

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

Issued August 2007

*Option 3—Non-Title 13 Local Address List Submission  
MAF/TIGER Partnership Software (MTPS)*



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

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

United States  
**Census**  
**2010**



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## CHAPTER 1

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

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

The Census Address List Improvement Act

The Census Bureau's Master Address File (MAF)

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

LUCA Program Responsibilities

Census Bureau's LUCA Program Responsibilities

Participant's LUCA Program Responsibilities

Training and Technical Support

The LUCA Schedule

Respondent Burden

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

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

The U.S. Census Bureau invited the highest elected official of your jurisdiction to participate in this program. Your jurisdiction selected Option 3, Non-Title 13 Local Address List Submission using the Census Bureau supplied MAF/TIGER Partnership Software (MTPS). This option allows you to:

- Review the Census Bureau's Address Count List for your jurisdiction. This list is for reference purposes only.
- Submit your local address list file of city-style<sup>1</sup> single or multiunit structure or group quarters<sup>2</sup> residential addresses only in a predefined Census Bureau computer-readable format. The Census Bureau will only accept local address files (city-style addresses only) in the predefined format as explained in Chapter 6.
- Identify any additions, deletions, or corrections to boundaries, roads, or other physical features on the Census Bureau paper maps or submit

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<sup>1</sup>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.*

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

an updated version of the digital map file (shapefile) provided by the Census Bureau.

## Background

### The Census Address List Improvement Act

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

### 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 File<sup>3</sup> with the latest version of the U.S. Postal Service's (USPS) Delivery Sequence File<sup>4</sup> (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<sup>®</sup>) Database

Address records in the MAF are linked to feature segments in the Topologically Integrated Geographic Encoding and Referencing (TIGER<sup>®</sup>) database. The TIGER<sup>®</sup> 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 tracts<sup>5</sup>, census

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<sup>3</sup> The 1990 residential address list used to label questionnaires, control the mail response check-in operation, and determine the nonresponse follow-up workload.

<sup>4</sup> 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.

<sup>5</sup> 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.



blocks<sup>6</sup>, etc.) used to tabulate decennial census data. The TIGER<sup>®</sup> database also includes address ranges<sup>7</sup> along streets that have city-style addresses and the hierarchy of census geographic area codes from the state level down to individual census blocks ([www.census.gov/geo/www/geodiagram.html](http://www.census.gov/geo/www/geodiagram.html)). By linking address records in the MAF to the TIGER<sup>®</sup> 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.

### 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.

### Participant's LUCA Program Responsibilities

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

- Select your LUCA liaison and reviewers.
- Sign and return the Registration 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 as well as Census Bureau terminology and concepts.
- Ensure the receipt of all required materials for the LUCA program review.
- Prepare a strategy to conduct the review of LUCA materials.

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<sup>6</sup>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.

<sup>7</sup>**Address ranges** are the lowest and highest address numbers used to identify structures along each side of a street segment that has city-style addresses. Usually one side of the street has even address numbers and the other side has odd address numbers.

- Within 120 calendar days of receiving your LUCA materials, complete your LUCA review and submit your updated materials to the Census Bureau.
- Review the Census Bureau’s feedback materials.

### 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. In addition, computer-based training (CBT) is available on the LUCA Program CBT CD-ROM and the LUCA Web site at [www.census.gov/geo/www/luca2010/luca.html](http://www.census.gov/geo/www/luca2010/luca.html).

**Should you need additional information, please contact your Census Bureau Regional Office toll free at 1-866-511-LUCA (5822) or for technical assistance about computer applications including the MAF/TIGER Partnership Software (MTPS), please call the Technical Help Desk toll free at 1-866-919-LUCA (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 a courtesy copy 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	Option 3 participants may review the Census Bureau’s Address Count List and submit their local address list file along with their MTPS map updates to their Census Bureau’s Regional Office within 120 calendar days from the receipt of materials.

October 2007–October 2008	Census Bureau reviews participant’s LUCA submissions and updates the MAF/TIGER database.
November 2008–June 2009	Census Bureau prepares for and conducts an Address Canvassing Operation using GPS-equipped hand held computers.
August 2009–October 2009	Census Bureau provides feedback materials to participants showing how we processed each participant’s LUCA submissions.
September 2009–December 2009	Participants review feedback materials and Option 1 and Option 2 participants have the opportunity to appeal the results to the LUCA Appeals Office.
September 2009–January 2010	LUCA Appeals Office reviews and adjudicates Option 1 and Option 2 participant appeals.

### Respondent Burden

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

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

Paperwork Project 0607-0795  
4600 Silver Hill Road, Room 3K138  
Washington, DC 20233

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

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

## CHAPTER 2 BEFORE YOU BEGIN YOUR REVIEW

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

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### Introduction

Chapter 2 explains some of the terms and concepts used by the Census Bureau and recommended strategies for your LUCA review. Refer to the [Glossary](#) or visit the Census Bureau's Web site at <[www.census.gov](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 you submit to the Census Bureau:

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

### What are Group Quarters?

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

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

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

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

### Unacceptable Types of Housing Units and Group Quarters

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

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

## Census Bureau Addresses

### Residential and Nonresidential Addresses

The Census Bureau divides all addresses in two use types, residential and nonresidential. Residential addresses are addresses of housing units and/or group quarters where one or more persons 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 classifies housing unit and group quarters addresses that have a house number and street name address, for example, 212 Elm Street or 137 Clark Ct., Apt. 316, as city-style addresses. In some instances, the house number may also include an alpha character such as 35A or W9254. These addresses are used for mailing or to provide location for emergency services, such as police, fire, and rescue (E-911 addresses).

City-style addresses for housing units in multiunit structures, such as apartment buildings, contain a unit designator, for example, Apt 101 or Suite D or a location designator such as “rear” or “basement” (*See [Appendix F, Unit Designation Abbreviations Example](#)*). The Census Bureau and the USPS 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 also may **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 are that they contain a minimum of 1,200 people with an optimal population of 4,000.

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

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

### Census Block

A census block is an area bounded by visible features such as streets, roads, streams, and railroad tracks and nonvisible 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 consist of 4-digits, and may include a single alpha character suffix reflecting a boundary change or added feature (e.g. 3001A and 3001B).

**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 Count List

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

- Areas of new housing construction.
- E-911 address conversion areas.
- Areas that have changed from single-family homes to multifamily homes and vice versa.
- Warehouses that have been converted to residential lofts.
- New mobile home parks or new scattered mobile homes.
- Apartment buildings with irregular or missing numbering schemes for the individual units.
- Recently added territory.
- Addresses near jurisdictional boundaries.

### Local Address Sources

There are many possible sources of local address information. Differences in your count of residential addresses and the Census Bureau's count of addresses are a good indication of where change is taking place and can help you identify addresses that you need to add to your local 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 CENSUS SUPPLIED MATERIALS

Introduction

The MAF/TIGER PARTNERSHIP SOFTWARE (MTPS) Version 2.1

The MTPS Computer Based Training (CBT)

Address Count List File

Address List Template

Shapefiles

Other Files and Software

Setup File

Readme.txt File

The MTPS LUCA User Guide

Zip Software

Adobe® PDF Reader Software

Adobe® Flash Software

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### Introduction

The Census Bureau supplies the following materials:

1) **One (1) MTPS CD:**

- The MTPS Application.
- The MTPS CBT.

2) **One (1)\* or more data CDs that may contain the following information:**

- Address Count List.
- Address List Template
- Shapefiles.
- Setup File.
- Readme.txt File.
- The MTPS LUCA User Guide.
- Zip Software.
- Adobe® PDF Reader Software.
- Adobe® Flash Software.

*\* The number of data disks depends on the size of your jurisdiction.*

### The MAF/TIGER Partnership Software (MTPS) Version 2.1

The MTPS is a user-friendly GIS software, written specifically for Census geographic program participants, that is ready to load with the address count list and shapefiles for your jurisdiction. Note the licensing agreement that limits use of the MTPS to Census Bureau programs; it will

appear on the screen when you open the software. Do not distribute the software beyond your LUCA staff.

### **The MTPS Computer Based Training (CBT)**

The **MTPS CBT** is a step-by-step guide that helps you learn how to use the MTPS for your LUCA review. We strongly advise you to review the CBT before you begin using the application.

### **Address Count List File**

The address count list file contains the number of residential addresses for each census block within your jurisdiction.

### **Address List Template**

The address list template contains the Census Bureau's predefined address file format that you may use to import your local address file for submission.

### **Shapefiles**

Shapefiles contain the location and attributes of physical features. They are created using the Census Bureau's Topologically Integrated Geographic Encoding and Referencing System (TIGER<sup>®</sup>) and allow participants to submit digital updates to map features. Shapefiles require the use of a GIS application such as the MTPS.

### **Other Files and Software**

#### **Setup File**

The setup file contains the geographic information that the MTPS requires in order to load the data disks.

#### **Readme.txt File**

The readme.txt file contains descriptive information about the software and the files and provides instructions on how to use them.

#### **The MTPS LUCA User Guide**

This is a step-by-step guide to learn how to use the MTPS for your LUCA review.

#### **Zip Software**

Zip software is included on the standard data disk for your address list submission. The MTPS will automatically zip and encrypt your updated map files.

#### **Adobe<sup>®</sup> PDF Reader Software**

Adobe<sup>®</sup> PDF Reader Software allows a user to view Adobe<sup>®</sup> Portable Document Format (PDF) files. The LUCA User's Guide and the MAF/TIGER Partnership Software User's Guide are in Adobe<sup>®</sup> PDF format.

