordinates and names of all streets, water features, and other linear features, and boundaries for all jurisdictions and statistical areas (census tracts⁶, census blocks⁷, etc.)

⁴ The 1990 residential address list used to label questionnaires, control the mail response check-in operation, and determine the nonresponse follow-up workload.

⁵ A computerized file containing all delivery point addresses serviced by the U.S. Postal Service (USPS). The USPS updates the DSF continuously as its letter carriers identify addresses for new delivery points or changes in the status of existing addresses.

⁶ A **census tract** is a small, relatively permanent statistical division of a county or statistically equivalent entity, delineated for the purpose of presenting Census Bureau statistical data.

⁷ A **census block** is a geographic area bounded by visible features, such as streets, roads, streams, and railroad tracks, and invisible features, such as the boundaries of governmental units and other legal entities. Census blocks are the smallest area for which the Census Bureau collects and tabulates statistical information.

used to tabulate decennial census data. The TIGER[®] database also includes address ranges⁸ along streets that have city-style addresses and the hierarchy of census geographic area codes from the state level down to individual census blocks (www.census.gov/geo/www/geodiagram.html). By linking address records in the MAF to the TIGER[®] database, the Census Bureau is able to identify street segments along which an individual address exists and determine the geographic code that applies to that address.

The Census Bureau's Geography Division regularly updates the MAF/TIGER database from various sources. In addition to the USPS DSF, other sources of updates include current household surveys, special censuses, and local sources.

LUCA Program Responsibilities

Census Bureau's LUCA Program Responsibilities

The Census Bureau's LUCA program responsibilities include:

- Provide training to LUCA program participants.
- Provide the necessary materials to participants.
- Provide technical assistance.
- Process updates submitted by LUCA participants.
- Conduct a 100% Address Canvassing (field check) operation. The Census Bureau will visit each census block within your state during this operation to update our address list and validate your LUCA submissions.
- Provide feedback materials for your review.
- Provide assistance to participants to resolve any address discrepancies.
- Provide for a formal appeal of disputed addresses by an independent federal agency outside of the Census Bureau and the Department of Commerce.

Participant's LUCA Program Responsibilities

As a participant in the LUCA program, your responsibilities include:

- Select your LUCA state liaison and reviewers. (*The Census Bureau suggests that individuals in your state involved in zoning enforcement not work on this program since this may create a conflict of interest.*)
- Sign and return the Registration Form.

⁸ **Address ranges** are the lowest and highest address numbers used to identify structures along each side of a street segment that has city-style addresses. Usually one side of the street has even address numbers and the other side has odd address numbers.

- All liaisons, reviewers, and anyone with access to Title 13, United States Code (U.S.C.) materials must read, understand, and agree to abide by the Census Bureau's Confidentiality and Security Guidelines. *(See Appendix A for the terms of the LUCA Program Confidentiality and Security Guidelines.)*
- All liaisons, reviewers, and anyone with access to Title 13 materials must sign and return to the Census Bureau the Confidentiality Agreement Form.
- Complete and return the Self-Assessment Form.
- Complete and return the Participation Option/GIS Preference/Coverage Selection Form
- Ensure that everyone working on the LUCA program understands the procedures for participating in the program and Census Bureau terminology and concepts.
- Keep Census Bureau addresses and maps showing structure points⁹, (housing units and group quarters locations) confidential and ensure their use only for census purposes. *(Although structure points are not displayed on the LUCA materials during the LUCA review phase, they will be provided for the Feedback phase of the program.)*
- Ensure the receipt of all required materials for the LUCA program review.
- Prepare a strategy to conduct the review of LUCA materials.
- Within 120 calendar days of receiving your LUCA materials, complete your address list review and return your updated materials to the Census Bureau.
- Review the Census Bureau's detailed feedback materials.
- Appeal address discrepancies to the LUCA Appeals Office.
- After the appeals process is complete, return to the Census Bureau or destroy all Title 13 materials.
- The LUCA state liaison must verify the return or destruction of Title 13 materials by signing and returning to the Census Bureau the Return or Destruction of Title 13, U.S.C. Materials form.
- All LUCA program reviewers must sign and date the Return or Destruction of Title 13, U.S.C. Materials form.

Training and Technical Support

Census Bureau staff will conduct LUCA training workshops beginning in August of 2007. These training workshops will provide you with hands-on

⁹ A **structure point** is a coordinate location that represents the location of one or more housing units and/or group quarters. Structure points are protected by Title 13. *See Appendix A, Confidentiality and Security Guidelines.*

experience in using the 2010 Decennial Census LUCA Program materials. In addition, computer-based training (CBT) is available on the LUCA Program CBT CD-ROM and the LUCA Web site at www.census.gov/geo/www/luca2010/luca.html.

Should you need additional information, please contact your Census Bureau Regional Office toll free at 1-866-511-LUCA (5822) or for technical assistance about computer applications including the MAF/TIGER Partnership Software (MTPS), please call the Help Desk toll free at 1-866-919- LUCA (5822).

Schedule

January–February 2007	LUCA advance notification letters and information materials were mailed to the Governor (Chief Executive/Highest Elected Official) and other contacts in your state government.
March–June 2007	LUCA Promotional Workshops were conducted.
August 2007	LUCA invitation letters and registration materials were mailed to the Governor (Chief Executive/Highest Elected Official) and a courtesy copy to other contacts in your state government.
August 2007–January 2008	Invited governments register for LUCA and the Census Bureau ships LUCA review materials to each participating government.
August 2007	LUCA Training Workshops begin.
September 2007–March 2008	LUCA Option 2 participants review the address list and address count list and submit their local address list file to their Census Bureau’s Regional Office within 120 calendar days from the receipt of materials.
October 2007–October 2008	Census Bureau reviews participant’s LUCA submissions and updates the MAF/TIGER database.
November 2008–June 2009	Census Bureau prepares for and conducts an Address Canvassing Operation using GPS-equipped hand held computers.

August 2009–October 2009	Census Bureau provides feedback materials to participants showing how we processed each participant’s LUCA submissions.
September 2009–December 2009	Participants review feedback materials and have the opportunity to appeal the results to the LUCA Appeals Office.
September 2009–January 2010	LUCA Appeals Office reviews and adjudicates appeals.

Respondent Burden

The Census Bureau estimates that it will take between 105 and 1,575 hours to complete the LUCA review depending on the number of addresses and rate of address growth and change. This includes the time needed to read the invitation materials and complete the registration forms, and upon receipt of the LUCA materials, to read the instructions, assemble and review the LUCA materials, and provide updates.

Please send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to:

Paperwork Project 0607-0795
4600 Silver Hill Road, Room 3K138
Washington, D.C. 20233

Or you may e-mail comments to <paperwork@census.gov>; use "Paperwork Project 0607-0795" as the subject. Please include a copy of your message addressed to <luca@geo.census.gov>.

Under the paperwork Reduction Act, the Census Bureau cannot ask you to respond to a collection of information unless it displays a currently valid Office of Management and Budget (OMB) control number. The OMB number is found in the upper right corner of each LUCA form.

CHAPTER 2 BEFORE YOU BEGIN YOUR REVIEW

Introduction
What is a Housing Unit?
What are Group Quarters?
Unacceptable Types of Housing Units and Group Quarters
Census Bureau Addresses
Census Tract
Census Block
What is Geocoding?
Strategies for Reviewing the Census Bureau's Residential Address List
State-Level Address Sources

Introduction

Chapter 2 explains some of the terms and concepts used by the Census Bureau and recommended strategies for your LUCA review. Refer to the *Glossary* or visit the Census Bureau's Web site at <www.census.gov> for additional terms and definitions.

What is a Housing Unit?

A single-family house, townhouse, mobile home, trailer, apartment, group of rooms, or a single room occupied as a separate living quarters or, if vacant, intended for occupancy as a separate living quarters. A separate living quarters is one in which one or more occupants (or intended occupants, if vacant) live separate from any other individual(s) in the building and have direct access to the living quarters without going through another living quarters, such as from outside the building or through a common hall.

The following types of housing units are acceptable and should be included on the address list you submit to the Census Bureau:

- Houses, including townhouses, condominiums, and apartments.
- Living quarters within an otherwise nonresidential structure such as an apartment within a church, school, or business.
- Mobile homes or trailers occupied as separate living quarters, or if vacant, intended for occupancy as separate living quarters.
- Any housing units under construction that will be habitable (closed to the elements with final roof, windows, and doors) on Census Day, April 1, 2010.

What are Group Quarters?

A place where people live or stay, in a group living arrangement, that is owned or managed by an entity or organization providing housing and/or services for the residents. This is not a typical household-type living arrangement. These services may include custodial or medical care as well as other types of assistance, and residency is commonly restricted to those receiving these services. People living in group quarters are usually not related to each other.

The following types of group quarters are acceptable and should be included on the address list you submit to the Census Bureau:

- Correctional facilities.
- Juvenile facilities.
- Nursing homes.
- Hospitals with long-term care facilities.
- College or university dormitories, fraternities, sororities.
- Dormitories for workers.
- Religious group quarters.
- Shelters.
- Group homes.
- Any group quarters under construction that will be habitable (closed to the elements with final roof, windows, and doors) on Census Day, April 1, 2010.

Note: Housing units and group quarters can exist within the same structure.

Unacceptable Types of Housing Units and Group Quarters

Exclude the following unacceptable types of housing units and group quarters addresses from your address list:

- Condemned or scheduled for demolition.
- Being converted or remodeled for nonresidential purposes.
- Used solely for nonresidential storage.
- Used solely as offices or businesses in which no one is living.
- Used solely for ceremonial purposes.
- Any units under construction that will **not** be habitable (closed to the elements with final roof, windows, and doors) on Census Day, April 1, 2010.

Census Bureau Addresses

Residential and Nonresidential Addresses

The Census Bureau divides all addresses in two use types, residential and nonresidential. Residential addresses are addresses of housing units and/or group quarters where one or more people could live. Nonresidential addresses are addresses of a structure or unit within a structure that do not serve as a residence, such as commercial establishments, schools, government offices, and churches.

Some structures can contain both residential and nonresidential units, even though they have a single address such as an apartment over a store or a home with an office.

Address Formats

City-Style Address Format

The Census Bureau refers to housing units and group quarters addresses that have a house number and street name address, for example, 212 Elm Street or 137 Clark Ct., Apt. 316, as city-style addresses. In some instances, the house number may also include an alpha character such as 35A or W9254. These addresses are used for mailing or to provide location for emergency services, such as police, fire, and rescue (E-911 addresses).

City-style addresses for housing units in multiunit structures, such as apartment buildings, contain a unit designator, for example, Apt 101 or Suite D or a location designator such as “rear” or “basement.” (*See Appendix C Unit Designation Abbreviations.*) The Census Bureau and the U.S. Postal Service treat these unit designators as part of the housing unit address, and they are included in each affected census address record.

Noncity-Style Address Format

The Census Bureau classifies addresses that do not include a house number and/or a street name as noncity-style addresses. Noncity-style addresses also **do not include a complete** house number and street name address. The majority of noncity-style addresses are located in the more sparsely settled areas of the United States; however, they may exist in small or medium sized towns as well. Frequently used noncity-style mailing addresses include:

- General delivery.
- Rural route and box number.
- Highway contract route and box number.
- Post Office box only delivery.

Noncity-style addresses often do not follow any numeric sequence, and may not be associated with the name of the street or highway on which they are located. For this reason, the Census Bureau uses different methods to compile the list of addresses for inclusion into the address list, such as location descriptions (BRICK HSE w/ATTACHED GARAGE ON RIGHT), structure points (geographic coordinates), and census geographic codes (**state code, county code, census tract number, census block number**).

Census Tract

Census tracts are small, relatively permanent statistical subdivisions of a county or statistically equivalent entity, delineated for presenting Census Bureau statistical data.

The proposed criteria for census tracts for the 2010 Census is that they contain a minimum of 1,200 people with an optimal population of 4,000.

Census tract boundaries are delineated with the intention of being stable over many decades, so they generally follow relatively permanent visible features. However, they may follow governmental unit boundaries and other non-visible features in some instances. Census tract boundaries never cross state or county (or statistically equivalent entity) boundaries.

Each census tract is uniquely numbered within a county and contains numerous census blocks. Census tract numbers contain up to a 4-digit number followed by a decimal point and a 2-digit number for suffixed tracts, e.g., 1234.01. For census tracts without a suffix, the number will contain a period with zero fill, e.g., 4567.00. Leading zeros are not shown on Census Bureau materials.

Note: *When using the Census Bureau shapefiles to geocode an address to a Census Tract number, use the Tractlabel attribute field on the curtracts (current tracts) shapefile.*

Census Block

A census block is an area bounded by visible features such as streets, roads, streams, and railroad tracks and non-visible features such as the boundaries of governmental units and other legal entities. A block is the smallest geographic area for which the Census Bureau collects and tabulates statistical data.

