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

August 2007

Option 2 – Title 13 Local Address List Submission Computer-Readable Format



USCENSUSBUREAU

Helping You Make Informed Decisions

TABLE OF CONTENTS

Chapter 1 Introduction to the 2010 Decennial Census Local Update of Census Ac (LUCA) Program	ddresses 1
The 2010 Decennial Census Local Update of Census Addresses (LUCA) Progra	ım1
Background	2
The Census Address List Improvement Act	
The Census Bureau's Master Address File (MAF)	
The Topologically Integrated Geographic Encoding and Referencing (TIGER®)	Database2
LUCA Program Responsibilities	
Census Bureau's LUCA Program Responsibilities	
Participant's LUCA Program Responsibilities	
Schedule	
Scriedule	
Chapter 2	
Before You Begin Your Review	6
Defore 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	
Residential and Nonresidential Addresses	
Address Formats	
City-style Address Format Noncity-Style Address Format	
Census Tract	
Census Block	
What is Geocoding?	
Strategies for Reviewing the Census Bureau's Address List	10
Local Address Sources	
Chapter 3 The LUCA Program's Computer- Readable Address List and Address	Count List 12
Introduction	
Protecting Census Bureau Address Information	
The File Names	
Software Requirements	
Opening the Files	
The File Formats	
Address List	
Computer-Readable Address List File Record Layout Example – Pipe-delimited Address List File – City-style Address	
Example – Pipe-delimited Address List File – City-style Address Example – Pipe-delimited Address List File – Noncity-style Address	
Address Count List	
Example – Address Count List File Record Layout	
Example – Pipe-delimited Address Count List File	
• •	

Chapter 4 The Census Bureau's Predefined Computer-Readable Local Address L Format	ist File 26
The Predefined Computer-Readable Address List File Format	
The Address List Template Record Layout File	27
Chapter 5	
The Census Bureau Maps	30
Introduction	30
Reading a Census Bureau Paper Map	
The Map Sheet to Block Number Relationship List	
Examples	
Adding a new street and associated address ranges	34
Correcting a street name on the paper map	30
Correcting the location of a street on the paper map	
Deleting a street on the paper map	
Boundary and Annexation Survey (BAS) Paper Maps	
Shapefiles	
Submitting Shapefile Feature Information	
The Census Bureau's Shapefile Coordinate System and Projection Informati	
General File Setup Guidelines	
Changing Our Coordinate System to Match Yours Feature Information	
Updating the Feature Shapefile	
Edges Layer Data Dictionary	
Census Feature Classification MTFCC to CFCC Crosswalk	
Change Type Codes for Feature Corrections	
Examples	
Adding a Feature to the Edges Layer	
2. Correcting a Feature Name	
3. Procedure for changing the MTFCC of an existing feature	
4. Deleting a feature	
5. Moving a street	4
Metadata	
Metadata Requirements	
Digital File Submission	50
Chapter 6	
Submitting Your LUCA Program Updates	51
O Locitico IIIOA Materiala	_
Submitting LUCA Materials	
Sorting the Census Bureau's Paper Maps for Submission Preparing the Shapefiles for Submission	
Shipping Your LUCA Materials	
Shipping Your Loca Materials	
Chapter 7	
Returning Or Destroying Census Bureau Title 13, U.S.C. Materials	53
Conclusion	
Returning Census Bureau Title 13, U.S.C. Materials Destroying Census Bureau Title 13, U.S.C. Materials	
Destroying Cerisus Dureau Title 13, U.S.C. Materials	

APPENDICES	55
Appendix A Confidentiality and Security Guidelines Appendix B	55
The Map Legend	61
Appendix C Physical Location Description and Street Type Abbreviation Examples Appendix D	65
Unit Designation Abbreviation Examples	66
Appendix E Confidentiality Agreement Form	67
Appendix F Inventory Form	68
Appendix G	
Special Disclosure Notice	69
Return or Destruction of Title 13, U.S.C. Materials Form	70
Glossary	71
Index	76
TABLE OF FIGURES	
Figure 3.1: Entity Identification Codes	
Figure 3.2: Computer-Readable Address List File Record Layout	
Figure 3.4: Pipe-delimited LUCA Program Address List File – Noncity-style Address	
Figure 3.5: Address Count List File Record Layout	24
Figure 3.6: Address Count List File "Total Row" Layout	
Figure 3.7: Pipe-delimited Address Count List File	25
Figure 4.1: Census Bureau's Predefined File Format for Local Address List Submission	26
Figure 5.1: Example of a Census Bureau Paper MapFigure 5.2: The Map Sheet to Block Number Relationship List	
Figure 5.3: Adding a New Street on the Paper Map	
Figure 5.4: Correcting a Street Name on the Paper Map	
Figure 5.5: Correcting the Location of a Street on the Paper Map	37
Figure 5.6: Deleting Streets on the Paper Map	
Figure 5.7: Edges Layer Data Dictionary	42
Figure 5.8: Census Feature Classification MTFCC to CFCC Crosswalk	44
Figure 5.9: Change Type Codes for Feature Corrections	
Figure 5.10: Example Attribute Table Updates	47
Figure 5.11: Digital Road Correction Example	

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 Responsibilities

Participant Responsibilities

Training and Technical Support

Schedule

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 Census Bureau invited the highest elected official of your jurisdiction to participate in this program. Your jurisdiction selected Option 2, Title 13 Local Address List Submission. This option allows you to:

- Review the Census Bureau's Address List and Address Count List for your jurisdiction for references purposes only.
- Submit your local address list file of **city-style¹ addresses** only in a predefined Census Bureau computer-readable format. The Census Bureau will only accept local address files in the predefined format as explained in Chapter 4.
- Identify any additions, deletions, or corrections to boundaries, roads, or other physical features on the Census Bureau paper maps or submit an updated version of the digital map file (shapefile) provided by the Census Bureau.

¹ A **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*.

1

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 File² with the latest version of the U.S. Postal Service's (USPS) Delivery Sequence File³ (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 tracts⁴, census blocks⁵, etc.) used to tabulate decennial census data. The TIGER® database also includes

² The 1990 residential address list used to label questionnaires, control the mail response check-in operation, and determine the nonresponse follow-up workload.

³ 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.

⁴ 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.