### **Adobe® Flash Software**

Adobe® Flash Player is software that allows you to view Web content created by Flash. This content may be interactive such as menus that slide, or it may consist of complex applications, games, or animations. Many Web browsers (Internet Explorer, for example) install Flash Player automatically. The MAF/TIGER Partnership Software Computer Based Training (CBT) is in Flash format. If the CBT does not run on your Web browser, you may need to install the Adobe® Flash player.

## CHAPTER 4 THE CENSUS BUREAU'S ADDRESS COUNT LIST

Introduction  
The Address Count List

### Introduction

The Census Bureau's Address Count List file for your jurisdiction is included on your data CD-ROM and is provided for reference purposes only. This chapter discusses the file format.

### The Address Count List

The address count list contains the number of housing unit and group quarter addresses on the Census Bureau's Address List for each census block within your jurisdiction. Use this list to identify inconsistencies between the Census Bureau's housing unit and/or group quarters address counts and your housing unit and/or group quarters address counts. This list is provided for reference purposes only.

The **Entity ID Code**, a unique identification number (maximum character length is 12 characters) assigned by the Census Bureau to each entity, is listed at the top of the address count list.

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 (MCD)	MC(2 alpha) + State (2 numeric) + County (3 numeric) + FIPS MCD (5 numeric)	12

Each block record in the address count list file contains eight (8) fields of information. The character length of each record may vary. The header displays the field names for each data column in the file:

1. **State**—2-digit current state code for your jurisdiction. This field is prepopulated.
2. **County**—3-digit current county code for your jurisdiction. This field is prepopulated.
3. **Tract**—Contains up to a 4-digit number followed by a decimal point and a 2-digit number for suffixed tracts, e.g., 1234.01. For census tracts without a suffix, the number will contain a period with zero fill, e.g., 4567.00. This field is prepopulated.
4. **Block**—Contains a 4-digit number plus one alpha character, if applicable, e.g. 3001a. This field is prepopulated.

## Chapter 4: The Census Bureau's Address Count List

5. **Census HU Count**—Census Bureau's most recent count of housing unit addresses. This field is prepopulated.
6. **Local HU Count**—blank field  
**Census GQ Count**—Census Bureau's most recent count of group quarters addresses. This field is prepopulated.
7. **Local GQ Count**—blank field.

## CHAPTER 5 SETTING UP THE MAF/TIGER PARTNERSHIP SOFTWARE (MTPS) FOR LUCA REVIEW

Introduction  
Installing the MTPS  
Starting the MTPS  
Completing the MTPS Computer Based Training (CBT)  
Beginning the LUCA Review with the MTPS  
Overview of Toolboxes and Buttons  
Additional Resources  
LUCA Program Help Desk  
LUCA Technical Help Desk  
LUCA Website

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### Introduction

The MTPS is a user-friendly application designed to read LUCA data disks and to record map updates in a format ready to be submitted to the Census Bureau.

### Installing the MTPS

To install the MTPS, please follow these instructions:

- 1) **Start Windows.**
  - 2) Insert the **Program CD** in your CD-ROM drive.
  - 3) Select the **Run** command from the **Start** menu. Type the location of your CD-ROM drive and the word “setup” (for example, type d:\setup).
- OR**
- Select the **Run** command from the **Start** menu. Use the **Browse** icon to locate the setup file.
- 4) Click **OK**. The installation program will appear on your screen.
  - 5) On the Welcome screen, click **Next**.
  - 6) Click **Yes** to accept the Software License Agreement.
  - 7) On the **Select Installation Type** window, accept the default option, “Install MAF/TIGER Partnership Software and Data for a Single Use.” Click **Next**.
  - 8) The setup program guides you through the installation process. Accept the default settings.
  - 9) Once the program has been installed, insert the first Data CD into your CD-ROM drive. (*Most data sets will fit on one (1) CD.*) Click **OK** when prompted.
  - 10) Click **Finish**.
  - 11) On the next window, select “Yes, I want to restart my computer now.”
  - 12) Click **Finish** to complete the setup.

### Starting the MTPS

To start the MTPS, please follow these instructions:

- 1) Select **Programs** from the **Start** menu.
- 2) Select MAF/TIGER Partnership Software > MAF/TIGER Partnership Software 2.1.
- 3) Enter a **User Name** and **Password** (You should have received this information under separate cover. If not, contact your local Regional Office and they will provide it to you.)
- 4) Click **OK** when prompted to install the data files.
- 5) Update the LUCA participant's information, if necessary.
- 6) Select one of two options:
  - To complete the training on CD-ROM, select "Run the MAF/TIGER Partnership Software Computer Based Training". (Please refer to the [Completing the Computer Based Training \(CBT\)](#) section below.)
  - OR**
  - To launch the application, select "Go directly to the MAF/TIGER Partnership Software program."

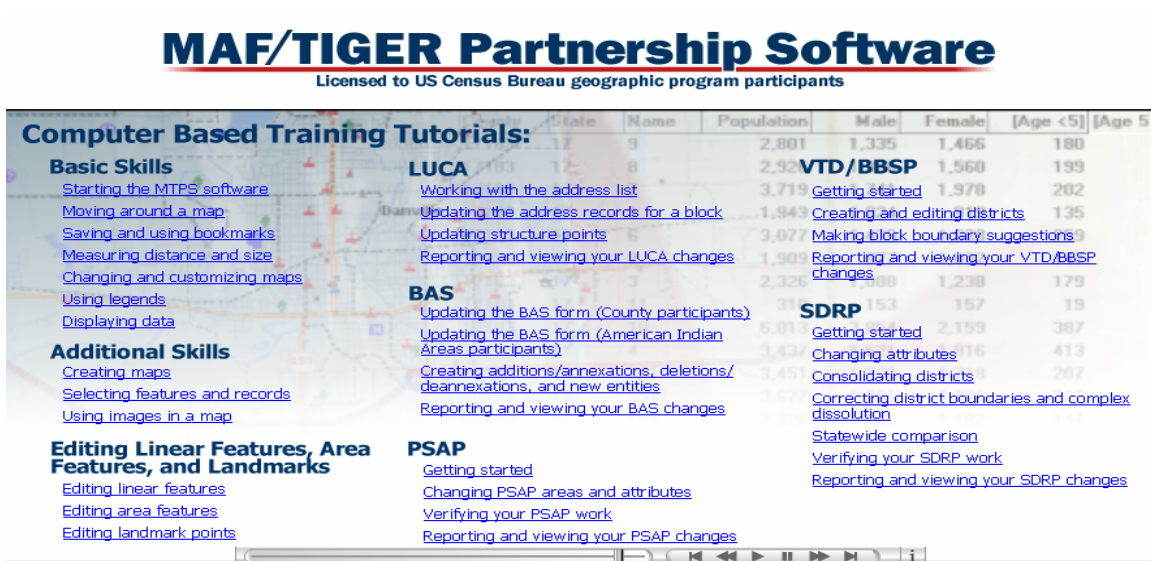
### Completing the MTPS CBT

The MTPS CBT is a self-paced tutorial that provides instructions on how to use the MTPS application for several Census Bureau geographic programs.

The opening screen shows a total of eight (8) tutorials:

- 1) Three (3) General Skills tutorials:
  - Basic Skills.
  - Additional Skills.
  - Editing Linear Features, Area Features, and Landmarks.
- 2) Five (5) tutorials specific to Census Bureau geographic programs:
  - **LUCA** (Local Update of Census Addresses)
  - **BAS** (Boundary and Annexation Survey).
  - **PSAP** (Participant Statistical Area Programs).
  - **VTD/BBSP** (Voting Districts/Block Boundary Suggestion Program).
  - **SDRP** (School District Review Program).





**NOTE:** This user guide provides instructions for the LUCA module of the MTPS and in addition, contains instructions for the BAS module in [Appendix G](#). If you find that the boundaries for your jurisdiction do not depict the correct current location, you may submit boundary updates using the MTPS as instructed in [Appendix G](#).