Census blocks may look like a city block or may be large and irregularly shaped, depending upon features. The boundary of a state or a county is always a block boundary.

Census blocks are numbered within census tracts and are unique to the census tract to which they belong. Census block numbers contain a 4-digit number, and may include a single alpha character suffix, reflecting a boundary change or added features (e.g. 3001A and 3001B).

Note: *When using the Census Bureau shapefiles to geocode an address to a Census Tract number, use the Tractlabel attribute field on the curtracts (current tracts) shapefile.*

Note: The 2010 Decennial Census LUCA Program addresses are coded to **current** census block/geography.

What is Geocoding?

In order to process your address submissions, the Census Bureau **requires** the inclusion of **census geographic code information**. This link to census geography is referred to as geocoding. Geocoding places an individual address in its correct geographic location, which includes the correct **state, county, census tract, and census block** codes.

Because the Census Bureau counts people where they live, census geographic code information or geocodes support the systematic collection of data that allows Census enumerators to locate an address. They are also important in allocating data from questionnaire responses to the correct location. You **must include census geographic code information** for the Census Bureau to process your address submissions. The Census Bureau will not accept addresses without census geographic codes (geocodes) including the **state, county, census tract, and census block** codes.

Note: *When using the Census Bureau shapefiles to geocode an address to a Census Tract number, use the Tractlabel attribute field on the curtracts (current tracts) shapefile.*

You can find these census geographic codes on your LUCA materials.

Strategies for Reviewing the Census Bureau's Address List

You must decide for yourself how to conduct the LUCA program review. Consider your available time, the information you have readily available, and the staff and computer resources you have. If resources are limited, the Census Bureau recommends focusing on areas where addresses are more likely to be missed or incorrect. For example:

- Areas of new housing construction.
- E-911 address conversion areas.
- Areas that have changed from single-family homes to multifamily homes and vice versa.
- Warehouses that have been converted to residential lofts.
- New mobile home parks or new scattered mobile homes.

- Apartment buildings with irregular or missing numbering schemes for the individual units.
- Annexed land.
- Areas along governmental boundaries.

Address Sources

There are many possible sources of address information. Some of these sources may not match the Census Bureau's address list exactly, but they are a good indication of where change is taking place and can help you identify addresses that you need to add to the address list. The following list provides suggestions for state address source materials:

- New housing construction or building permits (include units that are under construction only if final roof, doors, and windows will be in place on Census Day, April 1, 2010).
- E-911 address files.
- Housing inspection permits.
- Planning and zoning records.
- Local utility records.
- Drivers' license files.
- Annexation records.
- Assessment or taxation files.
- Voter registration files.
- School enrollment records.

CHAPTER 3

THE LUCA PROGRAM'S COMPUTER-READABLE ADDRESS LIST AND ADDRESS COUNT LIST

Introduction
Protecting Census Bureau Address Information
Accessing the Address List and Address Count List Files
Software Requirements
The File Names
The Address List and Address Count List Files
The File Formats

Introduction

The Census Bureau's address list and address count list files your state selected to review are included on your CD. This chapter discusses how you must protect the Census Bureau's computer-readable address information and explains the:

- File names and formats.
- Software requirements.
- How to open the files.

Protecting Census Bureau Address Information

The most efficient method to review and match your address list to the Census Bureau's address list is to copy the address file onto a computer hard drive or a network server in a useable format. You must first ensure the protection of the Census Bureau's Title 13, U.S.C. address information including your Census Bureau computer-readable address file, all address list paper copies, and maps (including copies) containing structure points. (*Structure points will be displayed on the address list and maps, where applicable, for the Feedback phase of the program.*) For detailed information see *Appendix A, Confidentiality and Security Guidelines*.

The LUCA state liaison must restrict access to confidential Census address information to only those individuals who have signed the Confidentiality Agreement. This includes all reviewers and anyone with access to LUCA materials. If you need to add additional reviewers during your LUCA review, a blank Confidentiality Agreement Form is included in Appendix D. Be sure additional reviewers have read and understand the Confidentiality and Security Guidelines, Appendix A, before signing and returning the Confidentiality Agreement Form to the Census Bureau.

Operating systems, programs, applications, and data related to the review of Census Bureau addresses must be accessible only to LUCA program liaisons and reviewers. The automated data processing (ADP) system should restrict

the read, write, delete, and execute functions applicable to the Census Bureau's address information.

The ADP system must use log-on routines that require a user-ID and password that conform to the following guidelines:

- **Assign** a unique user-ID and password for each LUCA program liaison and reviewer.
- Passwords **must consist** of at least eight (8) nonblank characters consisting of at least one alphabet letter and either one number or one special character (\$, *, &). No more than six consecutive characters (AAAAAA) may appear in the password, and then only once.
- **Reject** passwords that are the same as the user-ID or used within the last 6 months.
- **Encrypt** passwords.
- **Disable** passwords after three bad attempts.
- **Do not display** passwords on terminals or printers.
- **Change** passwords every 90 days (more frequent change is optional) or immediately, if compromised.
- On new accounts, **change the assigned** password to a unique password the first time users log on.
- The ADP system **must display** a warning log-on feature. Computer screens must display a warning that states:

****WARNING*WARNING*WARNING****

YOU HAVE ACCESSED A COMPUTER SYSTEM CONTAINING UNITED STATES GOVERNMENT INFORMATION. USE OF THIS COMPUTER WITHOUT AUTHORIZATION OR FOR PURPOSES FOR WHICH AUTHORIZATION HAS NOT BEEN EXTENDED IS A VIOLATION OF FEDERAL LAW AND CAN BE PUNISHED BY FINE OR IMPRISONMENT (Public Law 99-474). ALL USE MAY BE INTERCEPTED, MONITORED, RECORDED, COPIED, AUDITED, INSPECTED AND DISCLOSED TO AUTHORIZED LAW ENFORCEMENT OFFICIALS. REPORT SUSPECTED VIOLATIONS TO YOUR AGENCY SECURITY OFFICER. USE OF THIS SYSTEM INDICATES YOU CONSENT TO THIS WARNING. LOG OFF IMMEDIATELY IF YOU DO NOT AGREE TO THE CONDITIONS OF THIS WARNING.

****WARNING*WARNING*WARNING****

- If you place Census Bureau address information on a shared computer system, **construct electronic security profiles** to allow only the state LUCA liaison and reviewers access to the Census Bureau's address information. **Test your security** to ensure that only the LUCA state

liaison and reviewers are permitted access to the Census Bureau's address information.

- **Lock all rooms** containing computers and all associated media during non-work hours.
- **Do not leave** computers with Census Bureau address information unattended during work hours. **Log-off** the computer or **lock** the room whenever you leave.
- **Label** any computer diskettes, CD-ROMs, DVDs, tapes, cartridges or other computer storage media containing Census Bureau address information with the following:

“This document contains information the release of which is prohibited by Title 13 U.S.C. and is for Bureau of the Census official use only.”

- If backup is necessary, **do not send** the tapes, cartridges, or disks off-site. **Store** them in a secured area. **Do not mix, store, or back-up LUCA data with other data.**
- **Clear** magnetic media (tapes, disks, hard drives) containing Census Bureau address information before reuse. To clear magnetic media, overwrite all Title 13 data three times at a minimum using a commercial disk utility program or degauss using a commercial degausser.
- **Program** any software you develop for displaying the Census Bureau addresses to label each affected page of a printout containing Census Bureau address information with the following:

“This document contains information, the release of which is prohibited by Title 13 U.S.C. and is for Bureau of the Census official use only.”

Accessing the Address List and Address Count List Files

Encrypted State-Level File

Included on your CD are the address list (AL) and the address count list (ACL) files for each county (and county equivalent) your state selected to review. The files are zipped and encrypted into one state-level self-extracting executable file.

The state level file is named, **STxx.exe**. Where,

“**ST**” is the 2 character alpha entity type, “State”

and,

“**xx**” is the 2-digit numeric entity ID for your state.

Example,

4-character state file name–New York:

ST36.exe

Where, “**ST**” is state and “**36**” is the state code for New York.

Opening the Encrypted File

Before opening the zipped and encrypted self-extracting executable file, the Census Bureau recommends that you make a copy of the file and save it on the hard drive of a computer that is password protected. This will preserve the original file should you need to look at the original record or require another original copy of the file.

A case sensitive password is required to open the file. The Census Bureau mailed the password to your LUCA state liaison, separate from your LUCA materials. If your state's LUCA liaison has not received or has misplaced the password, contact your Census Bureau Regional Office.

To extract the address list, double click with the left mouse button on the executable file (.exe) and follow the prompts.

Software Requirements

The address list and address count list files you receive are pipe-delimited ASCII text files, meaning they can be viewed and read as letters and numbers with a text editor. All spreadsheet and database programs can read and understand these text files.

Many commercial spreadsheet and database programs can open the LUCA files. Use spreadsheet programs such as Microsoft Excel or Lotus 123 to open, view, and edit small files. For larger files, use a database program such as Corel Paradox, QuattroPro, Microsoft Access, or dBase¹⁰.

Note: Some computer programs that can open and view pipe-delimited text files **cannot** save an edited file in the correct format. Make sure your program has the ability to save or export a file with pipe-delimited fields. Call the Help Desk toll free at **1-866-919-5822** if you need assistance or more information.

The Address List and Address Count List Files

Each county or county-equivalent address list (AL) file contains the residential addresses currently recorded by the Census Bureau. The address count list (ACL) file contains the residential address counts for each census block within a county or county-equivalent.

¹⁰ The Census Bureau does not endorse or recommend the use of any specific software to view its files. The program names included here are only examples of programs that are able to read computer-readable files.

File Names

1. Address List - LUCA_AL_STXXyyy.txt
2. Address Count List–LUCA_ACL_STXXyyy.txt

Where:

XX = 2-digit, numeric state code and,

yyy = 3-digit, numeric county FIPS code.

Examples:

Address List File Name

County:

Cook County, Georgia

LUCA_AL_ST13075.txt,

Where, “ST” is state, “13” is the state code for Georgia, and “075” is the county code for Cook County.

County Equivalent:

Carson City, Nevada

LUCA_AL_ST32510.txt,

Where, “ST” is state, “32” is the state code for Nevada, and “510” is the county code for Carson City.

Address Count List File Name

County:

Prince George's County, Maryland:

LUCA_ACL_ST24033.txt,

Where, “ST” is state, “24” is the state code for Maryland, and “033” is the county code for Prince George's County.

County Equivalent:

Hampton City, Virginia

LUCA_ACL_ST51650.txt,

Where, “ST” is state, “51” is the state code for Virginia, and “650” is the county code for Hampton City.

Locating the Name of a County or County Equivalent Using the County Code

Each filename contains a unique Federal Information Processing Standards (FIPS) code. To locate the name of the county or county equivalent associated with the FIPS code visit,
<www.census.gov/geo/www/fips/fips65/index.html>

- The Census Bureau recommends that you make a copy of each of the files and place them on the hard drive of a computer that is password protected. This will preserve the original files should you need to look at an original record or require another original copy of the file.
- To help keep your work organized, create a new directory or new folder on your hard drive. Copy the files from the CD into that directory or folder.

Importing the Address List and Address Count List Files

When you open the text files with your application, some spreadsheets and databases will prompt you to supply some information about the file. Be prepared to provide the application program with the following:

- Fields are **delimited**.
- Delimiter is a **pipe symbol (|)**
- Text qualifier is **none**.
- All field types are **text**.
- It is **critical** that you define all field types as “**text**” including numeric fields such as census tract number, census block number, ZIP Code, and all others
- Follow the record layout in Figure 3.1 to name and define the sizes of your fields.
- If you need assistance or more information, call the Help Desk toll free at **1-866-919-5822**.

The File Formats

Address List

The Census Bureau's Address List contains all of the residential (city-style and noncity-style) addresses known to the Census Bureau within the county(s) or county equivalent(s) your state selected to review. It also

contains census geographic codes (state, county, census tract, census block) that indicate the location of each address.

Each address record in the address list file contains 26 fields of information and can have a maximum 462 characters. The character length of each record may vary. The first row, or header row, of the address list file displays the field names for each data column in the file.

Each address record contains the following fields:

1. **Entity ID Code**—unique identification number (maximum character length is 12 characters) assigned by the Census Bureau to each entity. This field is prepopulated.
2. **Line Number**—sequential number for each address record in the file. This field is prepopulated.
3. **MAFID**—unique control number (maximum character length is 9 characters) assigned to each MAF address. This field is prepopulated.
4. **Action Code**—blank.
5. **State Code**—2-digit current state code for your state. This field is prepopulated.
6. **County Code**—3-digit current county or county equivalent code for county or county equivalent under review. This field is prepopulated.
7. **Census Tract Number**—Census tract numbers contain up to a 4-digit number followed by a decimal point and a 2-digit number for suffixed tracts, e.g., 1234.01. For census tracts without a suffix, the number will contain a period with zero fill, e.g., 4567.00. This field is prepopulated.