⁵ 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.

address ranges⁶ along streets that have city-style addresses and the hierarchy of census geographic area codes from the state level down to individual census blocks (http://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 jurisdiction 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 liaison and reviewers. (The Census Bureau suggests that individuals in your jurisdiction involved in zoning enforcement not work on this program since this may create a conflict of interest.)
- Sign and return the Registration Form.
- All liaisons, reviewers, and anyone with access to Title 13 materials must read, understand, and agree to abide by the Census Bureau's

⁶ **Address ranges** are the lowest and highest address numbers used to identify structures along each side of a street segment. Usually one side of the street has even address numbers and the other side has odd address numbers.

Confidentiality and Security Guidelines (See Appendix A for the terms of the LUCA Program Confidentiality Agreement 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/Product Preference 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 points⁷, (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 submit 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 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 experience in using the 2010 Decennial Census LUCA Program materials. Should you need additional information, please contact your Census

⁷ 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.*

Bureau Regional Office at 1-866-511-LUCA or for technical assistance, please call the Help Desk at 866-919-5822.

Schedule

January – February 2007	LUCA advance notification letters and information materials were mailed to highest elected officials and other contacts in eligible, active, functioning governments.
March – June 2007	LUCA Promotional Workshops were conducted.
August 2007	LUCA invitation letters and registration materials were mailed to the highest elected officials and as a cc to other contacts in eligible, active, functioning governments.
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 participants review and update the address list and return their comments 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 Master Address File/TIGER® system.
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.

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
Local 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 http://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:

- 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 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:

- 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 or include a designator such as "garage" or "rear". 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 multi-unit structures, such as apartment buildings, contain a unit designator, for example, Apt 101 or Suite D (*See Appendix D, Unit Designation Abbreviations*). The Census Bureau and the U.S. Postal Service treat these 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 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 nonvisible 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 maps.

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

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.

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.

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 multi-family 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.
- Recently added territory.
- Addresses near jurisdictional boundaries.

Local Address Sources

There are many possible sources of local 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 local 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 occupancy permits.
- Planning or zoning records.
- Local utility records.
- Drivers' license files.
- Annexation records.
- Assessment or taxation files.
- Voter registration files.

CHAPTER 3 THE LUCA PROGRAM'S COMPUTER- READABLE ADDRESS LIST AND ADDRESS COUNT LIST

Introduction
Protecting Census Bureau Address Information
The File Names
Software Requirements
Opening the Files
The File Formats

Introduction

The Census Bureau's Address List and Address Count List files for your jurisdiction are included on your CD-ROM. 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 local 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 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 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 (See Appendix A for the terms of the Confidentiality and Security Guidelines).

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 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 (AAAAA) 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 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

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

The File Names

The **Address List (AL)** file contains all of the residential addresses currently recorded by the Census Bureau for your jurisdiction. The **Address Count List (ACL)** file contains the residential address counts for each census block within your jurisdiction. The name of each of the files is:

- 1. Address List LUCA_AL_XXyyyyyyyyytxt
- 2. **Address Count List** LUCA_ACL_XXyyyyyyyyytxt

Where:

XX = 2 character, alpha entity type:

ST - state

CO – county

PL - place

MC – minor civil division (MCD)

yyyyyyyy = variable length, numeric entity ID code.

The numeric portion of the entity identification code is of variable length, depending on the type of entity:

State: 2 digits
County: 5 digits
Place: 7 digits
Minor Civil Division (MCD): 10 digits

Figure 3.1: Entity Identification Codes

Entity	Entity Identification Code	Total Characters
State	ST (2 alpha) + (2 numeric)	4
County	CO (2 alpha) + State (2 numeric) + County (3 numeric)	7
Place	PL (2 alpha) + State (2 numeric) + FIPS Place (5 numeric)	9
Minor Civil Division	MC(2 alpha) + State (2 numeric) + County (3 numeric) +	12
(MCD)	FIPS MCD (5 numeric)	

Examples:

Address List File Names

4-character state file name – New York:

LUCA_AL_ST36.txt, where "ST" is state and "36" is the state code for New York.

7-character county file name – Erie County, New York:

LUCA_AL_CO36029.txt, where "CO" is county, "36" is the state code for New York and "029" is the county code for Erie County.

9-character place file name – Lake Zurich, Illinois:

LUCA_AL_PL1731155.txt, where "PL" is place, "17", the state code for Illinois, and "31155" is the FIPS place code for Lake Zurich.

12-character minor civil division – My Township, Indiana County, Pennsylvania:

LUCA_AL_MC4206398555.txt, where "MC" is minor civil division, in this instance, a township; "42" is the state code for Pennsylvania; "063" is the county code for Indiana County; and "98555", the minor civil division code for My Township.

Address Count List File Names

9-character place – Mitchell, Wyoming:

LUCA_ACL_PL5645788.txt, where "PL" is place, "56" is the state code for Wyoming, and "45788" is the Census place code for Mitchell.

Software Requirements

The 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 dBase⁸.

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 at 866-919-5822 if you need assistance or more information.

Opening the Files

Refer to the readme file for instructions on opening the encrypted self-extracting Address List. A case sensitive password is required to open the file. The Census Bureau will mail the password to you, separate from your LUCA materials.

- 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-ROM into that directory or folder.
- 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 tell the application program the following:
 - o Fields are **delimited**.

⁸ 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.

- Delimiter is a pipe symbol (|)
- o Text qualifier is none.
- o 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 so forth.
- Follow the record layout in Figure 3.2 to name and define the sizes of your fields.
- If you need assistance or more information, call the Help Desk at 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 your jurisdiction. 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 is a maximum of 462 characters and contains 26 fields of information. The character length of each record may vary.

Each address record contains the following fields:

- 1. **Entity ID Code** unique identification number assigned by the Census Bureau to each entity.
- 2. **Line Number** sequential number for each address record in the file.
- 3. **MAFID** unique control number assigned to each MAF address.
- 4. **Action Code** –this field is used by Option 1 participants only to record the type of change when an update is made to the address list.
- 5. **State Code** 2-digit current state code state for your jurisdiction.
- 6. **County Code** 3 digit current county code for your jurisdiction.
- 7. **Census Tract Number** uniquely identifies the census tracts within your 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.