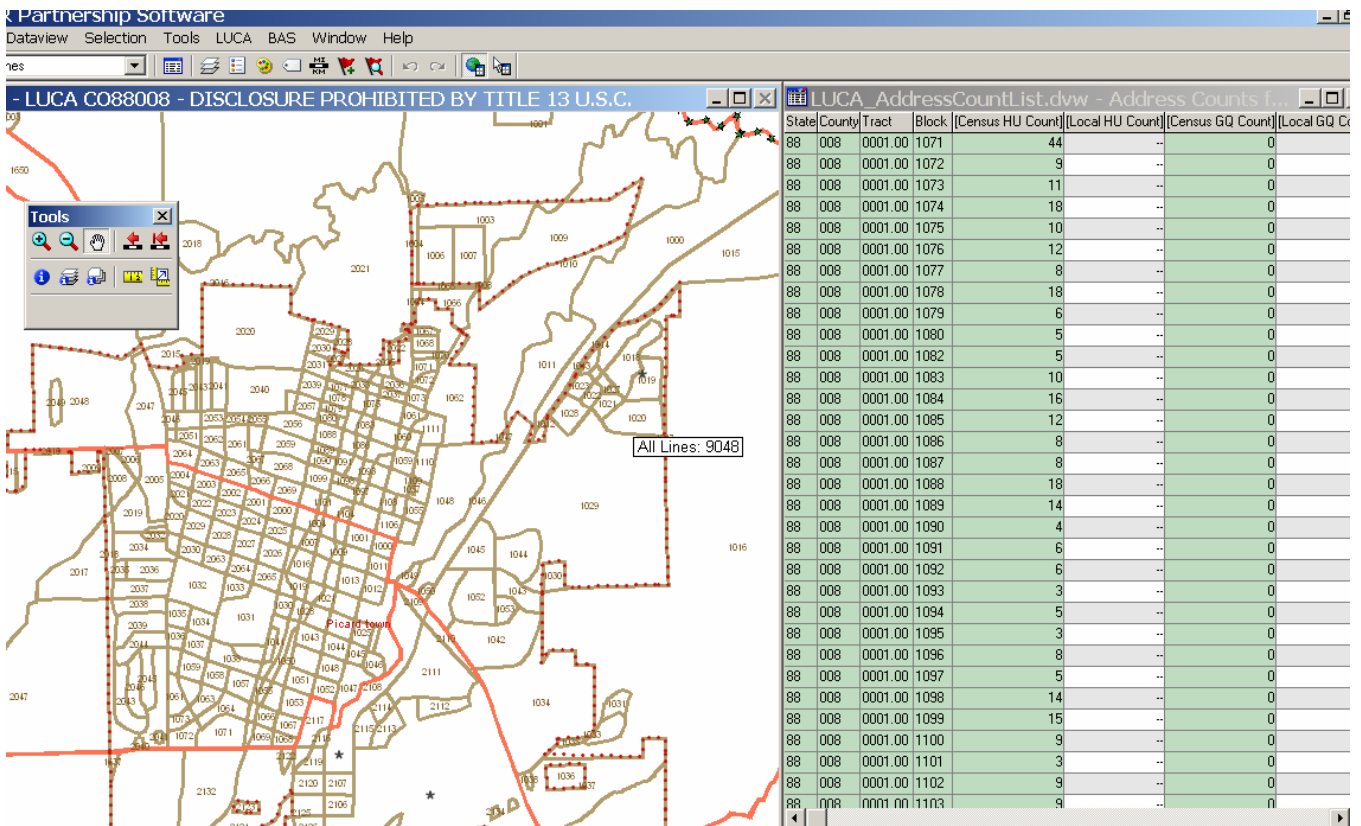
In the future, if you elect to participate in BAS, PSAP, VTD/BBSP, or SDRP, you will have the option to use the MTPS for these programs.

**NOTE:** All of the examples shown in this user guide and in the MTPS CBT were created with fictitious data that are not applicable to your jurisdiction, and do not contain any Title 13 information.

### Beginning the LUCA Review with the MTPS

- 1) Open the MTPS application. The **Please Log In** dialog box will open.
- 2) Enter a **User Name** and **Password** (the Census Bureau will provide this information to you under separate cover).
- 3) Select **LUCA** from the main menu.
- 4) Click **Open**. This will display the **LUCA** toolbox and two (2) windows:
  - a. LUCA Map.
  - b. LUCA Address Count List.

## Chapter 5: Setting up the MAF/TIGER Partnership Software (MTPS) for LUCA Review



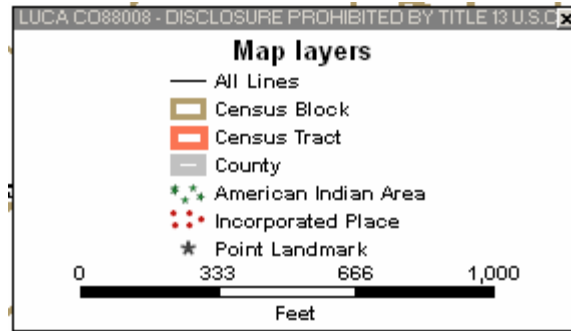
*The map shows an overview of county and places. Also shown is the Census Bureau's Address Count List.*


The MTPS allows you to combine the review of the maps and the address count list for your geographic area. The map and the address count list are linked. If you are working from the map, selecting a block on the map automatically selects and displays the corresponding block on the address count list.

The address count list is sorted by tract/block. For other sorting options, see the MTPS Help menu.

Census blocks and census tracts are identified with numeric labels on the map. State codes, County codes, American Indian Area codes, and Incorporated Place codes are not shown on the map. Use the **Information** buttons described on page 24 to locate the codes for any given feature.

The MTPS has a simple legend. All line features are drawn first and are the same thickness. Census block, census tract, county, American Indian Area, and incorporated place symbols are displayed over the feature lines.



Toggle the **Legend** button  on the **Standard** Toolbox (page 27) to show or hide the legend.

### Overview of Toolboxes and Buttons

The MTPS has several toolboxes, each of which contains numerous buttons. This section is an overview of their functions. Keep in mind that you will not need to use all of them. [Chapter 7](#) describes in more detail how to use the toolboxes and buttons required to complete your LUCA review. For more information on any of these toolboxes and buttons, refer to the MTPS Help section.

#### Main Menu

The system loads this menu by default when you open the MTPS, and the Main Menu remains open.

Select **Map** to access:

- **Layers:** to add, hide, drop, or move map layers.
- **Scale:** to modify the map scale displayed on the computer screen.
- **Previous Scale** draws the map to the extent that was used before the most recent change. **Initial Scale** draws the map to the extent that was used when the map was created or last saved.
- **Locator:** to create a window that shows your location within the overall area.
- **Bookmarks:** to create and manage bookmarks.

Select **Selection** on the Main Menu to access:

- **Settings:** to change the status and labels of map layers.
- **Select:** to build queries by Condition, List, Value, or Location. See Appendix H.

Select **Tools** on the Main Menu to access:

- **Imagery:** to load aerial images, topographic maps, or urban color images from TerraServer USA toolbox.

- **Export:** to convert features to a different geographic format.








Select **LUCA** on the Main Menu to access:

- **LUCA Toolbox:** to turn the LUCA Toolbox on and off.
- **Editing Toolboxes:** to edit lines, areas, and points.
- **Default Display:** to restore the computer screen to the original layout when the MTPS is opened.
- **Verify:** to validate your edits.
- **Report Changes:** to create a ZIP file of your edits.
- **Update Address Data:** to import an address list (Option 1 participants only).
- **Update User Information:** to make changes on the participant's information window.

### The Standard Toolbox

The **Standard** toolbox is used to perform general tasks. This toolbox is loaded by default when you open the MTPS and remains open. It is located directly below the **Main Menu**, and can be docked and undocked:

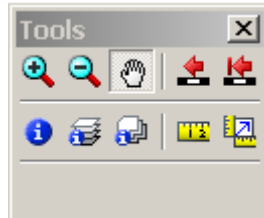




- **Target Layer:** to set the layer that is going to be edited  .
- **Dataview:** to see a list of records selected  .
- **Map Layers:** to add, hide, drop, or move map layers  .
- **Legend:** to show or hide the map legend  .
- **Layer Style:** to change layer symbols  .
- **Automatic Labels:** to create label styles  .
- **Set the Map Scale:** to set the scale of the map on the computer screen  .

### The Tools Toolbox

The **Tools** toolbox is used to navigate the map. This toolbox is loaded by default when you open the MTPS (if you close the **Tools** toolbox






accidentally, you can open it again by selecting **Tools** from the menu toolbar on the main menu then clicking on **Toolbox**).

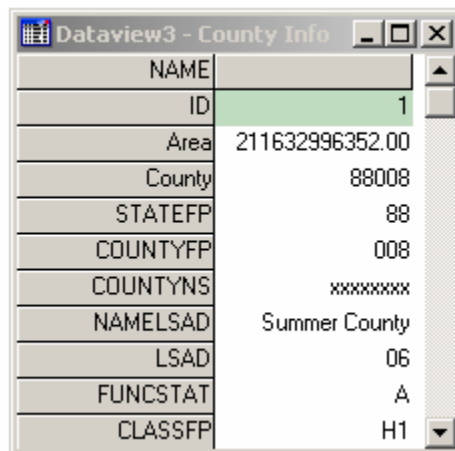


- The **Pan** and **Zoom** buttons are used to navigate around the map:
  - **Zoom In** and **Zoom Out** buttons .
  - **Pan** button .



**NOTE:** Every time you open the MTPS the map will display the geographic extent you viewed before closing the application.

**NOTE:** The labeling of the features depends on the scale of the map view: the further you zoom into the map, the more labels you will see.

- The **Scale** buttons are used to go back to the **Previous Scale**  or the **Initial Scale** .
- The **Information** button  is used to display the fields of the address records. Select a line to display its attributes. The   buttons display **multi-layer** and **multi-layer area** information, respectively.

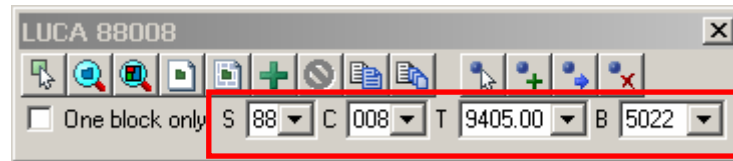



NAME	
ID	1
Area	211632996352.00
County	88008
STATEFP	88
COUNTYFP	008
COUNTYNS	xxxxxxx
NAMELSAD	Summer County
LSAD	06
FUNCSTAT	A
CLASSFP	H1

- The **Measuring** buttons are used to **Measure Distance**  or **Measure Size** .


## The LUCA Toolbox

The **LUCA** toolbox is used as a navigation tool. It is loaded by default when you open the MTPS (if you close the LUCA toolbox accidentally, you can load it again by selecting **LUCA** on the menu toolbar and then clicking on **LUCA** toolbox).






Click on the **Pick Block**  icon. Select the **One Block Only** box  One block only, and using the mouse click inside one census block on the map. The related census block records on the address count list are displayed.

**NOTE:** The information shown in the **S** (State), **C** (County), **T** (Tract), and **B** (Block) boxes will be the block you selected on the map and the associated state, country, tract and block codes. The dropdown menus for these boxes can also be used to select a particular block.

- Click on the **Zoom to Block**  icon to zoom in and center the map on the selected block; click on the **Zoom to the Entire Map**  icon to show the entire geographic extent of the map.