Note: When using the Census Bureau shapefiles to geocode an address to a Census Tract number, use the Tractlabel attribute field on the curtracts (current tracts) shapefile.

8. **Census Block Number**—Census block numbers contain a 4-digit number plus a 1-digit alpha character, if applicable, e.g. 3001A. This field is prepopulated.
9. **Group Quarters Flag**—displays a “Y” for addresses that are considered group quarters, such as nursing homes or dormitories. You may edit this field for group quarters addresses. This field is prepopulated, where applicable.
10. **House Number**—housing unit or group quarters assigned house number, which can contain numbers, letters, hyphens, or other characters. This field is prepopulated.

11. **Street Name Prefix Qualifier**—examples include, EXT, ALT, BUS, OLD, such as **ALT** Rt 30 or **OLD** Warren Rd. This field is prepopulated, where applicable.
12. **Street Name Prefix Direction**—examples include, N, W, SE, such as N Elm St or **SE** Chestnut Dr. This field is prepopulated, where applicable.
13. **Street Prefix Type**—examples include, HWY, RT, US, such as **HWY** 154 or **RT** 222. This field is prepopulated, where applicable.
14. **Street Name**—full street or road name such as **Apple Blossom** or **9th**. This field is prepopulated, where applicable.

Note: Census blocks that contain no addresses known to the Census Bureau will contain the following statement in the **Street Name** field:

“NO KNOWN ADDRESSES IN THIS BLOCK”
15. **Street Name Suffix Type**—examples include, ST, CT AVE, DR, such as Marley **ST** or Winterberry **DR**. This field is prepopulated, where applicable.
16. **Street Name Suffix Direction**—examples include, N, W, SE such as Waverly Dr **S**. This field is prepopulated, where applicable.
17. **Street Name Suffix Qualifier**—examples include, EXT, ALT, BUS, such as 6th St **EXT**. This field is prepopulated, where applicable.
18. **Location Description or GQ Name**—description of a living quarter (e.g., Brick Ranch w/White Shutters) or name of group quarters (e.g. Monteith Hall). This field is prepopulated, where applicable.
19. **Apartment/Unit Number**—within structure descriptor or identifier. This column may contain apartment unit numbers such as **APT 5** or location designator such as **1st FL FRNT**, or trailer lot number. (*See Appendix C, Unit Designation Abbreviation Examples.*) This field is prepopulated, where applicable.
20. **City-Style Mailing ZIP Code**—5-digit ZIP Code for city-style mailing addresses. This field is prepopulated, where applicable.
21. **Noncity-Style Mail Delivery Address**—identifies noncity-style mail deliver address such as rural route and box number, post office box number, etc. This field is prepopulated, where applicable.
22. **Noncity-Style Mailing ZIP Code**—5-digit ZIP Code for noncity-style mailing addresses. This field is prepopulated, where applicable.

23. **Structure Point**—4-digit number plus one alpha character assigned by the Census Bureau to a structure that contains a housing unit or a group quarters address. This field will be blank for the Review phase of the LUCA program but will be provided for the Feedback phase of the program.
24. **Structure Latitude**—This field will be blank for the Review phase of the LUCA program but will be provided for the Feedback phase of the program.
25. **Structure Longitude**—structure longitude. This field will be blank for the Review phase of the LUCA program but will be provided for the Feedback phase of the program.
26. **City-Style Address Flag**—contains a “Y” for city-style addresses and an “N” for noncity-style addresses. This field is prepopulated, where applicable.

Note: This field will be blank if “NO KNOWN ADDRESSES IN THIS BLOCK” appears in the **Street Name** field.

More information is included in the table on the next page.

Computer-Readable Address List File Record Layout

Figure 3.1: Computer-Readable Address List File Record Layout

Maximum Character Length	Field Name	Description/Notes
12	Entity ID Code	Unique identification number assigned by the Census Bureau to each entity
7	Line Number	Sequential number for each address record in the file
9	MAFID	Unique control number assigned to each MAF address
1	Action Code	Blank field
2	State Code	2-digit Current State Code
3	County Code	3-digit Current County Code
7	Census Tract Number	Up to 4-digit Census Tract Number, plus 2-digit number suffix, if applicable, includes a period for suffixed tracts. If no suffix, includes period and zero fill
5	Census Block Number	4-digit Current Census Block Number, plus 1-digit alpha character suffix, if applicable
1	Group Quarters Flag	Displays a 'Y' if the unit is a group quarters
35	House Number	Housing unit's or group quarters' assigned house number
3	Street Name Prefix Qualifier	e.g., EXT, ALT, BUS, OLD
2	Street Name Prefix Direction	e.g., N, W, SE
14	Street Name Prefix Type	e.g., HWY, RT, US
100	Street Name	Full street or road name
14	Street Name Suffix Type	e.g., ST, CT, AVE, DR
2	Street Name Suffix Direction	e.g., N,W, SE
3	Street Name Suffix Qualifier	e.g. EXT, ALT, BUS
100	Location Description or GQ Name	Description of living quarter (Red Brick Ranch w/White Shutters) or name of group quarters (Dobbs Hall-University of Dobbs)
53	Apartment/Unit Number	Within structure descriptor or identifier, such as APT 5 or 1 st FL FRNT
5	City-Style Mailing ZIP Code	5-digit ZIP Code for city-style mailing addresses
50	Noncity-Style Mail Delivery Address	Rural route and box number, post office box number, etc.
5	Noncity-Style Mailing ZIP Code	5-digit ZIP Code for noncity-style mailing address
5	Structure Point	4-digit number plus one alpha assigned by the Census Bureau to structures (RR, PO Box #, General Delivery, etc.)
11	Structure Latitude	Structure Latitude
12	Structure Longitude	Structure Longitude
1	City-Style Address Flag	Displays "Y" if city-style address, an "N" if noncity-style address

Example – Pipe-delimited Address List File – City-style Address

The following is an example of how the information may appear in the address list file before importing the file using your software program. The example is a city-style address, 101 Main Street, Mytown, VA 15888. Note that the “Y” in field 26 indicates that this is a city-style address and that the address record **can** be updated.

ST51059107|123456789|42|134|7654.01|2345|101|||MAIN|ST|15888|Y

Figure 3.2 displays the data in the appropriate fields.

Figure 3.2: Pipe-delimited LUCA Program Address List File – City-Style Address

Field Number	Field Name	Example
1	Entity ID Code	ST51059
2	Line Number	107
3	MAFID	123456789
4	Action Code	Blank
5	State Code	51
6	County Code	134
7	Census Tract Number	7654.01
8	Census Block Number	2345
9	Group Quarters Flag	Blank
10	House Number	101
11	Street Name Prefix Qualifier	Blank
12	Street Name Prefix Direction	Blank
13	Street Name Prefix Type	Blank
14	Street Name	MAIN
15	Street Name Suffix Type	ST
16	Street Name Suffix Direction	Blank
17	Street Name Suffix Qualifier	Blank
18	Location Description or GQ Name	Blank
19	Apartment/Unit Number	Blank
20	City-Style Mailing ZIP Code	15888
21	Noncity-Style Mail Delivery Address	Blank
22	Noncity-Style Mailing ZIP Code	Blank
23	Structure Point	Blank
24	Structure Latitude	Blank
25	Structure Longitude	Blank
26	City-Style Address Flag	Y

Example – Pipe-delimited Address List File – Noncity-style Address

The following is an example of how the information may appear in the address list file before importing the file using your software program. The example is a noncity-style address, Box 223, Scott Level Road, Myhome, Ohio 45555. Note that the information includes a description in the location description field:

2-STORY BRICK W/ATTACHED GARAGE ON LEFT

Also, note that the “N” in field 26 indicates that this is a noncity-style address and that the address record **cannot** be updated.

ST39074|678|234567891| |39|074|2345.00|5432| | | |SCOTT LEVEL|ROAD| | | 2-STORY BRICK W/ATTACHED GARAGE ON LEFT| |BOX 223|45555| | |N

Figure 3.3: Pipe-delimited LUCA Program Address List File – Noncity-Style Address

Field Number	Field Name	Example
1	Entity ID Code	ST39074
2	Line Number	678
3	MAFID	234567891
4	Action Code	Blank
5	State Code	39
6	County Code	074
7	Census Tract Number	2345.00
8	Census Block Number	5432
9	Group Quarters Flag	Blank
10	House Number	Blank
11	Street Name Prefix Qualifier	Blank
12	Street Name Prefix Direction	Blank
13	Street Name Prefix Type	Blank
14	Street Name	SCOTT LEVEL
15	Street Name Suffix Type	ROAD
16	Street Name Suffix Direction	Blank
17	Street Name Suffix Qualifier	Blank
18	Location Description or GQ Name	2-STORY BRICK W/ATTACHED GARAGE ON LEFT
19	Apartment/Unit Number	Blank
20	City-Style Mailing ZIP Code	Blank
21	Noncity-Style Mail Delivery Address	BOX 223
22	Noncity-Style Mailing ZIP Code	45555
23	Structure Point	Blank
24	Structure Latitude	Blank
25	Structure Longitude	Blank
26	City-Style Address Flag	N

Address Count List

The address count list contains the number of housing unit and group quarters addresses on the Census Bureau's address list for each census block within the county(s) or county equivalent(s) your state selected to review. Use the address count list to identify inconsistencies between the Census Bureau's housing unit and/or group quarters address counts and your state's housing unit and/or group quarters address counts for the area(s) under review.

Each block record in the address count list file contains nine (9) fields of information and has a maximum of 57 characters. The character length of each record may vary. The first row, or header row, of the address count list file displays the field names for each data column in the file. See Figure 3.4 for the address count list file record layout.

1. **Entity ID Code**—unique identification number (maximum character length is 12 characters) assigned by the Census Bureau to each entity. This field is pre-populated.
2. **State Code**—2-digit current state code for your state. This field is pre-populated.
3. **County Code**—3-digit current county code for the county or county equivalent under review. This field is pre-populated.
4. **Census Tract Number**—Contains up to a 4-digit number followed by a decimal point and a 2-digit number for suffixed tracts, e.g., 1234.01. For census tracts without a suffix, the number will contain a period with zero fill, e.g., 4567.00. This field is pre-populated.
5. **Census Block Number**—Contains a 4-digit number plus a one alpha character, if applicable, e.g. 3001a. This field is pre-populated.
6. **Census Count of Housing Unit Addresses**—Census Bureau's most recent count of housing unit addresses. This field is pre-populated.
7. **State Count of Housing Unit Addresses**—blank field.
8. **Census Count of Group Quarters Addresses**—Census Bureau's most recent count of group quarters addresses. This field is pre-populated.
9. **State Count of Group Quarters Addresses**—blank field.

Example – Address Count List File Record Layout

Figure 3.4: Address Count List File Record Layout

Maximum Character Length	Field Name	Description/Notes
12	Entity ID Code	Unique identification number assigned by the Census Bureau to each entity
2	State Code	2-digit State Code
3	County Code	3-digit County Code
7	Census Tract Number	Up to 4-digit Census Tract Number, plus 2-digit number suffix, if applicable, includes a period for suffixed tracts. If no suffix, includes period and zero fill
5	Census Block Number	4-digit Current Census Block Number, plus one alpha character suffix, if applicable
7	Census Count of Housing Unit Addresses	Census Bureau’s most recent count of housing unit addresses
7	State Count of Housing Unit Addresses	Blank field
7	Census Count of Group Quarters Addresses	Census Bureau’s most recent count of group quarters addresses
7	State Count of Group Quarters Addresses	Blank field

The last row records the total number of Census Blocks, Census Bureau Housing Unit Addresses, and Census Bureau Group Quarters Addresses on the address count list. See Figure 3.5 for the “Total Row” Layout.

Figure 3.5: Address Count List File “Total Row” Layout

Maximum Character Length	Field Name	Description/Notes
7	Census Tract Number	The word “Total” appears in this column
5	Census Block Number	Total number of Census Blocks on the Address Count List
7	Census Count of Housing Unit Addresses	Total number of Census Bureau Housing Unit Addresses on the Address Count List
7	State Count of Housing Unit Addresses	Blank.
7	Census Count of Group Quarters Addresses	Total number of Census Bureau Group Quarters Addresses on the Address Count List
7	State Count of Group Quarters Addresses	Blank.