- 8. **Census Block Number** identifies uniquely numbered census blocks within each census tract. Census block numbers contain a 4-digit number plus a 1-digit alpha character, if applicable, e.g. 3001A.
- 9. **Group Quarters Flag** displays a "**Y**" for addresses that are considered group quarters, such as nursing homes or dormitories.
- 10. **House Number** housing unit or group quarters assigned house number, which can contain numbers, letters, hyphens, or other characters, e.g., 2718, 1002-3.
- 11. **Street Name Prefix Qualifier** examples include, EXT, ALT, BUS, OLD, such as **ALT** Rt. 30 or **OLD** Warren Rd.
- 12. **Street Name Prefix Direction** examples include, N, W, SE, such as **N** Elm St. or **SE** Chestnut Dr.
- 13. **Street Prefix Type** examples include, HWY, RT, US, such as **HWY** 154 or **RT** 222.
- 14. **Street Name** full street or road name such as **Apple Blossom** or **9**th **ST**.
- 15. **Street Name Suffix Type** examples include, ST, CT AVE, DR, such as Marley **St**. or Winterberry **Dr**.
- 16. **Street Name Suffix Direction** examples include, N, W, SE such as Waverly Dr. **S**.
- 17. **Street Name Street Qualifier** examples include, EXT, ALT, BUS, such as 6th St. **EXT.**
- 18. **Location Description or GQ** description of a living quarter (e.g., Red Ranch w/White Shutters) or name of group quarters (e.g. Dobbs Hall).
- Apartment/Unit Number within structure descriptor or identifier. This column may contain apartment unit numbers such as APT 5 or location such as 1st FL FRNT.
- 20. **City-Style Mailing ZIP Code** 5-digit ZIP Code for city-style mailing addresses.
- 21. Noncity-Style Mail Delivery Address (RR#, HCR#, or PO BOX#) identifies noncity-style mail deliver address such as rural route and box number, post office box number, etc.
- 22. **Noncity-Style Mailing ZIP Code** 5-digit ZIP Code for noncity-style mailing addresses.
- 23. **Structure Point** 4-digit number plus 1-digit 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** 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.

A table showing the maximum character length of each field in the Address List file is on the next page.

Computer-Readable Address List File Record Layout

Figure 3.2: 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	Valid codes: A, C, D, J, N, entered by participant
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 quarter's 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 Street Qualifier	e.g. EXT, ALT, BUS
100	Location Description or GQ Name	Description of living quarter (Red Ranch w/White Shutters) or name of group quarter (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 (RR#, HCR#, or PO BOX#)	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 1-digit 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, PA 15888. Note that the "**Y**" in field 26 indicates that this is a city-style address.

Figure 3.3 displays the data in the appropriate fields.

Figure 3.3: Pipe-delimited LUCA Program Address List File – City-style Address

Field Number	Field Name	Example
1	Entity ID Code	PL4291059
2	Line Number	107
3	MAFID	123456789
4	Action Code	Blank
5	State Code	42
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
	Street Name Street 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 (RR#, HCR#, or PO BOX#)	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 for 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. Figure 3.4 displays the data in the appropriate fields.

PL3942868|678|234567891| |39|074|2345.00|5432| | | | | | |SCOTT LEVEL|ROAD| | | 2-STORY BRICK W/ATTACHED GARAGE ON LEFT| | |BOX 223|45555| | | |N

Figure 3.4: Pipe-delimited LUCA Program Address List File – Noncity-style Address

Field Number	Field Name	Example
1	Entity ID Code	PL3942868
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 (RR#,	BOX 223
	HCR#, or PO BOX#	
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 Address List for each census block within your jurisdiction. Use the Address Count List to identify inconsistencies between the Census Bureau's housing unit and/or group quarters address counts and your jurisdiction's housing unit and/or group quarters address counts.

Each block record in the Address Count List file is a maximum of 57 characters and contains nine (9) fields of information. The character length of each record may vary. See Figure 3.5 for the Address Count List file record layout.

- 1. **Entity ID Code** unique identification number assigned by the Census Bureau to each entity.
- 2. **State Code** 2-digit current state code state for your jurisdiction.
- 3. **County Code** 3 digit current county code for your jurisdiction.
- 4. **Census Tract Number** uniquely identifies the census tracts within your county or statistically equivalent entity. 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.
- 5. **Census Block Number** identifies uniquely numbered census blocks within each census tract. Contains a 4-digit number plus a 1-digit alpha character, if applicable, e.g. 3001A.
- 6. **Census Count of Housing Unit Addresses** Census Bureau's most recent count of housing unit addresses.
- 7. **Local Count of Housing Unit Addresses** this field is blank.
- 8. **Census Count of Group Quarters Addresses** Census Bureau's most recent count of group quarters addresses.
- 9. **Local Count of Group Quarters Addresses** this field is blank.

Example – Address Count List File Record Layout

Figure 3.5: 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 and Suffix	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 and Suffix	4-digit Current Census Block Number, plus 1-digit alpha character suffix, if applicable
7	Census Count of Housing Unit Addresses	Census Bureau's most recent count of housing unit addresses
7	Local Count of Housing Unit Addresses	Blank field to record your most recent count of housing unit addresses
7	Census Count of Group Quarters Addresses	Census Bureau's most recent count of group quarters addresses
7	Local Count of Group Quarters Addresses	Blank field to record your most recent count of group quarters addresses

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 3.6 for the "Total Row" Layout.

Figure 3.6: Address Count List File "Total Row" Layout

Maximum Character Length	Field Name	Description/Notes
7	Census Tract and Suffix	The word "Total" appears in this column
5	Census Block and Suffix	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	Local Count of Housing Unit Addresses	Blank. You do not need to record your totals.
7	Census Count of Group Quarters Addresses	Total number of Census Bureau Group Quarters Addresses on the Address Count List
7	Local Count of Group Quarters Addresses	Blank. You do not need to record your totals.

Example – Pipe-delimited Address Count List File

Figure 3.7 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 for a place, entity ID code PL1622233, in the state of Idaho, state code 16, place code 22233, and county code 089. There are 765 housing unit addresses and three (3) group quarters addresses in Census Tract 6789.01, Census Block 5432.

PL1622233|16|089|6789.01|5432|765| |3|

Figure 3.7: Pipe-delimited Address Count List File

Address Count Record	Field Name	
PL1622233	Entity ID Code	
16	State Code	
089	County Code	
6789.01	Census Tract and Suffix	
5432	Census Block and Suffix	
765	Census Count of Housing Unit Addresses	
Blank	Local Count of Housing Unit Addresses	
3	Census Count of Group Quarters Addresses	
Blank	Local Count of Group Quarters Addresses	

CHAPTER 4 THE CENSUS BUREAU'S PREDEFINED COMPUTER-READABLE LOCAL ADDRESS LIST FILE FORMAT

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

The Predefined Computer-Readable Address List File Format

You must submit your local address file containing **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. We will **not accept or process** noncity-style addresses.