## Other LUCA Toolbox Icons

Other LUCA toolbox icons include:

- **Create a Block Layout**  and **Create a Multiple Block Layout** .
- **Structure Point** icons  are not used for this phase of LUCA Review. (*Structure points will be available for the LUCA feedback phase of the program for Option 1 and Option 2 participants.*)






**NOTE:** The **LUCA** Toolbox remains in the same place on the screen unless you move it or close it. The **Tools** Toolbox and the **Line Editing** Toolbox disappear from the screen when you are working with the address count list but reappear when you click on the map.

## The Line Editing Toolbox

The **Line Editing** toolbox is used to edit road features. This toolbox is not loaded by default when you open the MTPS. To open it, click on **Line Editing** under **LUCA** on the main menu.








Refer to [Chapter 7](#) for additional line editing instructions.



- Click on the **Add Line**  icon to add a line. Click on the start of a new line, drag the mouse to the end of the line and double-click. (Click at intermediate points on the line when necessary to make it smooth).
- Click on **Delete Line**  then click on a line segment to delete it.
- Click on the **Split Line**  to split a line then click where you want to split the line.
- Click on **Cancel Edits**  to undo the most recent action or **Save Edits** , to save your work.

### Other Line Editing Toolbox Icons

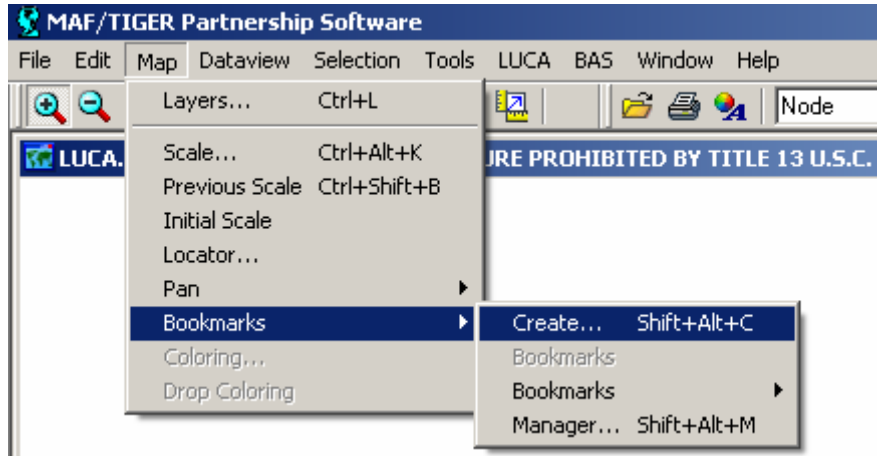
Other **Line Editing** toolbox icons:

- **Copy and Delete Line**  and **Replace Copied Line** .
- **Edit Line Attributes, Display Alternate Names, and Display Alternate Addresses**   .
- **Show Right/Left Direction Arrows**  are toggle icons that alternatively show or hide the arrows (click again to **Hide Right/Left Direction Arrows**) .

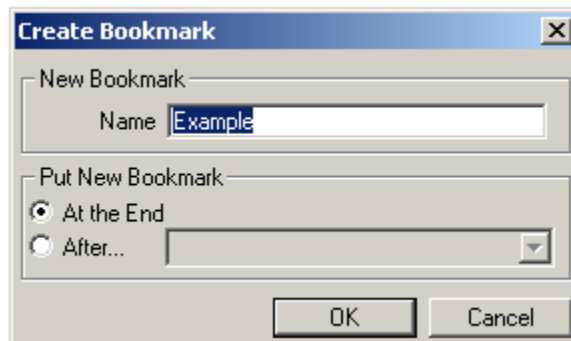
### Bookmarks

The MTPS allows you to save a particular map extent as a bookmark. You can zoom in to it at any time.

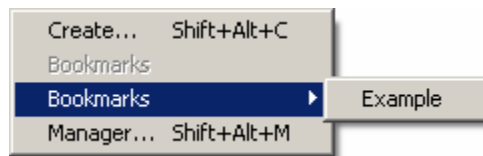
Click **Bookmarks** from the **Map** menu. Click **Create**.



Type a name in the **Create Bookmark** window. Click **OK**.



Click on the name of the bookmark you created to go back to the map extent you bookmarked. The MTPS will zoom to that map extent.



### Additional Resources

#### The MTPS Computer-Based Training (CBT)

You may have the MTPS and the CBT open at the same time while you are completing your training, or for reference purposes.

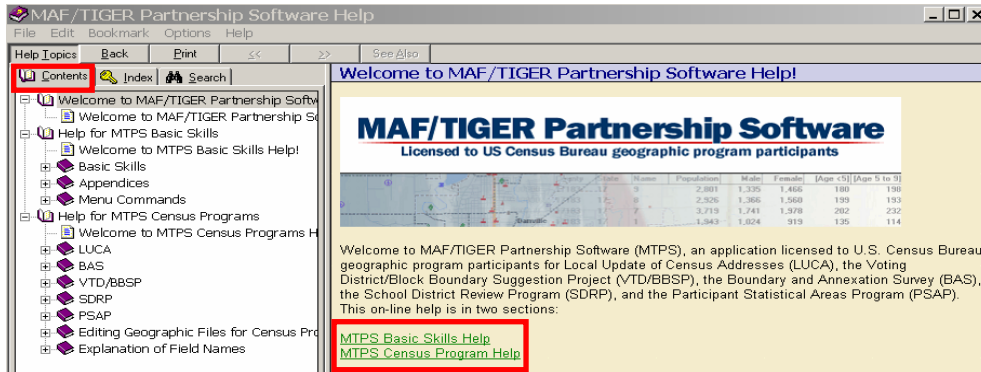
#### The MTPS Help Menu

The MTPS Help Menu provides a variety of options for finding information on a particular topic.



## Chapter 5: Setting up the MAF/TIGER Partnership Software (MTPS) for LUCA Review

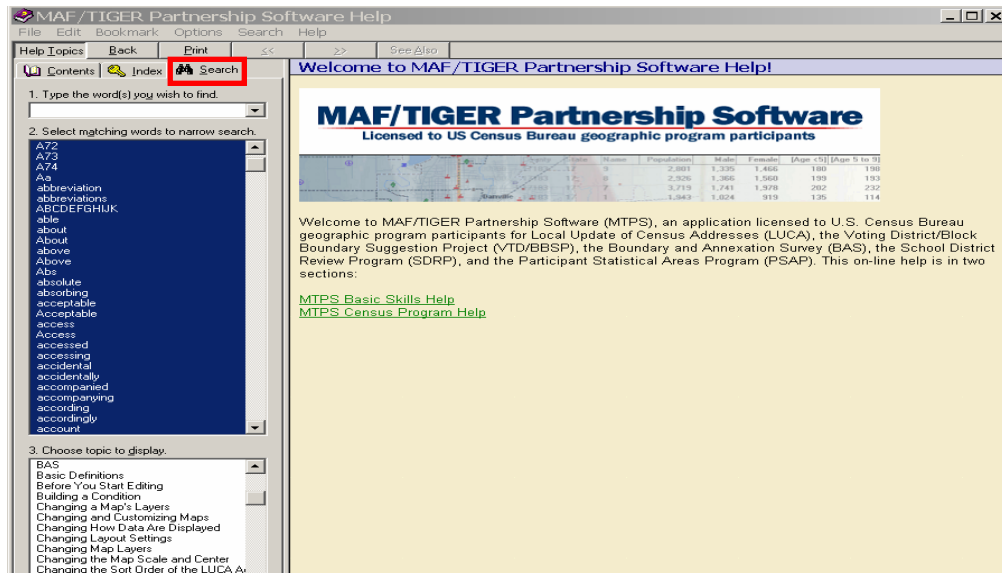
- 1) Select **Help** from the main menu and then click **Contents**. The screen on the left shows a list of topics. At the bottom of the right screen you can select either the link to the **MTPS Basic Skills Help** or the link to **Census Program Help**:



- 2) Select the **Index** tab on the left side and the following screen will display:



- 3) Select the **Search** tab on the left screen and the following screen will display:



- 4) Select a word from one of the lists in the left column or type a word into the search box.

### LUCA Program Questions

If you have questions concerning the LUCA geographic program, please call your local **Regional Office** toll free at **1-866-511-LUCA (5822)**.

### LUCA Technical Help Desk

If you have questions concerning the MTPS and the electronic data, please call the **LUCA Help Desk** toll free at **1-866-919-LUCA (5822)**.

### LUCA Website

Visit the Census Bureau's LUCA Web site at [www.census.gov/geo/www/luca2010/luca.html](http://www.census.gov/geo/www/luca2010/luca.html) for additional information.

## CHAPTER 6 SUBMITTING YOUR LOCAL ADDRESS LIST

The Predefined Computer-Readable Address List File Format  
 The Address Template  
 Creating the Address List File CD  
 Shipping Your Local Address List to the Census Bureau

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### The Predefined Computer-Readable Address List File Format

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

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

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 quarters' assigned house number
8	3	Street Name Prefix Qualifier	e.g. EXT, ALT, BUS, OLD
9	2	Street Name Prefix Direction	e.g., N, W, SE
10	14	Street Name Prefix Type	e.g., HWY, RT, US
11	100	Street Name	Full street or road name
12	14	Street Name Suffix Type	e.g., ST, CT, AVE, DR
13	2	Street Name Suffix Direction	e.g., N,W, SE
14	3	Street Name Suffix Qualifier	e.g. EXT, ALT, BUS
15	100	Group Quarters Name	Name of group quarters (Dobbs Hall-University of Dobbs)
16	53	Apartment/Unit Number	Within structure descriptor or identifier, such as APT 5 or 1st FL FRNT
17	5	City-style Mailing ZIP Code	5-digit ZIP Code for city-style mailing addresses

### The Address Template Record Layout File

An address template 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*

Follow these instructions:

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

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

1. **Entity ID Code**
2. **State Code**
3. **County Code**
4. **Census Tract Number**
5. **Census Block Number**
6. **Group Quarters Flag**, if applicable:
  - a. Enter a “Y” in the **Group Quarters Flag** field for a group quarters address.
  - b. Add the name of the group quarters in the **Group Quarters Name** field.