Example – Pipe-delimited Address Count List File

Figure 3.6 is an example of how the information may appear in the address count list file before importing the file using your software program. This example is in the state of Idaho, state code 16, and county code 089. There are 765 housing unit addresses and three (3) group quarters addresses in Census Tract 6789.01, Census Block 5432.

ST16089|16|089|6789.01|5432|765| |3|

Figure 3.6: Pipe-delimited Address Count List File

Address Count Record	Field Name
ST16089	Entity ID Code
16	State Code
089	County Code
6789.01	Census Tract Number
5432	Census Block Number
765	Census Count of Housing Unit Addresses
Blank	State Count of Housing Unit Addresses
3	Census Count of Group Quarters Addresses
Blank	State Count of Group Quarters Addresses

CHAPTER 4

THE CENSUS BUREAU'S PREDEFINED COMPUTER-READABLE ADDRESS LIST FILE FORMAT

The Predefined Computer-Readable Address List File Format
The Address List Template Record Layout File

The Predefined Computer-Readable Address List File Format

You must submit your address file containing residential **city-style** addresses only, in the predefined format as shown in Figure 4.1. The Census Bureau will only accept and process address files submitted in this format. Noncity-style addresses **will not be accepted or processed**.

The predefined file format contains 17 fields of information with a maximum of 361 characters for each address record.

Figure 4.1: Census Bureau's Predefined File Format for Address List Submission

Field Number	Maximum Character Length	Field Name	Description/Notes
1	12	Entity ID Code	Unique number assigned by the Census Bureau to each entity
2	2	State Code	2-digit Current State Code
3	3	County Code	3-digit Current County Code
4	7	Census Tract Number	Up to 4-digit Census Tract Number, plus 2-digit number suffix, if applicable, includes a period for suffixed tracts. If no suffix, includes period and zero fill, e.g. 5432.00.
5	5	Census Block Number	4-digit Current Census Block Number, plus one alpha character suffix, if applicable
6	1	Group Quarters Flag	Display a 'Y' if the unit is a group quarters
7	35	House Number	Housing unit's or group quarters' assigned house number
8	3	Street Name Prefix Qualifier	e.g. EXT, ALT, BUS, OLD
9	2	Street Name Prefix Direction	e.g., N, W, SE
10	14	Street Name Prefix Type	e.g., HWY, RT, US
11	100	Street Name	Full street or road name
12	14	Street Name Suffix Type	e.g., ST, CT, AVE, DR
13	2	Street Name Suffix Direction	e.g., N,W, SE
14	3	Street Name Suffix Qualifier	e.g. EXT, ALT, BUS
15	100	Group Quarters Name	Name of group quarters (Dobbs Hall-University of Dobbs)
16	53	Apartment/Unit Number	Within structure descriptor or identifier, such as APT 5 or 1 st FL FRNT
17	5	City-style Mailing ZIP Code	5-digit ZIP Code for city-style mailing addresses

The Address List Template Record Layout File

An address list template record layout is included on your CD. If you choose, you may use this template to import your address file for submission. The name of this file is:

AddressListTemplate.txt

- Create a new directory or new folder on your hard drive. Copy the file from the CD into that directory or folder.
- When you open the text file with your application provide the application program with the following:
 - Fields are **delimited**.
 - Delimiter is **pipe**. (|)
 - Text qualifier is **none**.
 - All field types are **text**.
- Define all field types as “**text**.”
- Be sure that the required address information is in the appropriate field as listed below for each address record. *Your Entity ID can be found on your LUCA materials.*

Note: All address records must contain census geographic codes including the **state code, county code, census tract number, and census block number**. The Census Bureau will not accept addresses without census geographic codes.

1. Entity ID Code

2. State Code

3. County Code

4. Census Tract Number

Note: *When using the Census Bureau shapefiles to geocode an address to a Census Tract number use the Tractlabel attribute field on the curtracts (current tracts) shapefile.*

5. Census Block Number

6. Group Quarters Flag, if applicable:

- a. Enter a “**Y**” in the **Group Quarters Flag** field for a group quarters address
- b. Add the name of the group quarters in the **Group Quarters Name** field

Note: If you enter a “Y” in the **Group Quarters Flag** field, you must provide a group quarters name in the **Group Quarters Name** field. The Census Bureau will not process an identified group quarters address record without a group quarters name.

7. House Number

8. Street Name Prefix Qualifier

9. Street Name Prefix Direction

10. Street Name Prefix Type

11. Street Name

12. Street Name Suffix Type

13. Street Name Suffix Direction

14. Street Name Suffix Qualifier

15. Group Quarters Name, if applicable:

- Be sure that the **Group Quarters Flag** field displays a “Y.” The Census Bureau will not process an identified group quarters address record without a group quarters name.

16. Apartment/Unit Number, if applicable:

- If you have multiunit structures (apartments, condominiums, etc.) listed in your address file or need to add these addresses, use the following guidelines for identifying individual units:

- a. Enter the unit designation (e.g., APT 5, UNIT 103) in the **Apartment/Unit Number** field, if known.
- b. If the apartment/unit designators are unknown, but you know the number of units at the multiunit structure, enter “*#” in the **Apartment/Unit Number** field for each unit added.

The “*” character will alert the Census Bureau that the actual unit identifiers are unknown and that we need to obtain further information during our field check of the address. The “#” is the sequential number, i.e., 1,2,3,4, etc.

For example, the new multiunit structure located at 505 Wells Blvd, contains 20

units. You don't know the actual individual unit numbers or designators but you know there are 20 units:

- i. Create 20 records with the correct census geographic codes (i.e., **state code, county code, census tract number, census block number**) and the street address, 505 Wells Blvd.
- ii. For each unit added at 505 Wells Blvd, enter in sequence, the appropriate "*" in the **Apartment/Unit Number** field.

For example, for the first unit added at 505 Wells Blvd, enter "*1" in the **Apartment/Unit Number** field; for the second unit record added, enter "*2" in the **Apartment/Unit Number** field, and so on, until you get to the twentieth unit record, where you enter "*20" in the **Apartment/Unit Number** field.

17. City-style Mailing ZIP Code

- Save your address list file **for each county or county equivalent** as a pipe-delimited, ASCII text file. (*If you need further instruction on saving a pipe-delimited, ASCII text file, please call the Help Desk toll free at 1-866-919-5822.*)
- Name the file containing the address list **for each county or county equivalent** STXXyyy_LUAL.txt. (*where ST is state; XX is your state code, and; yyy is the county code*)

See Chapter 6 for instructions on submitting your address list file to the Census Bureau.

CHAPTER 5

THE CENSUS BUREAU SHAPEFILES

- Introduction
- Shapefiles
- Submitting Shapefile Feature Information
- Metadata
- Digital File Submission

Introduction

The Census Bureau provides you with shapefiles as a reference for locating and geocoding individual addresses, and for updating and correcting features.

Shapefiles

Shapefiles require the use of GIS software. The Census Bureau provides county-based shapefile layers in Environmental Systems Research Institute¹¹ (ESRI) shapefile format. Participants that submit shapefiles with feature updates must follow Census Bureau requirements.

The shapefiles, created from the MAF/TIGER database, allow you to submit map feature updates electronically. All linear features in the MAF/TIGER database are contained in the edges shapefile. Use the edges shapefile to add, delete, or change linear feature attributes.

To geocode addresses to census blocks, a tabblock shapefile is included.

In addition to an edges shapefile, the Census Bureau provides shapefiles for legal boundaries. Do **not** edit the legal boundaries layer.

For more details on the contents of the shapefiles, view the readme.txt file that is included in the CD containing your shapefiles.

Submitting Shapefile Feature Information

In order to submit digital feature information, you must have a GIS capable of importing ESRI shapefiles, editing the features, and exporting layers back into ESRI shapefile format.

¹¹ All shapefiles provided by the Census Bureau are in Environmental Systems Research Institute (ESRI) format. The use of brand names does not represent an endorsement of a company or its products by the U.S. Government. Due to the wide use of ESRI products by our partners in the GIS community, and ubiquitous use of the shapefile format as a medium for GIS data exchange, the Census Bureau provides data in shapefile format.

The Census Bureau's Shapefile Coordinate System and Projection Information

All shapefiles provided by the Census Bureau are in the following unprojected geographic-based coordinate system:

- GCS_NAD83
- Angular Unit: Degree (0.017453292519943299)
- Prime Meridian: Greenwich (0.000000000000000000)
- Datum: D_North_American_1983
- Spheroid: GRS_1980
- Semi-major Axis: 6378137.000000000000000000
- Semi-minor Axis: 6356752.314140356100000000
- Inverse Flattening: 298.257222101000020000

General File Setup Guidelines

Upon receipt of your shapefiles, follow the setup guidelines listed below before beginning actual updates:

- Open the CD and enclosed zip file to ensure it contains the shapefiles for your entity.
- Copy and decompress the shapefiles to a directory on your server or hard drive.
- Open the shapefile in a GIS.

Note: If you are using GIS software that does not contain a shapefile translator, please contact the Help Desk toll free at 1-866-919-5822 for further instructions.

Changing Our Coordinate System to Match Yours

Our files are in GCS_NAD83 format. Please feel free to project these files into your local coordinate system projection. Most GIS software packages contain projection wizards, or something similar, allowing the user to transform file coordinate systems and projections. For example, if your office uses ArcView to update files, please activate and utilize ArcView's 'Projection Utility Wizard' extension. If using ArcGIS, please use its "Projection Utilities" in ArcToolbox. MAF/TIGER extract shapefiles contain defined projection information in the *.PRJ file. Both ArcView and ArcGIS access the *.PRJ file for projection information; therefore, there is no need for you to define these parameters before changing the file coordinate system.

In addition, if your files are in a datum other than NAD83, you must geographically transform our files to match your datum. Most GIS software has tools for performing geographic transformations on files. If you transform the files to your local coordinate system, we request that you convert them back to the GCS_NAD83 format before submitting the file to the Census Bureau. If you encounter problems transforming our files, please contact the Help Desk toll free at 1-866-919-5822 for assistance.

Feature Information

If you have reviewed your features using our shapefiles and have determined that the Census Bureau needs to add, remove, or rename features in a given area, you may submit your modifications in a separate layer. To move or correct the shape of a feature, first delete the feature then add the correction.

Use the appropriate update code located in the coding scheme as shown in Figure 5.3 to identify the type of feature modification needed for submission.

If any issues arise with the shapefiles that you submit, your Census Bureau Regional Office will attempt to contact you to clarify the issue. If clarification is not made prior to our project deadline, the updates may not be incorporated into MAF/TIGER. Your updates are considered temporary until their existence is confirmed during our Address Canvassing Operation.

Updating the Feature Shapefile

Use the edges layer to provide all feature updates to the Census Bureau’s shapefile.

Edges Layer Data Dictionary

The data dictionary defines the attribute information for each feature contained in the edges layer. See Figure 5.1 for an example of the edges layer data dictionary.

Figure 5.1: Edges Layer Data Dictionary

Field	Length	Type	Description
TLID	10	Integer	TIGER/Line ID
MTFCC	5	String	Feature MTFCC
FIDELITY	1	Integer	Shape Fidelity Flag
FULLNAME	120	String	Feature name
CHNG_TYPE	4	String	Type of digital linear update

- **TLID** is the TIGER/Line[®] ID
- The MAF/TIGER Feature Class Code or **MTFCC** is used to identify the most noticeable characteristic of a feature.
 - The **MTFCC** is a five-character code; the first character is a letter describing the feature class. For example, streets and roads are identified as S1400.
 - The Census Feature Class Codes or CFCC were recently changed to the **MTFCC**. A crosswalk is on the following page as well as in the readme.txt file on your CD-ROM.
- If the **FIDELITY** flag contains a value of “1,” the Census Bureau was unable to maintain the boundary’s shape during the MAF/TIGER Accuracy Improvement Process (MTAIP).
 - The MTAIP project acquired geographic information system (GIS) files, aerial photography, and GPS data from various sources nationwide to update the TIGER[®] database.
 - One of the primary goals of the project was to develop a highly accurate geographic database of the United States. The Census Bureau focused on improving the accuracy of street feature coordinates to provide base information suitable for use with GPS-equipped hand held devices that would facilitate the gathering of accurate location and census information for all living quarters and workplaces.
 - To aid the Census Bureau in developing a highly accurate geographic database, please review all line segments (not just roads) in the Census Bureau’s edges layer for lines with a fidelity flag value of “1.”
- **FULLNAME** is the feature name.
- **CHNG_TYPE** is the type of digital linear update.