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 Local 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 1-digit 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 quarter's 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-ROM. If you choose, you may use this template to import your local 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-ROM into that directory or folder.
- When you open the text file with your application tell the application program the following:
 - o Fields are **delimited**.
 - o Delimiter is **pipe**. (|)
 - o Text qualifier is **none**.
 - o 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*, state, and county codes can be found on the address list materials and/or the paper maps.)
 - 1. Entity ID code
 - 2. State code
 - 3. County code
 - 4. Census tract number
 - 5. Census block number
 - 6. Group quarters flag, if applicable:
 - a. Enter a "Y" in the "Group Quarters Flag" field (field6) for a group quarters address.
 - b. Add the name of the group quarter in the "Group Quarters Name" field (field 15)
 - 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 qualifier
- 15. GQ name, if applicable:
 - a. Be sure that the "Group Quarters Flag" in field 6 displays a "Y"
- 16. Apartment/Unit number, if applicable:

If you have multi-unit 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 multi-unit 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 multi-unit structure located 505 Wells Blvd, contains 20 units. You don't know the actual individual unit numbers or designators but you know there are 20 units:

- 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 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 at 866-919-5822.)
- Name the file containing your local address list XXyyyyyyyyy_LUAL.txt (XXyyyyyyyyy is your entity identification code).

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

CHAPTER 5 THE CENSUS BUREAU MAPS

Introduction

Reading a Census Bureau Paper Map

The Map Sheet to Block Number Relationship List

Examples

Figure 5.3: Adding a New Street on the Paper Map

Figure 5.4: Correcting a Street Name on the Paper Map

Figure 5.5: Correcting the Location of a Street on the Paper Map

Figure 5.6: Deleting Streets on the Paper Map

Shapefiles

Submitting Shapefile Feature Information

Metadata

Digital File Submission

Introduction

The Census Bureau provides you with one set of paper maps or shapefiles as a reference for locating and geocoding individual address, and for updating and correcting your jurisdiction's features and boundaries. If you requested paper maps, you also receive a Map Sheet to Block Number Relationship List that identifies the map sheet(s) on which each census block is located. See Figure 5.2, The Map Sheet to Block Number Relationship List.

During your review, you may find that the boundary for your jurisdiction does not depict the correct current location. You may use your LUCA maps to provide updates to your legal boundaries. If you register to participate in the LUCA program before October 31, 2007, you will receive your 2008 BAS materials with your LUCA program materials.

The BAS materials include the BAS User Guide for paper maps and a Boundary and Annexation Survey form.

If you selected to receive shapefiles, a layer for legal boundaries is included that you may edit. Refer to the Digital BAS Respondent Guide included on the CD-ROM containing your shapefiles for instructions on making your boundary edits.

Reading a Census Bureau Paper Map

There are three types of paper map sheets:

- 1. Index Sheets
- 2. Parent Sheets
- 3. Inset Sheets

Index Sheets – for reference (if more than one map sheet)

- Cover the entire extent of your jurisdiction.
- Divided into numbered grids.
- Used with jurisdictions containing more than one parent sheet.
- Each numbered grid area corresponds to area covered by a parent sheet.
- Index sheets are for reference; please do not make updates to the index maps because the updates are harder to incorporate into our database due to the smaller scale.

Parent Sheets – for map updates

- Detailed view of a section of your jurisdiction.
- Correspond to a grid and grid number on the Index sheet.
- Shows detail for features and geographic areas.
- Used for map updates.

Inset Sheets – for map updates to congested areas

- Shows the detail of congested areas on parent sheets.
- Corresponds to a notation on a Parent sheet.
- Shows detail for features and geographic areas.
- Use these maps to make updates for congested areas only.

The Census Bureau paper map shows some of the same information found on a typical road map, such as streets and roads, water features, and legal boundaries. However, the Census Bureau map displays this information using symbols unique to the Census Bureau.

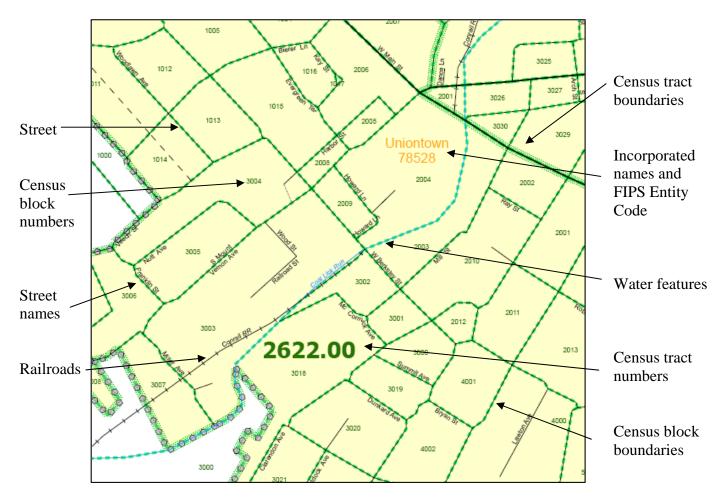
The map displays the following information:

- Streets
- Census block numbers
- Street names
- Railroads
- Census tract boundaries
- Incorporated names and FIPS Entity Code
- Water features

- Census tract numbers
- Census block boundaries

Refer to Figure 5.1 for an example of a Census Bureau map.

Figure 5.1: Example of a Census Bureau Paper Map



Information contained in the map border:

- The key to adjacent areas, if your jurisdiction has multiple map sheets
- Signature box for the Boundary and Annexation Survey (BAS) Official
- Entity identification information
- Bar Code
- Scale
- North arrow

- MAF/TIGER Accuracy Improvement Project (MTAIP) credit for counties that have undergone the MTAIP process:
 - o 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.

The symbols on the map legend include:

- Boundaries
- Transportation
- Other Features
- Landmarks
- Footnotes and Notes

See *Appendix B* for a detailed description of the map legend.

The Map Sheet to Block Number Relationship List

The Map Sheet to Block Number Relationship List is provided for use with paper maps. The list identifies the map sheet or sheets on which each census block is located and is sorted by census tract number and census block number in ascending order as shown in Figure 5.2 on the next page.