**NOTE:** If you enter a “Y” in the **Group Quarters Flag** field, you must provide a group quarters name in the **Group Quarters Name** field. The Census Bureau will not process an identified group quarters address record without a group quarters name.
7. **House Number**
8. **Street Name Prefix Qualifier**
9. **Street Name Prefix Direction**
10. **Street Name Prefix Type**

11. **Street Name**
12. **Street Name Suffix Type**
13. **Street Name Suffix Direction**
14. **Street Name Suffix Qualifier**
15. **Group Quarters Name**, if applicable:
  - Verify that the **Group Quarters Flag** field displays a “Y.” The Census Bureau will not process an identified group quarters address record without a group quarters name.

16. **Apartment/Unit Number**, if applicable:
  - If you have multiunit structures (apartments, condominiums, etc.) listed in your address file or need to add these addresses, use the following guidelines for identifying individual units:
    - a. Enter the unit designation (e.g., APT 5, UNIT 103) in the **Apartment/Unit Number** field, if known.
    - b. If the apartment/unit designators are unknown, but you know the number of units at the multiunit structure, enter “\*#” in the **Apartment/Unit Number** field for each unit added.

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

For example, the new multiunit structure located 505 Wells Blvd, contains 20 units. You don’t know the actual individual unit numbers or designators but you know there are 20 units:

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

For example, for the first unit added at 505 Wells Blvd, enter “\*1” in the **Apartment/Unit Number** field; for the second unit record added, enter “\*2” in the

Apartment/Unit Number field, and so on, until you get to the twentieth unit record, where you enter “\*20” in the **Apartment/Unit Number** field.

### 17. City-style Mailing ZIP Code

Save your address list file as a pipe-delimited, ASCII text file. *(If you need further instruction on saving a pipe-delimited, ASCII text file, please call the Help Desk toll free number at 1-866-919-5822.)*

Name the file containing your local address list

XXyyyyyyyyyyy\_LUAL.txt (*XXyyyyyyyyyyy is your entity identification code found on your LUCA materials.*)

### Creating Your Local Address List File CD

- Burn your Local Address File onto a CD.

**NOTE:** *If you are also submitting shapefiles, you may burn all of your files to one (1) CD. See the section, [Creating the Changes File](#)*

- Make a copy of the CD:
  - Keep one CD as a temporary backup copy for your records and to use during the feedback phase of the LUCA program.
  - Send the other CD to the Census Bureau.

### Shipping Your Local Address List to the Census Bureau

- Include the **Inventory Form** ([Appendix A](#)) with your returned materials.
- Double wrap your address list file CD.
- Address all envelopes, mailing boxes, etc. to:  
**ATTN: Geography**  
**U.S. Census Bureau**  
*Address for your Census Bureau Regional Office*  
*See [Appendix G](#) for a list of Regional Offices.*
- Use the prepaid, preprinted FedEx label provided to you, if FedEx service is available in your area.
- Use any shipping company that provides tracking services such as U.S. Postal Service (USPS), FedEx, United Parcel Service (UPS), or similar service.

Contact your Census Bureau Regional Office toll free at **1-866-511-5822** if you have questions about submitting your materials for the LUCA program.

## CHAPTER 7 UPDATING CENSUS BUREAU SHAPEFILES

- Introduction
- Reading a Census Bureau Map
- Examples of Map Updates
  - Map Example 1: Adding a New Street
  - Map Example 2: Correcting a Street Name
  - Map Example 3: Moving a Street
  - Map Example 4: Deleting a Street
- Creating the Shapefile Changes File
- Creating the Shapefile Changes File CD
- Shipping the Shapefile Changes CD to the Census Bureau

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### Introduction


The Census Bureau has provided you with a digital shapefile to review in conjunction with the address count list. Use the shapefile to submit any needed updates or corrections to your jurisdiction's features.

The spatial map updates you provide will allow the Census Bureau to update the TIGER® database so that all subsequent spatial map and address list products reflect these changes.

### Reading a Census Bureau Map

The Census Bureau 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 maps display the following information:

- Boundaries.
- Streets and roads and their names.
- Water features and their names, if any.
- Other features and their names, if applicable.
- Jurisdiction codes and jurisdiction names and adjacent areas.
- Census block boundaries and numbers.
- Census tract boundaries and numbers.

Click on the **Show or Hide the Legend**  icon on the Standard menu to display the map legend showing the symbols used on the maps.

### Examples of Map Updates

- Adding a new street.
- Correcting a street name.
- Moving a street.
- Deleting a street.


**NOTE:** Edits to features on the map must be saved manually. See the **Cancel Edits** and **Save Edits** buttons described below.

#### Map Example 1: Adding a New Street

During your review, you may find streets that are partially or entirely missing from the maps.

For example, Heekin Ave is a new street with newly constructed housing units in census tract **9704** and census block **1304**.



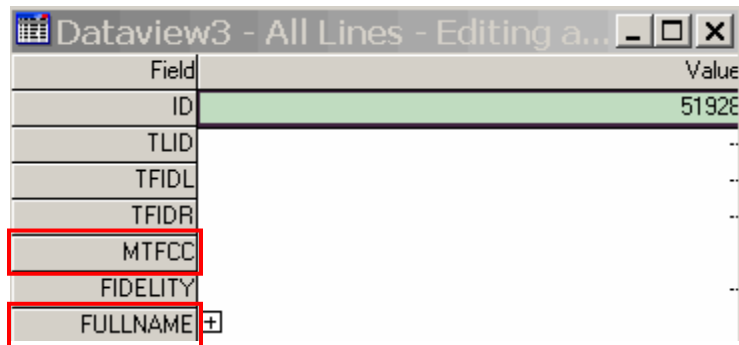
Click the **Add Line**  button on the **Line Editing** toolbox. Click on the starting point for Heekin Avenue, and drag the mouse to the end of the avenue, adding points as needed to define the shape. Double click to end the line.





A table will pop up for inserting the following information.

- 1) **MAF/TIGER Feature Class Code**-Click to the right of the MTFCC title (See [Appendix C](#)) and a pop-up table to select from will appear.
- 2) **Full Feature Name**-Enter the feature name, including any qualifiers such as prefixes or suffixes and street types. If the feature does not have a name, select the + sign, and unnamed features will display.



Field	Value
ID	5192E
TLID	
TFIDL	
TFIDR	
MTFCC	
FIDELITY	
FULLNAME	

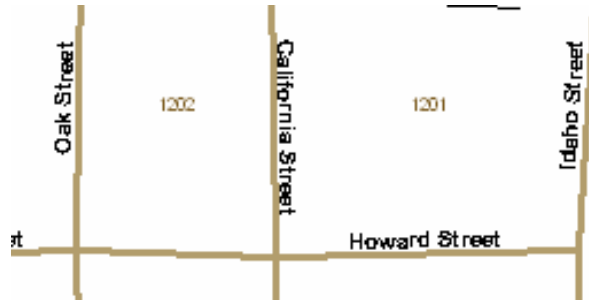
**NOTE:** The MTPS software automatically assigns a sequential number for each dataview you open; the first is Dataview1, the second is Dataview2, and so on. The numbers are labels and have no meaning.


Click **Save Edits**  and the feature name will appear on the map.



**Map Example 2: Correcting a Street Name**

The map shows **HOWARD ST** instead of the correct name, **BROWARD ST**




- From the **Line Editing** toolbox, click the **Edit Line Attributes**  icon. Then click on the road feature you want to correct. A dataview with the attributes for that line will pop up on your screen:

Field	Value
ID	3722
TLID	148472801
TFIDL	13348
TFIDR	13338
MTFCC	S1400 - Local Neighborhood Road, Rural Road, City Str
FIDELITY	0
FULLNAME	Howard Street

- Enter the correct name in the **FULLNAME** field:


Field	Value
ID	3722
TLID	148472801
TFIDL	13348
TFIDR	13338
MTFCC	S1400 - Local Neighborhood Road, Rural Road, City Str
FIDELITY	0
FULLNAME	Broward Street

- Click the **Save Edits**  button on the **Line Editing** toolbox. The name will be corrected on the map.



- Repeat for each line to be corrected (in this example, from Oak Street to California Street as well as from California Street to Idaho Street).

### Map Example 3: Moving a Street


The Census Bureau map shows **Caitlin Ct** located in census block **1006**. Actually, **Caitlin Ct** is located in census block **1007**.

- Click the **Copy and Delete**  button on the **Line Editing Toolbox**. Click on **Caitlin Ct** to select the line. The line will turn red as illustrated in the following figure.




- Click the **Replace Copied Line**  button on the **Line Editing toolbox**. Click at the beginning of the replacement line, drag it to the end and double click.
- Click the **Save Edits**  button on the **Line Editing toolbox**. The original street will show as a red dashed line. The new line will carry all the attributes of the original line.