Figure 5.2: Census Feature Classification MTFCC to CFCC Crosswalk

Census Feature Classification MTFCC to CFCC Crosswalk**Road Features**

MTFCC	FEATURE NAME	CFCC
S1100	Interstate Highway or Primary Road with limited access	A11, A12, A13, A14, A15, A16, A17, A18, A19
S1200	Primary Road without limited access, US Highway, State Highway, or County Highway, Secondary and connecting roads	A21, A22, A23, A24, A25, A26, A27, A28, A29, A31, A32, A33, A34, A35, A36, A37, A38, A39
S1400	Local Neighborhood Road, Rural Road, City Street	A41, A42, A43, A44, A45, A46, A47, A48, A49, A61, A62
S1500	Vehicular Trail (4WD)	A51, A52, A53
S1630	Ramp	A63
S1640	Service Drive usually along a limited access highway	A64
S1710	Walkway/Pedestrian Trail	A70, A71
S1720	Stairway	A72
S1730	Alley	A73
S1740	Private Road for service vehicles (logging, oil fields, ranches, etc.)	A74
S1750	Private Driveway	N/A

Water Features

MTFCC	FEATURE NAME	CFCC
H3010	Stream/River	H10, H11, H12, H76, H77
H3013	Braided Stream	H13
H3020	Canal, Ditch or Aqueduct	H20, H21, H22

Railroad

MTFCC	FEATURE NAME	CFCC
R1011	Railroad Feature (Main, Spur, or Yard)	B11, B12, B13, B14, B15, B16, B19, B21, B22, B23, B29, B31, B32, B33, B39
R1051	Carline, Streetcar Track, Monorail, Other Mass Transit Rail	B51, C31
R1052	Cog Rail Line, Incline Rail Line, Tram	B52

Miscellaneous Features

MTFCC	FEATURE NAME	CFCC
P0001	Nonvisible Legal/Statistical Boundary	F00, F10, F11, F12, F13, F14, F15, F16, F17, F18, F19, F20, F21, F22, F23, F24, F25, F50, F52, F70, F71, F72, F73, F74, F80, F81, F82, F83, F84, F85, F86, F87, F88
L4010	Pipeline	C10
L4020	Power Transmission Line	C20
L4110	Fence Line	E10
L4121	Ridge Line	E21
L4031	Aerial Tramway/Ski Lift	N/A
K2451	Airport or Airfield	D51
L4140	Property/Parcel Line	F40, F41
L4165	Ferry Crossing	A65, B40

Change Type Codes for Feature Corrections

Each updated line to the edges layer must contain one of the change type codes (Add Line, Change Attribute, Delete Line) listed in the coding scheme in Figure 6.3. Record the change type code in the **CHNG_TYPE** field in the attribute table for each line.

Figure 5.3: Change Type Codes for Feature Corrections

Code	Description
AL	Add Line
CA	Change Attribute
DL	Delete Line

Each feature update must have a change type code in the change type field for the line.

- There are three change type codes:
 1. Add Lines
 - Code – **AL**
 - Used to add a new feature (Road, Railroad, Hydrography, etc.)
 2. Change Attribute
 - Change Name
 - Code – **CA**
 - Used to change the name of a feature
 - Provide the feature's new name in the **FULLNAME** field
 - Change Feature Class
 - Code – **CA**
 - Used to change the feature class code (e.g., a local road mistakenly coded as a highway).
 3. Delete Line
 - Code – **DL**
 - Used to delete a feature

The following are examples of change type codes for feature corrections.

Examples

1. Adding a Feature to the Edges Layer

Spring Street is a new street that needs to be added to the Census Bureau's shapefile.

- Add or copy the missing street or feature into the edges layer.

In the attribute table:

1. Leave the **TLID** and **FIDELITY** fields blank.
2. Enter the appropriate **MTFCC**. In this example, S1400.
3. Enter the feature name in the **FULLNAME** field (if any), in this case Spring Street.
4. Enter **AL** in the **CHNG_TYPE** field.

2. Correcting a Feature Name

Ryan Street is incorrectly identified as Bryan Street.

In the attribute table:

1. Edit the **FULLNAME** field, in this case correcting it from Bryan Street to Ryan Street.
2. Enter **CA** in the **CHNG_TYPE** field.

3. Procedure for changing the MTFCC of an existing feature

A local road was mistakenly coded as a highway.

In the attribute table:

1. Edit the **MTFCC** from S1200 to S1400.
2. Enter **CA** in the **CHNG_TYPE** field (i.e., a local road was mistakenly coded as a highway).

4. Deleting a feature

A section of Dunlap Street no longer exists. In addition, the entire length of Carlisle Street has been replaced by a city park.

In the attribute table:

1. Enter **DL** in the **CHNG_TYPE** field for the segment of Dunlap Street that no longer exists.
2. Enter **DL** in the **CHNG_TYPE** field for all of the segments for Carlisle Street which no longer exist.

5. Moving a street

The Census Bureau shapefile incorrectly shows the location of Winona Street.

Add Winona Street in the correct location in the edges layer.

In the attribute table:

1. Enter **DL** in the **CHNG_TYPE** field for the incorrect segment(s) of Winona Street to be deleted.
2. For the new street segment(s), leave the **TLID** and **FIDELITY** fields blank.
3. Enter the appropriate **MTFCC**.
4. Enter Winona Street in the **FULLNAME** field.
5. Enter **AL** in the **CHNG_TYPE** field.

To move or correct the shape of a feature, first delete the incorrectly placed or aligned feature and then add the correction.

Figure 5.4 displays the attribute table, based on the previous examples.

Figure 5.4: Example Attribute Table Updates

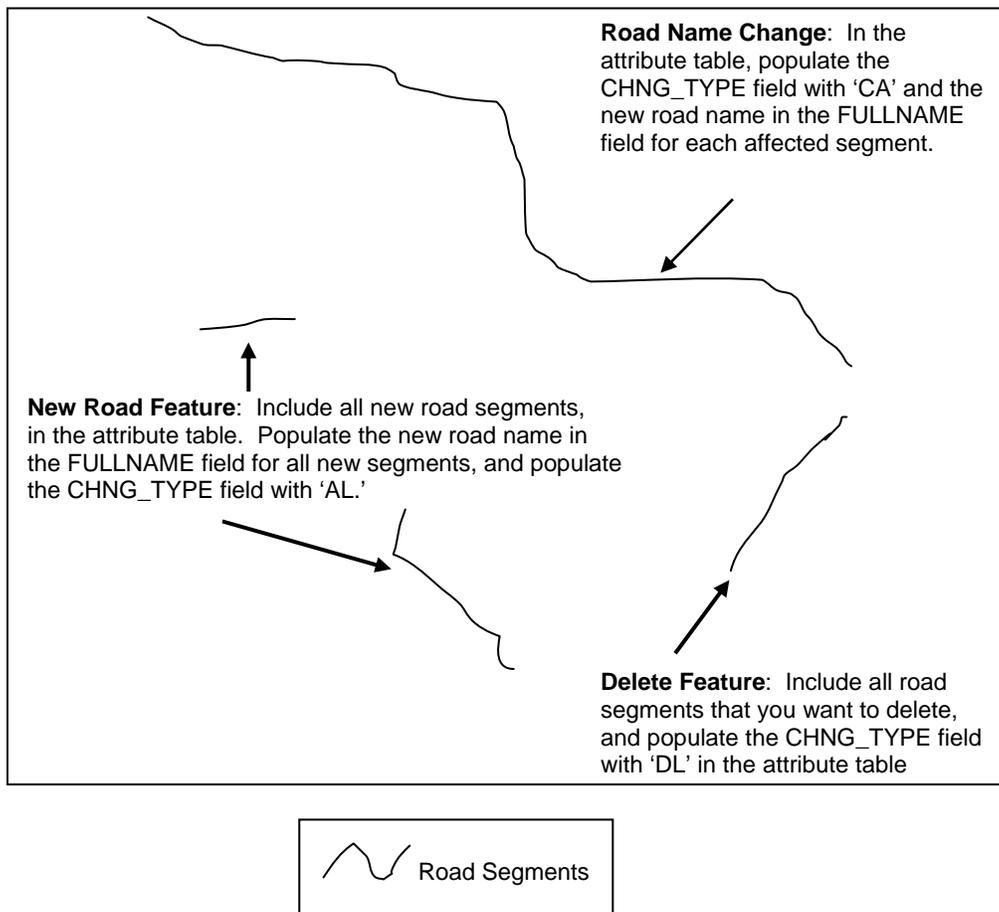
TLID	MTFCC	FIDELITY	FULLNAME	CHNG_TYPE
	S1400		Spring Street	AL
	S1400		Winona Street	AL
9999999995	S1400	0	Ryan Street	CA
9999999996	S1400	0	Dunlap Street	DL
9999999997	S1400	0	Carlisle Street	DL
9999999998	S1400	0	Carlisle Street	DL
9999999999	S1400	0	Winona Street	DL

Attribute table update examples:

- Spring Street added.
- Bryan Street corrected to Ryan Street.
- Segment of Dunlap Street deleted.
- Carlisle Street deleted.
- Winona Street moved.

Copy all features with values in the **CHNG_TYPE** field into a new feature update shapefile. The feature updates shapefile will resemble what is shown in Figure 5.5.

Figure 5.5: Digital Road Correction Example



Metadata

Metadata Requirements

Metadata that describe the data content, coordinate system/projection, author, source, and other characteristics of GIS files are critical for Census Bureau staff to efficiently and accurately process files. The Census Bureau requires that a metadata text file accompany every GIS file and layer submitted.

The Federal Geographic Data Committee's (FGDC) Content Standard for Digital Spatial Metadata provides a national standard that enables the data-sharing public to easily locate critical information about a file and ensure that no critical information is omitted inadvertently when creating metadata. For this reason, the Census Bureau requests that metadata be submitted using this standard. For information about the FGDC and its geospatial metadata standards, please visit <www.fgdc.gov/metadata>.

The Census Bureau requires that the following sections of the FGDC metadata form be completed:

- Citation (information about the originator, publication date, title edition, and other publications or information).
- Description (section that contains an abstract describing your data set).
- Time period of content (section that describes the vintage of the data).
- Spatial domain (information about bounding coordinates).
- Point of contact (general contact information).
- Data quality information (information about attribute accuracy).
- Spatial reference information (section on coordinate system/projection of the data set).
- Entity and attribute information (section that describes the contents of your table).

To help you fulfill the requirement of filling out and submitting metadata, the Census Bureau suggests visiting the United States Geological Survey (USGS) Web site at <www.usgs.gov>. This site contains useful information about FGDC compliant metadata, from which one can read about metadata frequently asked questions, view FGDC metadata examples, and connect to other FGDC related Web pages. The FGDC's metadata URL is <www.fgdc.gov/metadata>.

Moreover, if you are using Arc/Info, the following link points to a useful Arc Macro Language (AML) tool that, when executed, completes most of the required sections of the metadata form automatically <www.marinemetadata.org/tools/refs/FGDCMeta>. (This AML is a product of the Illinois State Geological Survey.)

Note: ESRI's ArcCatalog also has an embedded program that uses the FGDC standard in its creation of geospatial metadata.

If you have questions regarding the metadata requirements, please contact the Help Desk toll free at 1-866-919-5822.

Digital File Submission

Use the following as a guide to ensure that you have included all the required layers for each county.

- Save the changes for each county in a separate feature update layer file. Name each file:

LUCA_<STxxyyy>_LN_changes.shp (*where xx is the state code and the yyy is the county code*)

The feature update layer must include:

- A value in its "CHNG_TYPE" field that indicates the type of change.
 - Only feature updates (do not include unmodified features).
- Include the appropriate metadata.

CHAPTER 6 SUBMITTING YOUR LUCA PROGRAM UPDATES

Submitting LUCA Program Updates
Shipping Your LUCA Materials

Submitting LUCA Program Updates

After completing your review and update of the LUCA materials, return the materials with updates and your address lists to the Census Bureau's Regional Office responsible for your state. **Include the inventory form, Appendix E,** with your returned materials.

- Save the address list file **for each county or county equivalent** as a pipe-delimited, ASCII text file. (*If you need further instruction on saving a pipe-delimited, ASCII text file, please call the Help Desk toll free at 1-866-919-5822.*)
- Name the file containing the address list **for each county or county equivalent** STXXyyy_LUAL.txt. (*where ST is state; XX is your state code, and; yyy is the county code.*)
- Make a copy of your submitted files to keep for your records and to use during the Feedback phase of the program.
- ZIP the county files into one file and password protect your zipped address list files.
 - If you do not have ZIP software, Freebyte ZIP software is provided on your CD-ROM.
 - Use the case-sensitive password provided to you by the Census Bureau.
- Burn the files to a CD-ROM or DVD.

Note: *If you are submitting shapefiles, you may burn all of your files to one (1) CD-ROM or DVD. See the section, Preparing the Shapefiles for Submission.*
- Send the CD-ROM or DVD to your Census Bureau Regional Office as instructed in the section, *Shipping Your LUCA Materials*.
- You **cannot** submit files via e-mail or post the files to an FTP site.