Figure 5.2: The Map Sheet to Block Number Relationship List

2010 Decennial Census Local Update of Census Addresses Program Map Sheet to Block Number Relationship List

	Map Sheet to block Number Relationship List							
	2010 Census Local Update of Census Addresses Program Map Sheet to Block Number Relationship List							
	ST/CO: 14/015 Date: 07/29/2007 Listing for: DARLINGTON COUNTY CO14015 Page: 1 of 1							
Libering .	T DIMEL	T	T CO1101	. <u> </u>	1	1	Tuge: 1 0	T -
	Current			Current			Current	
Census	Census	35	Census	Census	1. ()	Census	Census	36 11 ()
Tract 49.01	Block #	Map# (s)	Tract 49.01	Block # 3004	Map# (s)	Tract	Block #	Map# (s)
49.01	1001	1	49.01	3005	1		1	
49.01	1002	1	49.01	3005	1			
49.01	1003	1	49.01	3007	1			
49.01	1004	1	49.02	2010B	1		1	
49.01	1005	1	49.02	20108	1			
49.01	1006	1	49.02	2011	1			
49.01	1007	1	49.02	2012	1,2			
49.01	1008	1	49.02	3024	1,2			
49.01		1	49.02	3024	2			
49.01	1010	1	49.02	3023	2			
49.01	2025	1	49.02	3037	2			
49.01	2025	1	49.02	3039	2			
49.01	2026	1	49.02	3039	2		+	
49.01	2027	1	-					
49.01	2020	1	-					
49.01	2029	1					1	
49.01	2030	1						
49.01	2031	1			+		-	
49.01	2032	1			+		-	
49.01	3001	1						
49.01	3001	1						
49.01	3002				<u> </u>		1	
49.UI	3003	1						

Examples

Adding a new street and associated address ranges9

During your review, you may find addresses missing from the Census Bureau's Address List that are on streets that are partially or entirely missing from the maps.

⁹ **Address ranges** are the lowest and highest address numbers used to identify structures along each side of a street segment. Usually one side of the street has even address numbers and the other side has odd address numbers.

For example, Spring Street is a new street with newly constructed housing units in Census Tract 2623.00, Census Block 3001. The address ranges for this street are 101 through 109 on the east side of the street and 100 through 108 on the west side.



Figure 5.3: Adding a New Street on the Paper Map

- 1. Using a purple pencil, draw the location of the new street on the map.
- 2. Print the street name, Spring St.
- 3. Print the address ranges for each side of the new street.
- 4. Print the address breaks¹⁰ where Spring St intersects Coolspring St (703-705) and Searight Ave (406-408).
- 5. Be sure that you record the new addresses in your address list so that your address list matches the map.

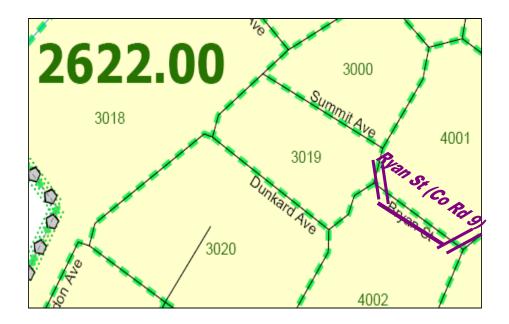
35

¹⁰ 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.

Correcting a street name on the paper map

The Census Bureau's Address List and map incorrectly shows Bryan St instead of Ryan St, the correct street name. The map also does not list the alternate name for the street, which is County Road 9 (Co Rd 9).

Figure 5.4: Correcting a Street Name on the Paper Map



- 1. Using a purple pencil, cross out the incorrect name Bryan St, and print the correct name, Ryan St above it.
- 2. Use double hatch marks to show the extent of the name change. In this instance, the entire street needs to be corrected.
- 3. Print the alternate name (Co Rd 9) in parentheses.
- 4. Be sure that your address list matches corrections to the map.

Correcting the location of a street on the paper map

The Address List and map shows Winona St as located in Census Block 2005. According to local sources, Winona St is located north of Connellsville St in Census Block 1034.

At this location, Winona St includes an odd numbered address range from 101 through 105 on the north and an even numbered address range from 100 through 106 on the south.

Winona St intersects Lincoln St between address numbers 502 and 504.

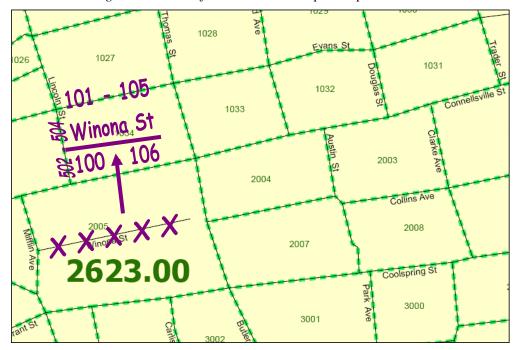


Figure 5.5: Correcting the Location of a Street on the Paper Map

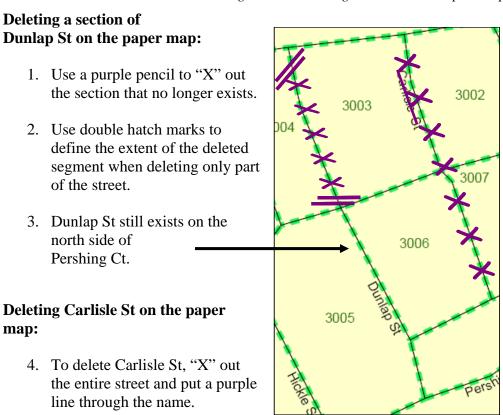
- 1. Using a purple pencil, cross out the incorrect location of Winona St with a series of "Xs".
- 2. Redraw Winona St in its correct Census Block, 1034, and print the street name and address ranges along the moved street.
- 3. Draw an arrow to the correct location of Winona St.
- 4. Print the address breaks where Winona St intersects Lincoln St.
- 5. Be sure that your address list matches corrections to the map.

Deleting a street on the paper map

In this example, there are two streets and their associated addresses to delete.

- 1. All of the housing units along a portion of Dunlap St between Census Block 3003 and Census Block 3004 have been demolished, and this section of the street no longer exists.
- 2. All of the houses on Carlisle St between Census Blocks 3003, 3004, 3006, and 3007 have been demolished. The entire street no longer exists.