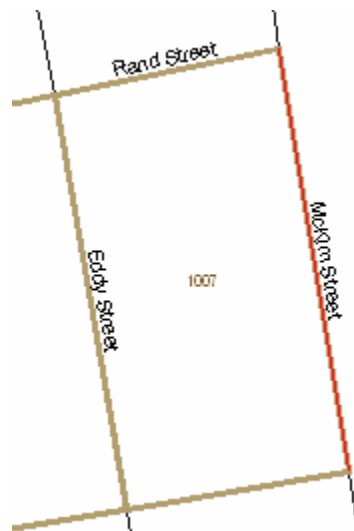



**NOTE:** The street name may not show up on the new line on the map, but if you check **Edit Line Attributes**  on the **Line Editing** toolbox, you will see that the name and other attributes have been transferred.

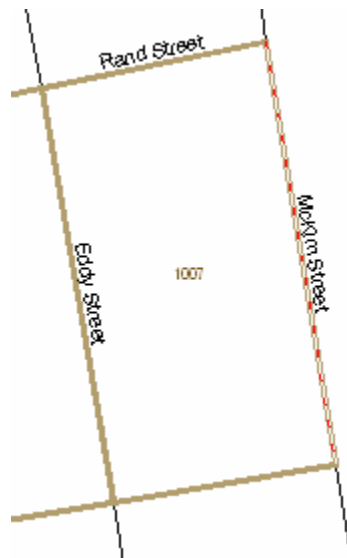
#### Map Example 4: Deleting a Street

All of the housing units along a portion of **McKim Street** in census block **1007** have been demolished and this section of the street no longer exists.

- Click the **Delete Line**  button on the **Line Editing Toolbox**. Click on the line to be deleted. The line will turn red:



- Click the **Save Edits**  button on the **Line Editing** toolbox. The deleted line will show as a red dashed line:



### Creating the Changes File

- Select **Report Changes** from the **LUCA** dropdown menu.
- The MTPS prompts you to create a ZIP file of your updates.
  - Enter your password.
  - The name of the ZIP file will correspond to the Entity ID, and will contain the phrase “LUCA\_XXXXXXXXXX\_Return.”
  - If you want to review your changes, use Windows Explorer to open the ZIP file you created and extract its contents to a folder on your computer. The MTPS will prompt you to enter a password. This is the same password supplied by the Census Bureau at the beginning of the LUCA program.

- Make two CDs of the Changes File:

**NOTE:** *If you are submitting your local address list file, you may burn all of your files to one (1) CD. See the section, [Creating Your Local Address List File CD](#).*

- Return one CD to the Census Bureau.
- Keep one CD as a backup copy for your records until the completion of the LUCA program.

### Shipping the Changes File CD

- Include the **Inventory Form** ([Appendix A](#)) with your returned materials.
- Double wrap your returned materials.
- Address all envelopes, mailing boxes, etc. to:

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

*Address for your Census Bureau Regional Office*

See [Appendix G](#) for a list of Regional Offices.

- Use the prepaid, preprinted FedEx label provided to you, if FedEx service is available in your area.
- Use any shipping company that provides tracking services such as U.S. Postal Service (USPS), FedEx, United Parcel Service (UPS), or similar service.

Contact your Census Bureau Regional Office toll free at **1-866-511-5822** if you have questions about submitting your materials for the LUCA program.

**APPENDIX A  
INVENTORY FORM**

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



**APPENDIX B**  
**MAF/TIGER FEATURE CLASSIFICATION CODES**

### MAF/TIGER Feature Classification Codes

The MTFCC field contains the MAF/TIGER Feature Class Code that identifies the most noticeable characteristic of a feature. For example, streets and roads are identified as S1400.

#### **Road Features**

MTFCC	FEATURE NAME
S1100	Interstate Highway or Primary Road with limited access
S1200	Primary Road without limited access, US Highway, State Highway, or County Highway, Secondary and connecting roads
S1400	Local Neighborhood Road, Rural Road, City Street
S1500	Vehicular Trail (4WD)
S1630	Ramp
S1640	Service Drive usually along a limited access highway
S1710	Walkway/Pedestrian Trail
S1720	Stairway
S1730	Alley
S1740	Private Road for service vehicles (logging, oil fields, ranches, etc.)
S1750	Private Driveway

#### **Water Features**

MTFCC	FEATURE NAME
H3010	Stream/River
H3013	Braided Stream
H3020	Canal, Ditch or Aqueduct

#### **Railroad**

MTFCC	FEATURE NAME
R1011	Railroad Feature (Main, Spur, or Yard)
R1051	Carline, Streetcar Track, Monorail, Other Mass Transit Rail
R1052	Cog Rail Line, Incline Rail Line, Tram

#### **Miscellaneous Features**

MTFCC	FEATURE NAME
P0001	Non-visible Legal/Statistical Boundary
L4010	Pipeline
L4020	Power Transmission Line
L4110	Fence Line
L4121	Ridge Line
L4031	Aerial Tramway/Ski Lift
K2451	Airport or Airfield
L4140	Property/Parcel Line
L4165	Ferry Crossing

**APPENDIX C  
SELECTION SETS**

## APPENDIX C SELECTION SETS

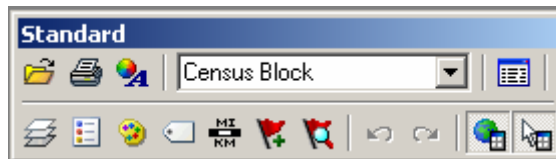
- Introduction
  - Creating a Selection Set
  - Saving a Selection Set
  - Deleting a Selection Set
- 

### Introduction

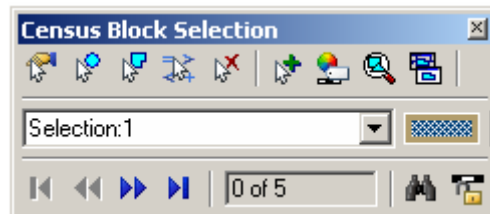
A **Selection Set** is a group of features from a single map layer that you can highlight on the map in order to display only the records that meet a certain condition (e.g., blocks that have already been reviewed). The MTPS allows you to create, update, and delete new geographic layers that contain only the features you select using the Selection toolbar and the Selection Sets dialog box. You can save selection sets to store them in the file so you can use them when you open it again.


### Creating a Selection Set

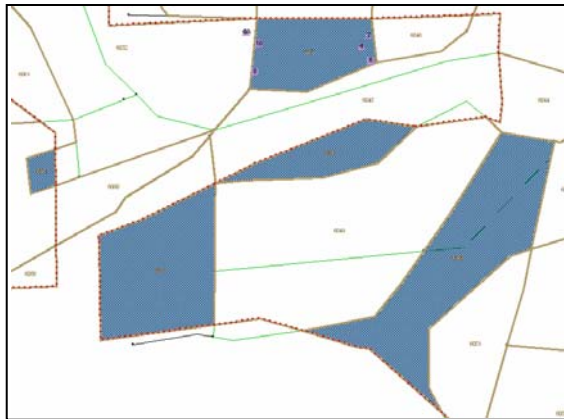
1. Choose the layer whose line or block features you want to select from the drop-down list on the **Standard** toolbar:





2. Click **Tools** from the **Main Menu**.





3. Click **Selection** to display the **Census Block Selection** dialog box:
  - Click the **Select by Pointing**  button to select a map feature by pointing to it. Click on a single feature on the map. The MTPS selects the features and highlights the result on the map:

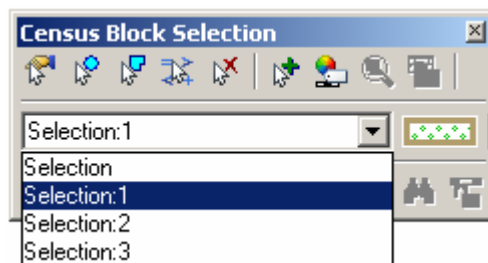



- Click the **Select by Circle**  button to select a map feature by drawing a circle around it. Draw a circle to select all features inside it. The MTPS selects the features and highlights the result on the map.
- Click the **Select by Shape**  button to select a map feature by drawing a shape around it. Draw a shape to select all features inside it (double-click at the end to finish your sketch). The MTPS selects the features and highlights the result on the map.

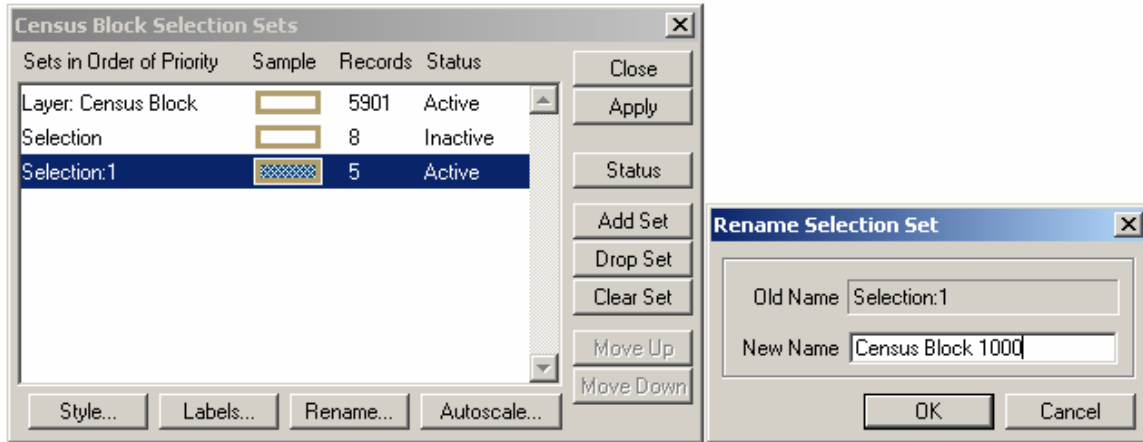
**NOTE:** Selecting by circle or by shape will only select map features that are completely contained within the shapes.