Preparing the Shapefiles for Submission

Note: If you are using ArcGIS, when you copy files to be burned to a CD-ROM, be sure to use ArcCatalog. ArcCatalog will capture all required files such as .dbf, .shp, .shx, etc.

- Name the feature update layers for each county :
LUCA_<STxyyy>_LN_changes.shp (where *xx* is the state code and the *yyy* is the county code)
- Compress all updated materials–Shapefile and Metadata–into one ZIP formatted file called:
LUCA_2010_<STxx>_Return.ZIP (where *xx* is your state code)
- Save a backup copy of your updated digital file for your records and to use during the Feedback phase of the program.
- Burn the file to a CD-ROM or DVD.
- Send the CD-ROM or DVD with updates to your Census Bureau Regional Office as instructed in the section, *Shipping Your LUCA Materials*.
- You **cannot** submit files via e-mail or post the files to an FTP site.

Note: *You may burn all of your files (shapefiles, address list, and address count list) to one (1) CD-ROM or DVD.*

Shipping Your LUCA Materials

- Double wrap all address materials.
- Address all envelopes, mailing boxes, mailing tubes, etc. to:
ATTN: GEOGRAPHY
U.S. Census Bureau
Address for your Census Bureau Regional Office
You can find a list of the Census Bureau’s Regional Office addresses on the back cover.
- Use the prepaid, preprinted FedEx label provided to you, if FedEx delivery service is available in your area.
- Use shipping contractors that provide tracking services, such as U.S. Postal Service (USPS) certified or registered mail, FedEx, United Parcel Service (UPS), or similar service.

CHAPTER 7 RETURNING OR DESTROYING CENSUS BUREAU TITLE 13, U.S.C. MATERIALS

Program Conclusion
Returning Census Bureau Title 13, U.S.C. Materials
Destroying Census Bureau Title 13, U.S.C. Materials

Program Conclusion

At the **conclusion of the appeals process**, you must return to the Census Bureau or destroy all Title 13, U.S.C. address lists and all copies. If you choose to destroy Title 13, U.S.C. materials, you must follow the Census Bureau’s specific guidelines for destroying Title 13 materials as described below or in the Confidentiality and Security Guidelines. (*See Appendix A.*)

The designated state liaison is required to verify the return or destruction of any remaining Title 13 materials, both paper and computer-readable (i.e. paper copies, backup files, etc.) by **signing and returning** to the Census Bureau the Return or Destruction of Title 13, U.S.C. Materials form found in *Appendix G*. If you return your Title 13 materials to the Census Bureau, **this form must be included**. All LUCA Program reviewers and anyone with access to Title 13 materials (includes all persons who signed the Confidentiality Agreement Form) are required to sign and date this form once the appeals process has concluded. Should any state liaison, reviewer, or anyone with access to Title 13 materials leave before the completion of the LUCA program, they are required to sign out of the program by signing and dating this form. If any state liaison or reviewer leaves and fails to sign and date this form, the current state liaison can sign out on their behalf.

Returning Census Bureau Title 13, U.S.C. Materials

- Double wrap all Title 13 materials. This includes your original CD-ROM and all paper copies and backup files of the Census Bureau’s Address List and Feedback maps containing structure points.
 - Label both sides of the inner envelope or wrapping with the disclosure notice as shown below and in *Appendix F*:
“This Package Contains U.S. Census Bureau Address Information: DISCLOSURE PROHIBITED BY Title 13 U.S.C.”
- Do not label the outer envelope with the disclosure notice.
- Address all envelopes, mailing boxes, etc. to:

**ATTN: GEOGRAPHY
U.S. Census Bureau**

Address for your Census Bureau Regional Office

- *You can find a list of the Census Bureau's Regional Office addresses on the back cover.*
- Use the prepaid, preprinted FedEx label provided to you, if FedEx delivery service is available in your area.
- Use shipping contractors that provide tracking services, such as U.S. Postal Service (USPS) certified or registered mail, FedEx, United Parcel Service (UPS), or similar service.

Destroying Census Bureau Title 13, U.S.C. Materials

- Only those individuals who signed the Confidentiality Agreement Form are permitted to destroy the materials.
- Never deposit Census Bureau confidential materials in a trash or recycle container before destruction.
- Store the materials in a secure area in a container labeled “document destruction container” until they are destroyed.
- The destruction process must prevent recognition or reconstruction of the paper or computer-readable information. Use one of the following methods to destroy census confidential materials:
 - Shredding.
 - Chemical decomposition.
 - Pulverizing (such as, hammer mills, choppers, etc.).
 - Burning (only in a facility approved by the Environmental Protection Agency).
 - Clear magnetic media (tapes, disks, hard drives) containing Census Bureau address information before reuse. To clear, overwrite all Title 13 data a minimum of three times using a commercial disk utility program or degauss using a commercial degausser.
 - Clear diskettes by running a magnetic strip of sufficient length to reach all areas of the disk over and under each surface a minimum of three times. If the information cannot be destroyed as suggested, the disk must be damaged in an obvious manner to prevent use in any disk drive unit and discarded.
 - Destroy CD-ROMs and DVDs using a commercial grade shredder, suitable for rendering them unuseable; or cut them up with scissors in an obvious manner to prevent use in a drive unit.

Note: Hand tearing or burying information in a landfill are unacceptable methods of disposal.

If you have questions regarding the destruction of Title 13 materials, contact your Census Bureau Regional Office.

APPENDICES

Appendix A Confidentiality and Security Guidelines

The law requires the U.S. Census Bureau to maintain the confidentiality for all of the information that it collects. The Census Bureau takes its responsibility to protect the confidentiality of the information it collects very seriously. Respondents place their trust in the Census Bureau each time they complete a survey or an interview. This trust in confidentiality is critical to the success of the Census Bureau's mission to collect and report the most accurate data possible. To uphold the law, the Census Bureau requires that all individuals who work with the Census Bureau's confidential materials read, understand, and agree to abide by the confidentiality and security guidelines outlined below.

Why Address Information Is Protected

Title 13, United States Code (U.S.C.), provides for the confidential treatment of census-related information. Chapter 1, Section 9 of the code states:

“Neither the Secretary, nor any other officer or employee of the Department of Commerce or bureau or agency thereof, or local government census liaison, may, except as provided in section 8 or 16 or chapter 10 of this title...

- 1) use the information furnished under the provisions of this title for any purpose other than the statistical purposes for which it is supplied; or*
- 2) make any publication whereby the data furnished by any particular establishment or individual under this title can be identified; or*
- 3) permit anyone other than the sworn officers and employees of the Department or bureau or agency*

thereof to examine the individual reports.”

Section 214 of the Code and the Uniform Sentencing Act of 1984 set the penalty for the wrongful disclosure or release of information protected by Title 13 at a fine of not more than \$250,000 or imprisonment for not more than 5 years, or both.

To implement this law, all Census Bureau employees (both temporary and permanent) take an oath to maintain the confidentiality of the census information they encounter in their work. Census information includes:

- Everything on a completed or partially completed questionnaire or obtained in a personal or telephone interview.
- Individual addresses maintained by the Census Bureau that Local Update of Census Addresses (LUCA) Program liaisons review.
- Maps that identify the location of individual housing units and/or group quarters (“structure points”).

Title 13 of the U.S.C. does not protect generalized address information, such as the address range data available in the Census Bureau's digital shapefile products.

In 1994, the U.S. Congress amended Chapter 1 of Title 13 to allow local government designated census liaisons to review the Census Bureau's address list for their area. This amendment recognizes the important role that local knowledge and participation can play in building and updating an accurate, comprehensive census address list. In amending this chapter, the Congress

reaffirmed the confidential nature of address information.

The Confidentiality Agreement

Each participating government must designate a primary liaison. The primary liaison, all reviewers, and anyone with access to Title 13, U.S.C. materials must understand and sign the Confidentiality Agreement. The Census Bureau considers all individuals who have access to the Census Bureau's address information and maps showing the location of housing units and group quarters, liaisons. Therefore, all Option 1 and Option 2 2010 Decennial Census LUCA Program liaisons, reviewers, and anyone with access to Title 13 materials must sign the Confidentiality Agreement.

Signatures on this form constitute an agreement by each individual to abide by the security guidelines outlined below. While access to Title 13 protected information is temporary, the commitment to keep the information confidential is permanent.

- **The Census Bureau will not deliver the address list materials to Option 1 and Option 2 participants until we have received a completed and signed Confidentiality Agreement and Self-Assessment Form.**
- **Although you may have prior confidentiality agreements on file at the Census Bureau, these will not fulfill the requirements of the 2010 Decennial Census LUCA Program.**

Security Guidelines

The Census Bureau recognizes the fact that the implementation of these guidelines may vary slightly from one participant to another. Regardless, the result must be the same for each

participant – nondisclosure of information protected by Title 13, U.S.C.

The primary liaison accepts the responsibility for protecting and safeguarding the LUCA program materials covered by Title 13, U.S.C. This includes any list that shows individual Census Bureau addresses and any Census Bureau map or digital file that shows individual housing units and/or group quarters location (“structure points”). The primary liaison must restrict access to the Census Bureau's address information to those individuals who have signed the Confidentiality Agreement. The liaison, reviewers, and anyone with access to Title 13 materials must sign the Confidentiality Agreement.

As you read the Census Bureau's security requirements, keep in mind the important role security plays in the overall responsibilities of each LUCA program liaison, reviewers, and anyone with access to Title 13 materials. The Census Bureau must have your full cooperation and commitment to following these guidelines. Together, we will maintain the confidential information entrusted to the Census Bureau by the Congress and the American public.

Protecting Census Bureau Address Information

The Census Bureau will conduct training workshops covering all aspects of the LUCA program. In addition, the workshops will provide the participating governments with an opportunity to review the security guidelines and safeguards to protect against illegal use of Census Bureau address information. Census Bureau staff conducting the workshops will provide information to help you decide who in your organization needs to have access to the

Census Bureau's Address List and will review the civil and criminal penalties for improper or illegal use of the data.

Onsite Visits

To ensure that participating entities or organizations are maintaining adequate security safeguards, the Census Bureau may make on-site visits to review your government or organization's security procedures. The Census Bureau will strive not to disrupt your office operations. A typical visit would include a review of:

- Storage and handling of Census Bureau address information.
- Employee access to Census Bureau address information.
- The physical safeguard of the computers, rooms, and buildings where the Census Bureau address information is stored.
- Instructions to employees about security.
- Data processing operations (including use of passwords).
- Employee awareness of their responsibilities to protect the confidentiality of Census Bureau addresses.

Protecting Paper Copies of Census Bureau Address Information and Maps

- Keep all Census Bureau address information in a locked room during non-work hours. If possible, store the Census address materials and maps showing structure points in locked desks or cabinets.
- During work hours, do not leave a room unattended where Census Bureau address information is stored. Lock the room whenever you leave.

- Do not leave Census Bureau address information unattended at your desk. Return any Title 13 data to secure storage when you are not using it.
- Only make copies of the information necessary to complete your task. Do not leave the copying machine unattended while making copies. All copied material containing Title 13 information must bear the statement:

“This document contains information, the release of which is prohibited by Title 13, U.S.C., and is for U.S. Census Bureau official use only. Wrongful disclosure or release of information can be punished by fine or imprisonment (Public Law 99-474).”
- To FAX a document containing Census Bureau address information to a Census Bureau location, make sure the document is properly labeled with the disclosure statement: **“DISCLOSURE PROHIBITED BY Title 13, U.S.C.”**, verify the FAX number before sending, and arrange for a Census Bureau employee to be at the FAX machine to receive it and acknowledge receipt.
- Do not disclose precise or even anecdotal information about Census Bureau addresses or locations to anyone who has not signed the Confidentiality Agreement Form or is not a Census Bureau employee.

Protecting Computer-Readable Census Bureau Address Information and Maps

Operating systems, programs, applications, and data related to the review of Census Bureau addresses must be accessible only to LUCA program liaisons and reviewers. The automated data processing (ADP) system should restrict the read, write, delete, and execute functions applicable to the Census Bureau's addresses.

The ADP system must use log-on routines that require a user-ID and password that conform to the following guidelines:

- Assign a unique user-ID and password for liaisons, reviewers, and anyone with access to Title 13 materials.
- Passwords must consist of at least 8, nonblank characters consisting of at least one alphabet letter and either one number or one special character (\$, *, &). No more than six consecutive characters (AAAAAA) may appear in the password, and then only once.
- Reject passwords that are the same as the user-ID or that have been used within the last 6 months.
- Encrypt passwords.
- Disable passwords after three bad attempts.
- Do not display passwords on terminals or printers.
- Change passwords every 90 days (more frequent change is optional) or immediately, if compromised.
- On new accounts, the user must change the assigned password to a unique password the first time they log on.