Figure 5.6: Deleting Streets on the Paper Map



Be sure that your address list matches corrections to the map.

Boundary and Annexation Survey (BAS) Paper Maps

The Census Bureau conducts the Boundary and Annexation Survey (BAS) each year to determine the inventory of correct names, legal descriptions, and legal boundaries of counties and equivalent entities, minor civil divisions, incorporated places, federally recognized American Indian reservations, and off-reservation trust lands. Title 13, U.S.C. authorizes this voluntary survey.

Specifically, the Census Bureau requests up-to-date boundary information for local governments and information on the legal actions associated with the changed boundaries. The Census Bureau enters all boundary and area information obtained through the BAS into the TIGER® database so that all subsequent map and Census address list products reflect these changes.

During your review, you may find that the boundary for your jurisdiction does not depict the correct current location. You may use your LUCA maps to provide updates to your legal boundaries. If you register to participate in the LUCA program before October 31, 2007, you will receive your 2008 BAS materials with your LUCA program materials.

The BAS materials include the BAS User Guide for paper maps and a Boundary and Annexation Survey form.

If you selected to receive shapefiles, a layer for legal boundaries is included that you may edit. Refer to the Digital BAS Respondent Guide included on the CD-ROM containing your shapefiles for instructions on making your boundary edits.

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.

In addition to an edges shapefile, the Census Bureau provides shapefiles for legal boundaries that you may edit. Refer to the *Digital BAS Respondent Guide* included with your LUCA materials for boundary updates.

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

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

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.

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.

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)
- Datum: D_North_American_1983
- Spheroid: GRS_1980
- Semi-major Axis: 6378137.000000000000000000
- Semi-minor Axis: 6356752.31414035610000000
- Inverse Flattening: 298.257222101000020000

Please feel free to project these files into your local coordinate system/projection.

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 at 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 at 866-919-5822 for assistance.

Feature Information

The Census Bureau will collect feature changes designated by the LUCA participant.

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 5.9 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 5.7 for an example of the edges layer data dictionary.

Figure 5.7: Edges Layer Data Dictionary

Field	Length	Туре	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.
 - o 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 \$1400.
 - 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).
 - o 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.
 - o 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 this flag. Make necessary boundary corrections to the affected entity if the boundary has been coordinately shifted.

- **FULLNAME** is the feature name.
- **CHNG_TYPE** is the type of digital linear update.

Figure 5.8: 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 5.9. Record the change type code in the **CHNG_TYPE** field in the attribute table for each line.

Figure 5.9: 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
 - lacktriangledown 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

Refer to the following examples.

Examples

1. Adding a Feature to the Edges Layer

Spring Street is a new street that needs 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, \$1400.
- 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 S1400 to S1200.
- 2. When changing the feature class code of a feature, 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 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 5.10 displays the attribute table, updated to show the examples.

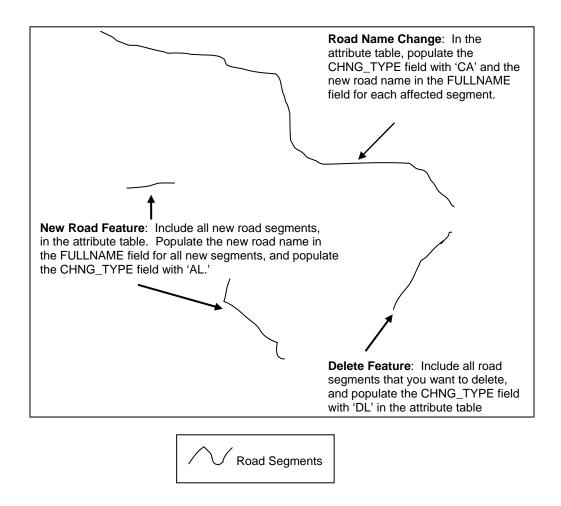
Figure 5.10: Example Attribute Table Updates

TLID	MTFCC	FIDELITY	FULLNAME	CHNG_TYPE
	S1400		Spring Street	AL
	S1400		Winona Street	AL
999999995	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

Examples:

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

Figure 5.11: Digital Road Correction Example



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 5.11.

Metadata

Metadata Requirements

Submit appropriate metadata with your file.

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 http://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 USGS's metadata URL is http://geology.usgs.gov/tools/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 http://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 Census Bureau at the Help Desk (866-919-5822).

Digital File Submission

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

• Name the feature update layer:

LUCA_<entity ID>_LN_changes.shp

The feature update layer must include:

- A value in its "CHNG_TYPE" field that indicates the type of change.
- o 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 Materials

After completing your review and update of the LUCA materials, return the materials with updates to the Census Bureau's Regional Office responsible for your jurisdiction (See the back cover for a list of Regional Offices.) **Include the inventory form** in *Appendix F* with your returned materials. Be sure to follow the procedures for shipping Census Bureau Title 13 Materials as outlined in this chapter.

- Save your address list file 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 at 866-919-5822.)
- Name the file containing your local address list XXyyyyyyyyy_LUAL.txt (*XXyyyyyyyyy is your entity identification code*).
- Make a copy of your submitted file to keep for your records and to use during the Feedback phase of the program.
- ZIP and password protect the file.
 - o 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 file to a CD-ROM or DVD.

Note: You may burn all of the files you are submitting your address lists and shapefiles to one CD-ROM or DVD.

- Send the CD-ROM or DVD with updates to your Census Bureau Regional Office.
- You may **not** submit an e-mail or post the file to an FTP site.

Sorting the Census Bureau's Paper Maps for Submission

- Separate the map sheets with updates from those without updates.
- Make a copy of all map sheets containing updates to keep for your records to use during the Feedback phase of the program.

- Organize the map sheets by map sheet number. Fold the maps if there are five (5) or fewer map sheets.
- If there are more than five (5) map sheets, roll the maps and mail them in a mailing tube or box.
- Return only those map sheets containing updates.

Preparing the Shapefiles for Submission

• Name the feature update layer:

LUCA_<entity ID>_LN_changes.shp

Compressing the File

• Compress all updated materials – Shapefile and Metadata -- into one ZIP formatted file called:

LUCA_2010_<entity ID>_Return.ZIP

Note: If you have boundary updates, ZIP the file and burn to a CD-ROM after making your boundary updates.