**NOTE:** For more Selection Sets options please search the **Help** menu.

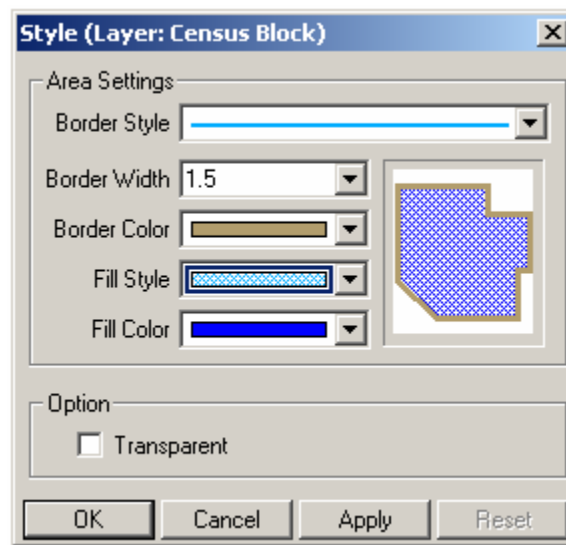
- Click the **Clear Selection**  button to clear all selected features on the active selection set.
- Click the **Create New Selection**  button to add more selection sets:



- Click the **Selection Settings**  button to symbolize the selection sets:



- The Selection Sets are named by default but you can rename them by clicking the **Rename** button and typing a new name, i.e., “Census Block 1000”.
- Click the **Style** button to customize the display style. Choose the border and the fill styles and colors.




- Click **Apply** then click **OK** to save the selection set.
- Select any map features as described in Step 3.

### Saving a Selection Set

When you close the MTPS session, all the selection sets are saved so you can access them again. The MTPS also saves the style settings of the selection set(s).

### Deleting a Selection Set

- You can delete selection sets that you no longer need to use.

- Click the **Selection Settings**  button to display the Selection Sets dialog box.
- Choose the selection set you want to delete.
- Click **Drop Set**. The MTPS prompts you to confirm that you want to delete the selection set.
- Click **Yes** to delete the selection set. The MTPS deletes the selection set and updates the **Selection** toolbar and map legend accordingly.

**NOTE:** You cannot delete the default selection set named "Selection."

- Close the **Selection Sets** dialog box.





**APPENDIX D  
LOCATION DESCRIPTION AND STREET TYPE ABBREVIATION  
EXAMPLES**

Appendix D: Location Description and Street Type Abbreviation Examples

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

**APPENDIX E**  
**UNIT DESIGNATION ABBREVIATION EXAMPLES**

Appendix E: Unit Designation Abbreviation Examples

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

**APPENDIX F**  
**MAF/TIGER PARTNERSHIP SOFTWARE (MTPS)**  
**BOUNDARY AND ANNEXATION SURVEY (BAS) PROCEDURES**

## **APPENDIX F BAS PROCEDURES**

- 1.0 Introduction to the Boundary and Annexation Survey
  - 1.1 Overview of the BAS
  - 1.2 Legal Disputes
  - 1.3 Key Dates for BAS Respondents or Participants

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### **1.0 Introduction to the Boundary and Annexation Survey**

#### **1.1 Overview of the BAS**

The Census Bureau conducts an annual survey called the Boundary and Annexation Survey (BAS) to collect information about selected legally defined geographic areas, such as counties (and equivalent areas), incorporated places, minor civil divisions (MCDs), as well as federally recognized American Indian reservations, including off-reservation trust lands and tribal subdivisions. The BAS also provides an opportunity for participants to review the names and geographic relationships for these areas. Title 13, U.S. Census Code authorizes this survey.

BAS information is used to provide a record for reporting the results of the decennial and economic censuses, and to support the Population Estimates Program and the American Community Survey. Maintaining correct boundaries and boundary-to-feature relationships through the BAS helps ensure that the appropriate population is assigned to each entity. In compliance with the Office of Management and Budget Circular A-16, the BAS supports the Census Bureau's spatial data steward responsibilities for the Federal Geographic Data Committee and the Geospatial One-Stop by updating the inventory of and boundaries for, governmental units. In addition, the BAS is the source of up-to-date information on boundaries, codes, and names for the U.S. Geological Survey's (USGS) National Map and the Geographic Names Information System. The BAS is also the source for changes in the boundary of incorporated places, minor civil divisions (MCDs), counties (and equivalent areas), and federally recognized American Indian areas, which include reservations and off-reservation trust lands.

#### **1.2 Legal Disputes**

If it comes to our attention that areas of land are in dispute between two or more jurisdictions, we will not make annexations or boundary corrections until the parties come to a written agreement, or there is a documented final court decision regarding the matter/dispute. If you have questions concerning this, please contact the Census Bureau Legal Office at 301-763-2918.

### **1.3 Key Dates for BAS Respondents or Participants**

All changes received by April 1st, will be reflected in the Population Estimates Program and the American Community Survey. If the Census Bureau receives your updates by May 31st, they will be included in your BAS materials next year.

To change your method of participation in BAS from the MTPS to either paper or Digital BAS, you must notify the Census Bureau by February 15th. You can contact the Census Bureau by phone at (800) 972-5651 or by email at [geo.bas@census.gov](mailto:geo.bas@census.gov).

## BAS PROCEDURES

- 2.0 Viewing and Updating Boundary Data and BAS Forms Using the MTPS
  - 2.1 Logging onto the MTPS
  - 2.2 Computer Based Training (CBT)
  - 2.3 Updating Your Contact Information
  - 2.4 Reviewing and Updating the BAS Forms
    - 2.4.1 Incorporated Place Form
    - 2.4.2 Minor Civil Division (MCD) Form
    - 2.4.3 County Form
    - 2.4.4 American Indian Areas Form
  - 2.5 Opening the Map to Make Boundary Updated in the MTPS
  - 2.6 Customizing the Map View
  - 2.7 Editing the Boundary Data in the MTPS
    - 2.7.1 Map Editing Toolboxes
    - 2.7.2 Boundary Changes Using the BAS Toolbar
      - 2.7.2.1 Creating Boundary Change Polygons
      - 2.7.2.2 Populating the BAS Entity Update Form
    - 2.7.3 Linear Feature Updates
    - 2.7.4 Area Landmark Updates
      - 2.7.4.2 New Landmark
      - 2.7.4.3 Deletion or Deannexation
      - 2.7.4.4 Change Name
    - 2.7.5 Point Landmark Updates
      - 2.7.5.1 Adding a Point Landmark
      - 2.7.5.2 Deleting a Point Landmark

---

### 2.0 Viewing and Updating Boundary Data and BAS Forms Using the MTPS

#### 2.1 Logging onto the MTPS

When you installed the MTPS on your computer it was added to the list of software on the Programs folder in the Start menu. The software can be initiated by selecting the **MAF/TIGER Partnership Software** from the Programs folder.

The program will open and will ask for your username and password. You will be asked for this username and password each time you sign onto the program. Select the **OK** button when you have completed entering both pieces of information. The program will tell you if the entered information has an error.

**NOTE:** The username and password fields are case sensitive. This means that if the username is uppercase it needs to be entered as such into the software.

After your username and password is accepted by the program, the data files that you loaded in the previous step will be indexed so that the program is able to read and edit them. For this step, the antivirus on your computer must be turned off. This step will take much longer if it is on. The time required for indexing the files varies depending on the size and amount of features in your entity and the surrounding areas.



## 2.2 Computer Based Training (CBT)

After you have logged onto the MTPS, a window will appear asking you if you would like to view the CBT or if you would like to go straight to the update software. The Computer Based Trainings demonstrate how to use the software to make different types of updates, such as adding a line or area to your entity.

We strongly recommend that you review the following tutorials in the CBT before continuing:

- Creating additions/annexations, deletions/deannexations, and new entities.
- Editing linear features.
- Editing area features.
- Editing landmark points.
- Reporting your LUCA changes.

The CBT can be viewed at any time from the **Programs** folder in the **Start** menu. The window asking if you would like to view the CBT will also appear the next time you log onto the software.

## 2.3 Updating Your Contact Information

The first time you enter the MTPS, a window will appear asking you to verify and/or correct the contact information for the person responding to the BAS. Example 2.3.1 shows an example of the contact information box.

The screenshot shows a window titled "Participant Information" with a close button (X) in the top right corner. The window contains the following text and form fields:

Please verify and correct your participant information.

First Name:

Last Name:

Title:

Department Name:

Mailing Address:

City:  State:

ZIP Code:  +4

Phone Area Code:  Exchange:  Last 4:  Extension:

Fax Area Code:  Exchange:  Last 4:

Email Address:

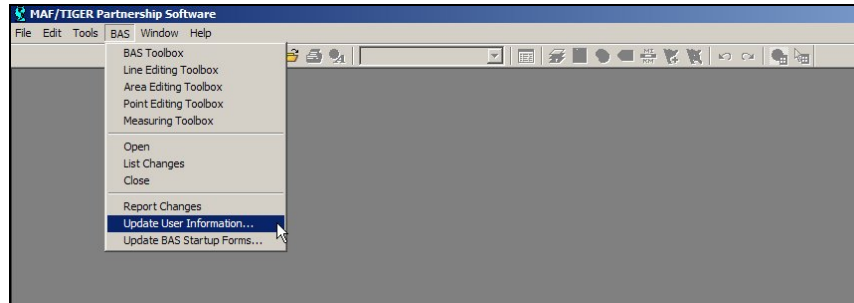
At the bottom right of the window are two buttons: "OK" and "Cancel".

*Example 2.3.1: Participant Information Window*

If the contact information for the person completing the submission is different from what is populated in the form, please type over the incorrect data. The Census Bureau tries to have complete contact data for each entity, but if we are missing data, such as a fax number or e-mail address, please populate the appropriate fields with the information. Click the **OK** button in the bottom right corner after you have completed making the necessary updates.