The ADP system must display a warning log-on feature. Computer screens must display a warning that states:

****WARNING*WARNING*WARNING**
YOU HAVE ACCESSED A COMPUTER
SYSTEM CONTAINING UNITED STATES
GOVERNMENT INFORMATION. USE OF
THIS COMPUTER WITHOUT
AUTHORIZATION OR FOR PURPOSES
FOR WHICH AUTHORIZATION HAS NOT
BEEN EXTENDED IS A VIOLATION OF
FEDERAL LAW AND CAN BE PUNISHED
BY FINE OR IMPRISONMENT (Public Law
99-474). ALL USE MAY BE
INTERCEPTED, MONITORED,
RECORDED, COPIED, AUDITED,
INSPECTED, AND DISCLOSED TO
AUTHORIZED LAW ENFORCEMENT
OFFICIALS. REPORT SUSPECTED
VIOLATIONS TO YOUR AGENCY
SECURITY OFFICER. USE OF THIS
SYSTEM INDICATES YOU CONSENT TO
THIS WARNING. LOG OFF
IMMEDIATELY IF YOU DO NOT AGREE
TO THE CONDITIONS OF THIS
WARNING.
WARNING*WARNING*WARNING**

If Census Bureau address information is placed on a shared computer system, construct electronic security profiles to allow only LUCA program liaisons, reviewers, and anyone with access to the Census Bureau's address information. Test your security to ensure that only LUCA liaisons and reviewers are permitted access to the Census Bureau's address information.

ZIP and password protect Title 13 Census Bureau address information.

Lock all rooms containing computers with Title 13 Census Bureau address information and all associated media during non-work hours.

Do not leave computers with Census Bureau address information unattended during work hours. Log-off the computer/system or lock the room whenever you leave.

Label any computer diskettes, CD-ROMs, DVDs, tapes, cartridges or other computer storage media containing Census Bureau address information with the following:

“This document contains information, the release of which is prohibited by Title 13, U.S.C., and is for U.S. Census Bureau official use only. Wrongful disclosure or release of information can be punished by fine or imprisonment (Public Law 99-474).”

If backup is necessary, do not send the tapes, cartridges, or disks off-site. Store them in a secured area. **Do not mix, store, or back-up LUCA data with other data.**

Clear magnetic media (tapes, disks, hard drives) containing Census Bureau address information before reuse. To clear magnetic media, overwrite all Title 13 data three times at a minimum using a commercial disk utility program or degauss using a commercial degausser.

Program any software you develop for displaying the Census Bureau addresses to label each affected page of a printout containing Census Bureau address information with the following:

“This document contains information, the release of which is prohibited by Title 13, U.S.C., and is for U.S. Census Bureau official use only. Wrongful disclosure or release of information can be punished by fine or imprisonment (Public Law 99-474).”

Returning Census Bureau Title 13 Materials

Once you have completed your initial review and update of the LUCA materials, return only those materials with updates to the Census Bureau’s Regional Office responsible for your jurisdiction. Make a copy of all updated

pages to keep for your records. Retain all non-annotated Title 13 materials until you receive your feedback materials. Keep all retained address lists and copies in a secure location.

Use the following guidelines to ship the updated materials:

- Ship all Census Bureau confidential material in two opaque sealed envelopes that are durable enough to prevent someone from viewing or tampering with the enclosed materials.
- Label both sides of the inner envelope or wrapping with the disclosure notice:

“DISCLOSURE PROHIBITED BY Title 13, U.S.C.”
- **DO NOT** label the outer envelope with the **“DISCLOSURE PROHIBITED BY Title 13, U.S.C.”** notice.
- Address the outer envelope to:

**ATTN: GEOGRAPHY
U.S. Census Bureau
Address for your Census Bureau
Regional Office**
- Use shipping contractors that provide tracking services, such as U.S. Postal Service certified or registered mail, FedEx, United Parcel Service, or similar service.

Return or Destruction of Census Bureau Confidential Materials

After the appeals process has concluded, **all** Title 13, U.S.C., Census Bureau address lists and maps containing structure points **must be returned or destroyed** according to the Census Bureau’s specific guidelines for returning or destroying confidential material.

The liaison is required to verify the return or destruction of any remaining Title 13 materials, both paper and computer-readable including all paper copies, backup files, etc. The liaison must sign and return to the Census Bureau the “Return or Destruction of Title 13, U.S.C. Materials” form. In addition, all LUCA program reviewers and anyone with access to Title 13 materials who signed the Confidentiality Agreement are required to sign this form once their participation in the LUCA program has ended. Should any liaison, reviewer, or anyone leave before the end of the LUCA program, they are required to “sign-out” of the program by signing and dating this form.

Only those individuals who signed the Confidentiality Agreement are permitted to destroy Title 13, U.S.C. materials.

- Never deposit Census Bureau confidential materials in a trash or recycle container before destruction.
- Store the materials in a secure area in a container labeled “document destruction container” until they are destroyed.
- The destruction process must prevent recognition or reconstruction of the paper or computer-readable information. Use one of the following methods to destroy census confidential materials:
 - Shredding
 - Chemical decomposition
 - Pulverizing (such as, hammer mills, choppers, etc.)
 - Burning (only in a facility approved by the Environmental Protection Agency)
 - Clear magnetic media (tapes, disks, hard drives) containing Census Bureau address

information before reuse. To clear, overwrite all Title 13 data a minimum of three times, using a commercial disk utility program or degauss using a commercial degausser.

- Clear diskettes by running a magnetic strip of sufficient length to reach all areas of the disk over and under each surface a minimum of three times. If the information cannot be destroyed as suggested, damage the disk in an obvious manner to prevent use in any disk drive unit and discard.

Note: Hand tearing or burying information in a landfill are unacceptable methods of disposal before destruction.

- Destroy CD-ROMs and DVDs using a commercial grade shredder, suitable for rendering them un-usable, or cut them up with scissors in an obvious manner to prevent use in a drive unit.

Appendix B
Physical Location Description and Street Type Abbreviation Examples

Full Name	Abbreviations
Alternate Route	ALT
Avenue	AVE
Blue	BL
Boulevard	BLVD
Brown	BRN
Boarded Up	BU
Circle	CIR
County Highway	CO Hwy
County Road	CO Rd
Court	CT
Drive	DR
East	E
Four-Wheel Drive Trail	4WD
Freeway	FWY
Green	GR
General Delivery	GEN DEL
Hospital	HOSP
Highway Contract Route	HCR
House	HSE
Interstate	I
Intersection	INT
Lane	LN
North	N
Parkway	PKWY
Post Office Box	PO BOX
Road	RD
Route	RTE
Rural Route	RR
South	S
Star Route	ST RT
State Highway	ST HWY
State Road	ST RD
State Route	ST RTE
Street	ST
Thoroughfare	THFR
Township Highway	TWP HY
Township Road	TWP RD
West	W
White	WHT
Yellow	YLW
With	W/

Appendix C
Unit Designation Abbreviation Examples

Name	Abbreviation
Apartment	APT
Basement	BSMT
Bottom	BOTM
Downstairs	DOWN
Floor	FLR
Front	FRNT
Interior	INTE
Level	LVL
Lower	LOWR
Middle	MIDL
Mobile Home	MH
Number	#
Penthouse	PH
Room	RM
Right	RGHT
Space	SP
Studio	STUD
Suite	STE
Suites	STES
Trailer	TRLR
Upper	UPPR
Upstairs	UPS

**Appendix D
Confidentiality Agreement Form**

OMB No. 0607-0795

FORM D-1669 (6-12-2007)	U.S. DEPARTMENT OF COMMERCE Economics and Statistics Administration U.S. CENSUS BUREAU	ENTITY ID
CONFIDENTIALITY AGREEMENT LOCAL UPDATE OF CENSUS ADDRESSES (LUCA) PROGRAM 2010 Decennial Census		
PLEASE PRINT		
1. Government name 		
2. Name of LUCA Liaison's Office or Department (<i>Assessor's Office, Planning Department, etc.</i>) 		
3. Address (<i>House number and street name, RR, HC, or PO box number</i>) 		
4. City, State, ZIP Code 		
Responsibilities for Participating in the 2010 Decennial Census LUCA Program All 2010 Decennial Census LUCA Program liaisons, reviewers, and anyone with access to Title 13 materials must agree to keep confidential the U.S. Census Bureau address information (including map structure points provided for feedback) they review or to which they have access. They may use this information solely for suggesting improvements to the Census Bureau's address list and maps. All individuals who will be reviewing Census Bureau addresses or have access to Title 13 materials must sign below to indicate they have read and understand the Census Bureau's results regarding restrictions related to confidential information. By signing this agreement, your government agrees to return or destroy all Title 13, Census Bureau confidential materials to the Census Bureau after the LUCA Program appeals process is complete. In addition, those who sign the agreement indicate that they understand the penalty for disclosing information about addresses or individuals obtained by the Census Bureau, including maps that contain structure points showing the location of housing units or group quarters is a fine of not more than \$250,000 or imprisonment for not more than 5 years, or both. Although access to the data is temporary, this commitment is permanent. You must be at least 18 years of age to sign this agreement.		
Liaison's name and telephone number		
Printed name 		Your address - Please print <i>(If different from above)</i>
Area code <input type="text"/> <input type="text"/> <input type="text"/>	Telephone number <input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	City
Signature 		State ZIP Code
Date Month Day Year <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>		
Reviewer(s)/Person(s) with access to Title 13 materials name(s) and telephone number(s)		
Printed name 		Your address - Please print <i>(If different from above)</i>
Area code <input type="text"/> <input type="text"/> <input type="text"/>	Telephone number <input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	City
Signature 		State ZIP Code
Date Month Day Year <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>		
Printed name 		
Area code <input type="text"/> <input type="text"/> <input type="text"/>	Telephone number <input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	City
Signature 		State ZIP Code
Date Month Day Year <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>		
Printed name 		
Area code <input type="text"/> <input type="text"/> <input type="text"/>	Telephone number <input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	City
Signature 		State ZIP Code
Date Month Day Year <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>		

U S C E N S U S B U R E A U

If you require more signature blocks, you may duplicate this form.

Appendix E
Inventory Form

OMB No. 0607-0795

FORM D-1671 (6-12-2007)	U.S. DEPARTMENT OF COMMERCE Economics and Statistics Administration U.S. CENSUS BUREAU	ENTITY ID
INVENTORY FORM FOR THE RETURN/SUBMISSION OF LUCA PROGRAM MATERIALS LOCAL UPDATE OF CENSUS ADDRESSES (LUCA) PROGRAM 2010 Decennial Census		
Please use this form to identify only the LUCA materials that you have updated and are returning to the Census Bureau for the 2010 Decennial Census LUCA Program.		
GOVERNMENT NAME <div style="border: 1px solid black; height: 20px; width: 100%;"></div>		
Option 1 Participants	Option 2 and Option 3 Participants	
<p>A. Paper Lists</p> <p>1 <input type="checkbox"/> Census Bureau Address List Number of updated pages <input style="width: 50px;" type="text"/></p> <p>2 <input type="checkbox"/> Address List Add Page Number of updated pages <input style="width: 50px;" type="text"/></p> <p>3 <input type="checkbox"/> Address Count List Number of updated pages <input style="width: 50px;" type="text"/></p> <p>B. Computer-Readable Lists</p> <p>1 <input type="checkbox"/> Census Bureau Address List File – <i>Specify file name ↗</i></p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <p>Number of updated address records <input style="width: 50px;" type="text"/></p> <p>2 <input type="checkbox"/> Address Count List File – <i>Specify file name ↗</i></p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <p>Number of updated records <input style="width: 50px;" type="text"/></p> <p>C. MTPS Zip file</p> <p>Products updated –<i>Mark (X) all that apply.</i></p> <p>1 <input type="checkbox"/> Census Bureau Address List</p> <p>2 <input type="checkbox"/> Address Count List</p> <p>3 <input type="checkbox"/> Shapefiles</p>	<p>1 <input type="checkbox"/> Local Address List File – <i>Specify file name ↗</i></p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <p>Number of address records <input style="width: 50px;" type="text"/></p> <p>2 <input type="checkbox"/> MTPS Zip file</p> <hr/> <p>MAPS – All Non-MTPS Participants</p> <p><i>Mark (X) one box.</i></p> <p>1 <input type="checkbox"/> Shapefiles</p> <p>2 <input type="checkbox"/> Paper map Number of updated map sheets ... <input style="width: 50px;" type="text"/></p> <p>NOTE</p> <p>If you received paper maps and have boundary updates – <i>Please include the appropriate Boundary and Annexation Survey (BAS) form.</i></p>	