- Burn the file to a CD-ROM or DVD.
- Save a backup copy of your updated digital file for your records and to use during the Feedback phase of the program.

Note: You may burn all of the files you are submitting your address list and shapefiles to one CD-ROM or DVD.

Shipping Your LUCA Materials

- Double wrap all address materials.
- Address all envelopes, mailing boxes, mailing tubes, etc. to:

ATTN: GEOGRAPHY Director, Census Bureau Regional Office 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 shipping contractors that provide tracking services, such as U.S. Postal Service (USPS) certified or registered mail, Fed Ex, United Parcel Service (UPS), or similar service.

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

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

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 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 H*. 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 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 or reviewer leaves and fails to sign and date this form, the current liaison can sign-out on their behalf.

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

- Double wrap all Title 13 materials. This includes 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 G:

"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, mailing tubes, etc. to:

ATTN: GEOGRAPHY Director, Census Bureau Regional Office Address for your Census Bureau Regional Office You can find a list of the Census Bureau's Regional Office addresses on the back cover.

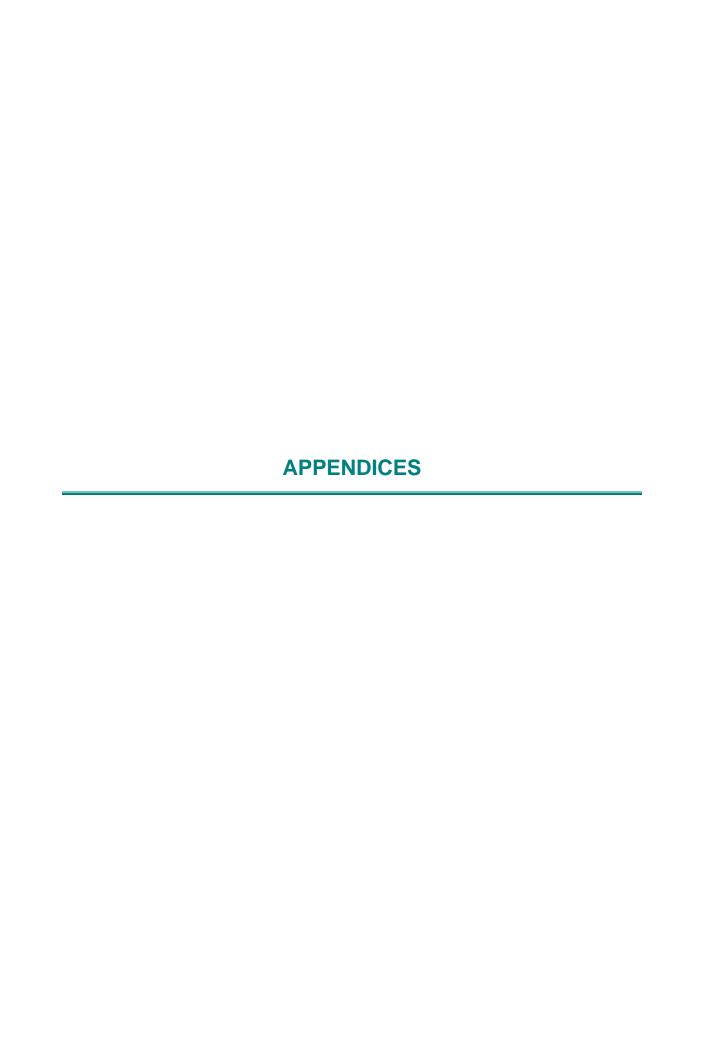
 Use shipping contractors that provide tracking services, such as U.S. Postal Service (USPS) certified or registered mail, Fed Ex, United Parcel Service (UPS), or similar service.

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:
 - o Shredding.
 - o Chemical decomposition.
 - o 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 an 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 un-useable; 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 before destruction.

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



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 (AAAAA) 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**

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 Director, Census Bureau Regional Office for your jurisdiction.

 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:
 - o 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 The Map Legend

ne wap Legend				
2010 LOCAL UP				
SYMBOL DESCRIPTION		SYMBOL	NAME STYLE	
International		***	CANADA	
American Indian Reservation (Federal)		* * * * * * *	L'ANSE	RES (1880)
Off-Reservation Trust Lar Hawaiian Home Land ¹	ıd,	++++++	T1880	
American Indian Tribal Su	bdivision1		• • • • • • • SHONTO (620)	
American Indian Area (fill	1)			
State or Statistically Equi	valent Entity ¹		NEW YOR	K 36
County or Statistically Eq	uivalent Entity ¹		ERIE 029	
Minor Civil Division (MC	D)1	0000000	PIKET	WP 59742
Consolidated City ¹		0000000	Milfor	d 47500
Incorporated Place			Rome 6	3418
Census Tract			5702.	01
Block ²			1326	
FEATURE	SYMBOL	FEATUR	<u>E</u>	SYMBOL
Interstate	₹	Geograph and Corri	ic Offset	veraveraveraveraveraverav
U.S. Highway	- 66			
State Highway	4	Large Riv	ver or Lake	A Plogson Lake
Other Road	Marsh Ln			Fa Januara Can.
Cul-de-sac		Glacier		Carleting Short and
Circle		Airport		Acquaid Aicport
Address Range Break ³	201+	Cemetery		Powell Cintry
Jeep Trail, Walkway, Stairway, or Ferry				
Railroad	Southern RR	Golf Cou	rse	Pinenuet GMCas
Pipeline or Power Line		Jail		Rolsom: State: Prison:
Ridge, Fence, or Other Physical Feature		Military I	Installation	Fart Belvair
Property Line		Park		St Francis Park.
Nonvisible Boundary or Feature Not Elsewhere Classified		Mountain	Peak	Alt. Saker
Perennial Stream or Shoreline	Tumbling Cr	Inset Are	a	Α
Intermittent Stream or Shoreline	Piney Cr	Outside S	Subject Area	
Where international, state, and/o of these boundaries.	Where international, state, and/or county boundaries coincide, the map shows the boundary symbol for only the highest-ranking of these boundaries.			
¹ Boundaries reshaped during coordinate enhancement are highlighted on the map. ² A '*' following a block number indicates that the block number is repeated elsewhere in the block. ³ Insert footnote about address break here. ORAFI DRAFI DR				

The map legend describes the various symbols and colors used on the paper maps. The legend is divided into three columns:

- 1. The Symbol Description column includes the type of features, boundaries, and geography shown on the map.
- 2. The Symbol column shows the symbols representing the feature in the symbol description.
- 3. The Name Style column shows an example of the name of a particular feature such as a road, waterway, or geographic area displayed on the map.

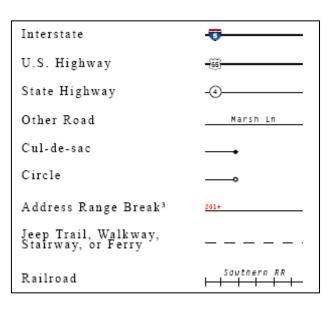
Boundaries

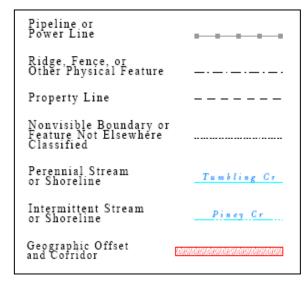
The first group of symbols in the legend refers to different boundary types or geographic area shown on the map. Each type of boundary has a distinct color or symbol.

2010 LOCAL UPDATE OF C	CENSUS ADD	RESSES MAP LEGEND
SYMBOL DESCRIPTION	SYMBOL	NAME STYLE
International	***	CANADA
American Indian Reservation (Federal)	****	L'ANSE RES (1880)
Off-Reservation Trust Land, Hawaiian Home Land ¹	++++++	T1880
American Indian Tribal Subdivision		SHONTO (620)
American Indian Area (fill)		
State or Statistically Equivalent Entity ¹		NEW YORK 36
County or Statistically Equivalent Entity		ERIE 029
Minor Civil Division (MCD)1	000000	PIKE TWP 59742
Consolidated City ¹	0000000	Milford 47500
Incorporated Place ¹		Rome 63418
Census Tract		5702.01
Block ²		1326

Transportation

The second group of symbols represents various types of transportation features. Thicker lines identify major roadways such as interstates and U.S. highways while thinner lines represent secondary roads and city streets. Also identified are cul-de-sacs and circles. Jeep trails, walkways, stairway, and ferries, represented by distinctive dashed lines, are included in this section.





Other Features

The third group of symbols represents other feature types such as pipelines and streams and non-visible boundaries. Streams and shorelines are blue and geographic offset and corridors are speckled red.

Landmarks

The last group of symbols represents various landmarks on the map such as rivers and lakes, glaciers, airports, cemeteries, golf courses, jails, military installations, parks, and mountain peaks. The area outside of the subject area is speckled gray.

Large River or Lake	Approximately and the second
Glacier	Carbon Chair and
Airport	★ Oxnatd Aitpott
Cemetery	Powell Cmtry
Golf Course	Pinenurst GMCrs
Jail	Rolsom: State: Prison
Military Installation	Fart Belvair
Park	St Francis Park
Mountain Peak	▲ A.R. Baker
Inset Area	А
Outside Subject Area	

Footnotes and Notes

The footnote and notes section of the legend provide additional information and details on geographic relationships, boundaries, and symbols

Where international, state, and/or county boundaries coincide, the map shows the boundary symbol for only the highest-ranking

- Boundaries reshaped during coordinate enhancement are highlighted on the map.
 A '*' following a block number indicates that the block number is repeated elsewhere in the block.
 Insert footnote about address break here.

Appendix C 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	Е
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 D 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	UPPR

Appendix E Confidentiality Agreement Form



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

 struction of			

GLOSSARY

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

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 quarter 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 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 person most responsible for the governmental activities of a local government. 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 government's jurisdiction, and thus bounds the area of LUCA responsibility.

Glossary 73

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

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. 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.

Glossary 75

INDEX

A	Census tract number. See also census tract,
Address breaks	See also census tract
defined, 35	defined, 9, 72
Address control file 1990, 2	Chief executive/highest elected official
defined, 2	defined, 72
Address count list	invitation, 1
file name, 14	City-style address. See house number and
file record layout, 24	street name addresses, See house number
pipe-delimited file example, 25	and street name addresses
Address list	defined, 1, 8, 72
entity ID codes, 15	Confidentiality
file format, 17	defined, 72
file name, 14	D
opening files, 17	Delivery sequence file (DSF), 2
pipe-delimited file city-style example, 21	Disclosure notice, 53
pipe-delimited noncity-style example, 22	F
protecting, 12	Feature
restricting access, 13–14	defined, 72
software requirements, 16	G
Title 13, 55	Governmental unit
Address range	defined, 73
in TIGER, 3	Group quarters
Address types, 8	acceptable types, 7
nonresidential, 8	defined, 7, 73
residential, 8	unacceptable types, 7
B	H
Block number	House number and street name addresses, 8
defined, 71	Housing unit
Boundary	acceptable, 6
defined, 71	defined, 6, 73
C	unacceptable types, 7
Census address list improvement act of	L
1994, 2	Legal boundary
Census block	defined, 73
defined, 9, 10, 71	Liaison
Census Bureau	chief-executive/highest elected official,
responsibilities, 3	72
Census Bureau paper map	defined, 74
adding streets, 34	Local address list
correcting street location, 37	sources, 11
correcting street names, 36	LUCA program
deleting streets, 38	destroying title 13 materials, 54
index sheets, 31	explained, 1
information, 31	return title 13 materials, 53–54
inset sheet, 31	schedule, 5
parent sheets.	shipping materials, 52
sample, 32	training, 5
Census tract. See also census tract number	M
defined, 9, 72	Map sheet to block number relationship list,
defined, 7, 12	33

76 Index

example, 34	R
Master address file (MAF)	Return or destruction of title 13 materials
creation, 2	form, 53, 70
defined, 74	S
Minor civil division. See legal boundary	Shapefile
N	defined, 74
Noncity-style address	submitting feature information, 40
defined, 8, 74	Software requirements, 16
mailing addresses, 8	Strategies for review, 10
Non-house number and street name	Structure point
addresses. See non-city style addresses	confidential, 55
Nonresidential addresses, 8	defined, 75
0	Title 13, 55
Occupied housing unit	Structure points
defined, 74	feedback, 12
P	LUCA review, 12
Participant responsibilities, 3	T
Pipe-delimited file	Topologically integrated geographic
address count list, 25	encoding and referencing. See also
address list city-style example, 21	TIGER/Line [®] file
address list noncity-style example, 22	defined, 75
defined, 16	,

Index 77

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