Special Notice

**This Package Contains
U.S. Census Bureau
Address Information**

**DISCLOSURE PROHIBITED BY
TITLE 13, U.S.C.**

U.S. Department of Commerce
U.S. Census Bureau
4/04/2007

D-1657

Appendix G
Return or Destruction of Title 13, U.S.C. Materials Form

OMB No. 0607-0795

<p>FORM D-1674 (5-31-2007)</p>	<p>U.S. DEPARTMENT OF COMMERCE Economics and Statistics Administration U.S. CENSUS BUREAU</p>
<p>RETURN OR DESTRUCTION OF TITLE 13, U.S.C. MATERIALS LOCAL UPDATE OF CENSUS ADDRESSES (LUCA) PROGRAM 2010 Decennial Census</p>	
<p>1. Government name – Please Print</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>	
<p>2. 2010 Decennial Census LUCA Program Liaison <i>Please print name</i></p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <p>Signature _____</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <p style="text-align: right;">Date Month Day Year <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/></p> <p>has properly destroyed or returned to the U.S. Census Bureau, the original 2010 Decennial Census Local Update of Census Addresses (LUCA) Program Title 13, U.S.C. materials and any copies using the security requirements provided to us by the U.S. Census Bureau. <i>Mark (X) one.</i></p> <p><input type="checkbox"/> Returned Title 13, U.S.C. materials <input type="checkbox"/> Destroyed Title 13, U.S.C. materials</p>	
<p>2010 DECENNIAL CENSUS LUCA PROGRAM REVIEWERS</p>	
<p>Program Reviewer</p> <p>1. Please print name</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <p>Signature _____</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <p style="text-align: right;">Date Month Day Year <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/></p>	
<p>2. Please print name</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <p>Signature _____</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <p style="text-align: right;">Date Month Day Year <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/></p>	
<p>3. Please print name</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <p>Signature _____</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <p style="text-align: right;">Date Month Day Year <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/></p>	
<p>4. Please print name</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <p>Signature _____</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <p style="text-align: right;">Date Month Day Year <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/></p>	
<p><i>If you require more signature blocks, you may duplicate this form.</i></p>	
<p>All LUCA Program liaisons, reviewers, and anyone with access to Title 13 materials are required to sign and date this form at the conclusion of the appeals process. Should any liaison, reviewer, or anyone with access to Title 13 materials leave before the completion of the LUCA Program, they are required to sign-out of the program by signing and dating this form. If any liaison, reviewer, or anyone with access to Title 13 materials fails to sign and date this form, the current liaison can sign-out on their behalf.</p>	

U S C E N S U S B U R E A U

Glossary

Address breaks – Address breaks are the city-style addresses on each side of a boundary or at an intersection of a street with another street or another feature.

Address count list – Identifies the number of housing unit addresses and group quarters addresses on the Census Bureau’s address list for each census block within a jurisdiction.

Address range – The lowest and highest address numbers used to identify structures along each side of a street segment that has city-style addresses. Usually one side of the street has even address numbers and the other side has odd address numbers.

American Indian area – A Census Bureau term that refers to any or all of the following entities: American Indian reservation, American Indian off-reservation trust land, Oklahoma tribal statistical area, joint use area, American Indian tribal subdivision, tribal designated statistical area, and state designated American Indian statistical area.

American Indian off-reservation trust land – The United States holds title for specific areas in trust for the benefit of federally recognized American Indian tribes (tribal trust land) or for individual American Indians (individual trust land). Although trust land may be located on or off a reservation, the Census Bureau recognizes and tabulates data only for off-reservation trust land. Census data always associate off-reservation trust land with a specific federally recognized reservation or tribal government.

American Indian reservation – A federal American Indian reservation is an area that has been set aside by the United States for the use of one or more federally recognized American Indian tribes. It covers territory over which a tribe(s) has primary governmental authority. Its boundary is defined by tribal treaty, agreement, executive or secretarial order, federal statute, or judicial determination. A state American Indian reservation is an area that a state government has allocated to a tribe recognized by that state, but not by the federal government.

Block number – A 4-digit number, plus 1 alpha character block suffix, if applicable, used by the Census Bureau to identify each census block. Census blocks are numbered uniquely within each census tract.

Boundary – A line, either invisible or coincident with a visible feature that identifies the extent of a geographic entity, such as a census tract, city, or county.

Boundary and Annexation Survey – An annual survey to collect information about selected legally defined geographic areas. The BAS is used to update information about the legal boundaries and names of all governmental units in the United States.

Census Bureau address list – A nationwide list of all housing unit and group quarters addresses known to the Census Bureau. In addition to the mailing address and ZIP Code, the Address List may identify the location of each housing unit and group quarters.

Census block – A geographic area bounded by visible features, such as streets, roads, streams, and railroad tracks, and invisible features, such as the boundaries of governmental units and other legal entities. A census block is the smallest area for which the Census Bureau collects and tabulates statistical information. Census blocks are numbered within census tracts and are unique to the census tract to which they belong.

Census block number – Census block numbers contain a 4-digit number plus a 1-digit alpha character, if applicable, e.g. 3001A. Suffixes, such as 2011A and 2011B, reflect boundary changes as well as added features.

Census Bureau – An agency within the U.S. Department of Commerce. The U.S. Census Bureau is the country's preeminent statistical collection and dissemination agency. It publishes a wide variety of statistical data about people and the economy of the nation. The Census Bureau conducts approximately 200 annual surveys and conducts the decennial census of the United States population.

Census Bureau map – Any map produced by the Census Bureau. A Census Bureau map displays geographic entities used in a Census Bureau sponsored census or survey for which the Census Bureau tabulates data.

Census tract – A small, relatively permanent statistical division of a county or statistically equivalent entity, delineated for the purpose of presenting Census Bureau statistical data. Census tracts never cross the boundary of a county or statistically equivalent entity, but may split other geographic entities; e.g., minor civil divisions and places.

Census tract number – Unique numbers to identify census tracts within a county or statistically equivalent entity. Census tract numbers contain up to a 4-digit number followed by a decimal point and a 2-digit number for suffixed tracts, e.g., 1234.01. For census tracts without a suffix, the number will contain a period with zero fill, e.g., 4567.00. Leading zeros are not shown on Census Bureau maps.

Chief executive/highest elected official – The elected or appointed person who is the chief executive official of a governmental unit and is most responsible for the governmental activities of the governmental unit, such as the governor of a state, chair of a county commission, or mayor of an incorporated place. This person receives the LUCA Program invitation letter, and must designate a LUCA liaison, if desired.

City-style address – An address that consists of a house number and street name; for example, 201 Main Street. The address may or may not be used for the delivery of mail and may include apartment numbers/designations or similar identifiers.

Confidentiality – The guarantee made by law (Title 13, United States Code) to individuals who provide information about themselves or their business to the Census Bureau. This item refers to the Census Bureau's promise of nondisclosure of that information to others.

County – The primary legal division of most states. Most are governmental units with powers defined by state law.

Delivery Sequence File (DSF) – A computerized file containing all delivery point addresses serviced by the U.S. Postal Service (USPS). The USPS updates the DSF continuously as its letter carriers identify addresses for new delivery points or changes in the status of existing addresses.

Edges shapefile – All linear features in the MAF/TIGER database are contained in the edges shapefile. Use the edges shapefile to add, delete, or change linear feature attributes.

Enumeration – The process of interviewing people and recording the information on census forms.

Feature – Any part of the landscape, whether natural (such as, a stream or ridge) or artificial (such as a road or power line). In a geographic context, features are any part of the landscape portrayed on a map, including nonvisible boundaries of legal entities, such as city limits or county lines.

Federal Information Processing Standards codes (FIPS codes) – a standardized set of numeric or alphabetic codes issued by the National Institute of Standards and Technology (NIST) to ensure uniform identification of geographic entities through all federal government agencies. The entities covered include: states and statistically equivalent entities, counties and statistically equivalent entities, named populated and related location entities (such as places and county subdivisions), and American Indian and Alaska Native areas.

Geocodes – Codes that place an individual address in its correct geographic location, which includes the correct **state, county, census tract, and census block** codes.

Geographic Information System (GIS) – A computer system for the storage, retrieval, and maintenance of information about the points, lines, and areas that represent the streets and roads, rivers, railroads, geographic entities, and other features on the surface of the Earth-information that previously was available only on paper maps.

Governmental unit – A geographic entity established by legal action for the purpose of implementing specified governmental functions. Most governmental units provide a number of general government services and raise revenues (usually through taxing authority).

Group quarters – A place where people live or stay, in a group living arrangement, that is owned or managed by an entity or organization providing housing and/or services for the residents. This is not a typical household-type living arrangement. These services may include custodial or medical care as well as other types of assistance, and residency

is commonly restricted to those receiving these services. People living in group quarters are usually not related to each other.

Group quarters include such places as correctional facilities, juvenile facilities, nursing homes, hospitals with long-term care facilities, college or university dormitories, fraternities, sororities, dormitories for workers, religious group quarters, shelters, group homes.

Housing unit (HU) – A single-family house, townhouse, mobile home, trailer, apartment, group of rooms, or a single room occupied as a separate living quarters or, if vacant, intended for occupancy as a separate living quarters. A separate living quarters is one in which one or more occupants (or intended occupants, if vacant) live separate from any other individual(s) in the building and have direct access to the living quarters without going through another living quarters, such as from outside the building or through a common hall.

Legal boundary – The legally defined boundary of a governmental unit, usually referring to a county, minor civil division, or incorporated place. The legal boundary identifies the area within a local or state government's jurisdiction, and thus bounds the area of LUCA responsibility.

LUCA state liaison – Also known as the program primary liaison or designated liaison. A person voluntarily appointed by the chief executive/highest elected official of each state to review the Census Bureau's address list and maps against state records to identify differences.

MAF/TIGER Database – The Census Bureau's nationwide geographic database, which integrates the Master Address File (MAF) and Topologically Integrated Geographic Encoding and Referencing (TIGER[®]) files.

MAF/TIGER Partnership Software (MTPS) – A GIS application provided by the Census Bureau that has customized functionality required by Census Bureau geographic partnership programs.

Map Sheet to Block Number Relationship List – A list identifying census block numbers and the Census Bureau map(s) on which each block is located.

Master Address File (MAF) – A nationwide database of all addresses to support many of the Census Bureau's operations. Besides containing mailing addresses and ZIP Codes, a MAF record also contains geographic information about the location of addresses.

Metadata – describes the data content, coordinate system/projection, author, source, and other characteristics of GIS files.

Minor civil division (MCD) – A type of governmental unit that is the primary governmental or administrative subdivision of a county. MCDs are identified by a variety of terms, such as town (in 8 states), township, and/or district, and include both functioning and nonfunctioning governmental entities.

Noncity-style address – An address that does not have a house number and/or street name or may not include a complete house number and street name address. This includes rural route and box number address and highway contract route addresses, etc., which may include a box number, post office boxes and drawers, and general delivery.

Occupied housing unit – A housing unit is classified as occupied if it is the usual place of residence of the individual or group of persons living in it at the time of enumeration or if the occupants are only temporarily absent; for example, away on vacation. Occupied rooms or suites of rooms in hotels, motels, and similar places are classified as housing units only when occupied by permanent residents, that is, individuals for whom the facility is their usual place of residence.

Place – A concentration of population either legally bound as an incorporated place or identified by the Census Bureau as a census designated place.

Regional Office – One of 12 permanent Census Bureau offices responsible for the Census Bureau's office and field operations within its region.

Shapefile – Data set used to represent geographic features such as streets and boundaries. Shapefiles can represent point, line, or area features and require GIS or mapping software.

Street segment – The portion of a street or road between two features that intersect that street or road, such as other streets or roads, railroad tracks, streams, and governmental unit boundaries. The Census Bureau records the known address ranges for every street segment with city-style addresses.

Structure Point – A dot on a Census Bureau map, used to show the location of one or more living quarters. A 4-digit number plus 1-digit alpha character assigned within a census block to each structure point. Structure points are stored in the TIGER[®] database.

Topologically Integrated Geographic Encoding and Referencing (TIGER[®]) – A computer database that contains a digital representation of all map features (streets, roads, rivers, railroads, lakes, and so forth) required to support Census Bureau operations, the related attributes for each, and the geographic identification codes for all entities used by the Census Bureau to tabulate data for the United States, Puerto Rico, and Island Areas.

Vacant housing unit – A habitable structure containing living quarters that is not occupied. New housing units not yet occupied are classified as vacant housing units if

construction has reached a point where exterior windows and doors are installed and final usable floors and a roof are in place. Vacant units are excluded if open to the elements, or if there is positive evidence, such as a sign on the house, that the housing unit is to be demolished or has been condemned.

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