If you determine the respondent's contact data is correct and complete, click the **OK** button to verify.

The Participant Information window can be viewed at any time while you are logged on to the MTPS by selecting **BAS** from the general toolbar and then selecting **Update User Information** (see Example 2.3.2).

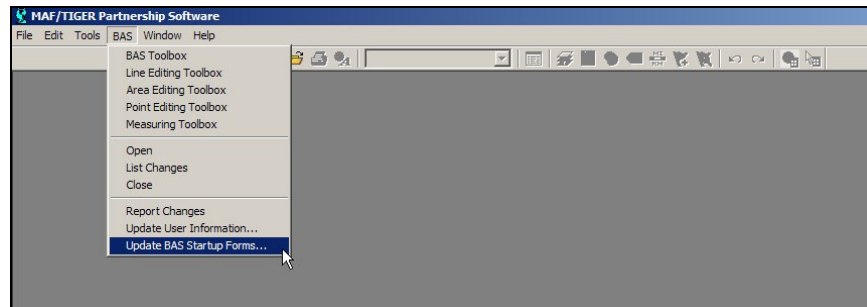


*Example 2.3.2: Opening the Participant Information window after initial logon*

## 2.4 Reviewing and Updating the BAS Forms

The BAS forms are important because they allow the local participants to review the geographic relationship information and previously submitted legal boundary change data. Included in your package is a paper BAS form. This form is provided only as a reference. The Census Bureau has developed a unique form for each entity type included in the BAS. There are four form types: incorporated place, minor civil division (MCD), county, and American Indian Areas (AIA). Please complete the form using the MTPS that corresponds to the type of entity you represent.

The forms can be accessed at any time while you are logged on to the MTPS by selecting **BAS** from the main toolbar at the top of the screen and then select **Update BAS Startup Forms** (Example 2.4.1).



*Example 2.4.1: Opening the BAS forms after initial logon*

The following subsections will provide an explanation of the necessary steps to complete each type of form.

### 2.4.1 Incorporated Place Form

The BAS Form 1 screen shows the name and geographic relationship information for the place and asks the participant to verify the information.

The following information is provided in the **Title** and **Entity** section:

- **Part A** lists the incorporated place name, FIPS code, type, and state.
- **Part B** lists the counties that contain the incorporated place.
- **Part C** lists the MCDs that contain or correspond with the incorporated place, if applicable. If your incorporated place is located in a state where MCDs do not exist or are not active, **Part C** will state, “None listed.”

Please review the information provided in the **Title** and **Entity** section (Example 2.4.1.1).

**BAS Form 1**

Title and Entity

Boundaries as of January 1, 2006

A. Incorporated Place	FIPS Code	Type	State
Wamer Robins	80508	city	GA

B. Counties	C. MCDs
Houston (153)	None listed

Modifications

a. Are the name and type of this incorporated place correct as shown above?

Yes - SKIP to question b.       No - Enter correction here

Name: \_\_\_\_\_ Type: \_\_\_\_\_ Effective Date of Change: \_\_\_\_\_

b. Is the list of the counties and MCDs within which this incorporated place is located correct as shown in boxes B & C, above?

Yes       No - Enter correction in item c.

c. Enter the correct information, AND the effective date of the change.

Add/Del	County Name	MCD Name	Date

Next >      Cancel



*Example 2.4.1.1: Reviewing the first screen of the Place form*

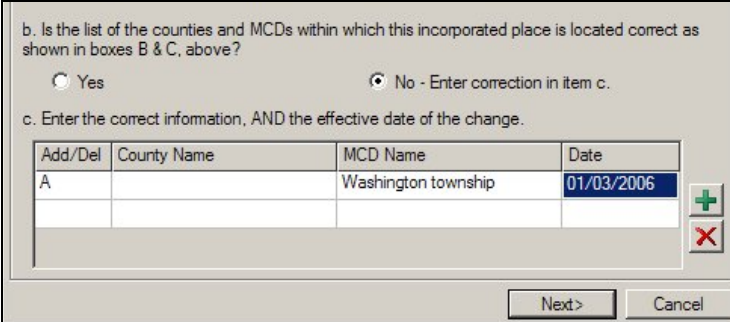
The **Modifications** section includes questions about the validity of the information provided in the **Title** and **Entity** section. The default answer to each question is **yes**.

If you have changes to report for **Question a**, complete the following steps:

- Select the radio button next to **No**.
- Key in the correct name and/or type into the appropriate field.
- Select the calendar under the **Effective Date of Change** to choose a date. An effective date is required for all name and type changes, with the exception of spelling corrections.

If you have changes to report for **Question b**, complete the following steps:

- Select the radio button next to **No**. This selection will activate **Question c**.
- To add or delete a county or MCD from the list, select the **Add New Change** tool (). Multiple rows can be added using this tool.
- After a record has been added, select **A for Add** or **D for Delete** from the **Add/Del** dropdown and type the name of the county or MCD that needs to be added or removed from the list in the appropriate column.
- If a legal boundary change resulted in your entity being added or removed from a county or MCD, double click in the field under **Date** and select the effective date from the provided calendar. A date is not required if your entity was listed in the county or place erroneously.
- If you add a row and would like to remove it, use the **Drop Change** tool ().



b. Is the list of the counties and MCDs within which this incorporated place is located correct as shown in boxes B & C, above?

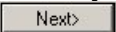
Yes  No - Enter correction in item c.

c. Enter the correct information, AND the effective date of the change.

Add/Del	County Name	MCD Name	Date
A		Washington township	01/03/2006

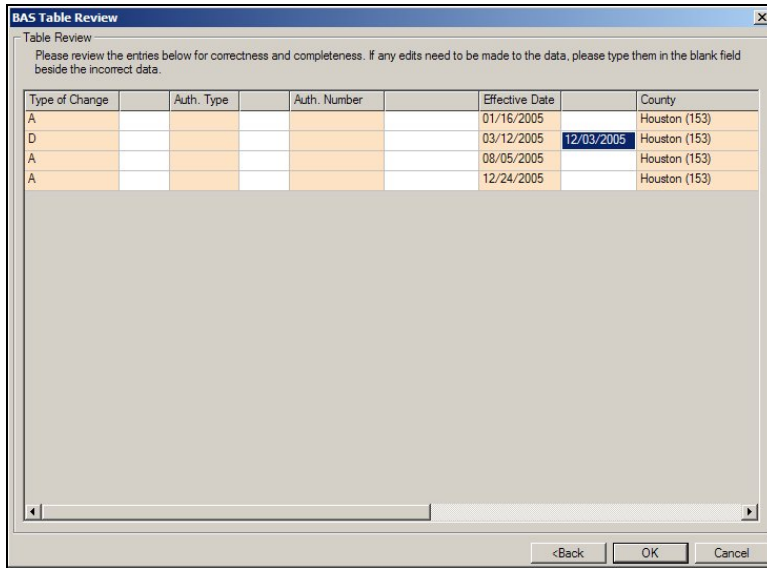
Next> Cancel

*Example 2.4.1.2: Correcting or updating the counties and MCDs your incorporated place is located within*

If your entity supplied the Census Bureau with boundary changes during the previous BAS cycle, select the **Next** button () at the bottom of the screen to proceed to the BAS Table Review screen. This screen displays data submitted for each boundary change that was reported for your entity during the previous BAS cycle.

**NOTE:** If your entity did not supply the Census Bureau with any boundary changes, an **OK** button will appear at the bottom of the BAS Form 1 screen. Select the **OK** button to complete the form review. The next step to submitting your BAS is to review and update the boundaries on the maps. Skip to section 2.5 of this document for an explanation on how to open the BAS map in the MPTS.

On the BAS Table Review screen, please look at each field to ensure that the data was accurately recorded (Example 2.4.1.3).



*Example 2.4.1.3: Reviewing boundary change data*

The values that may be present in the **Type of Change** field are **A (Addition)**, **B (Boundary Correction)**, **D (Deletion)**, and **O (Other)**. Table 2.4.1.1 explains the values that may be present in the **Auth. Type** field.

CODE	DEFINITION
O	Ordinance
R	Resolution
L	Local Law
S	State Level Action
X	Other Type

*Table 2.4.1.1: Auth. Type Codes*

If you determine that a field needs to be modified, complete the following step:

- Enter the correct data into the white field to the right of the column that requires the correction. The fields next to **Type of Change** and **Auth. Type** require a value to be chosen from a dropdown menu. If you wish to make a change to the effective date double click in the field next to **Date** and a calendar will appear for you to choose the correct date. Note: additional fields exist for each record that are not viewable unless you scroll to the right.

When you have completed reviewing both portions of the form, select the **OK** button to complete your form review. The next step to submitting your BAS is to review and update the boundaries on the maps. Skip to section 2.5 of this document for an explanation on how to open the BAS map in the MPTS.

### 2.4.2 Minor Civil Division (MCD) Form

The BAS Form 3 screen shows information about the Minor Civil Division and requests the participant to verify the information.

The following information is provided in the **Title and Entity** section:

- **Part A** lists the MCDs name, type, county, and state.

Please review the information provided in the **Title and Entity** section (Example 2.4.2.1).


*Example 2.4.2.1: Reviewing the first screen of the MCD form*

The **Modifications** section includes a question about the validity of the information provided in the **Title and Entity** section (Example 2.4.2.2). The default answer is **yes**.

If you have a change to report for **Question a**, complete the following steps:

- Select the radio button next to **No**.
- Key in the correct name and/or type into the appropriate field.
- Select the calendar under the **Effective Date of Change** to choose a date. An effective date is required for all name and type changes, with the exception of spelling corrections.

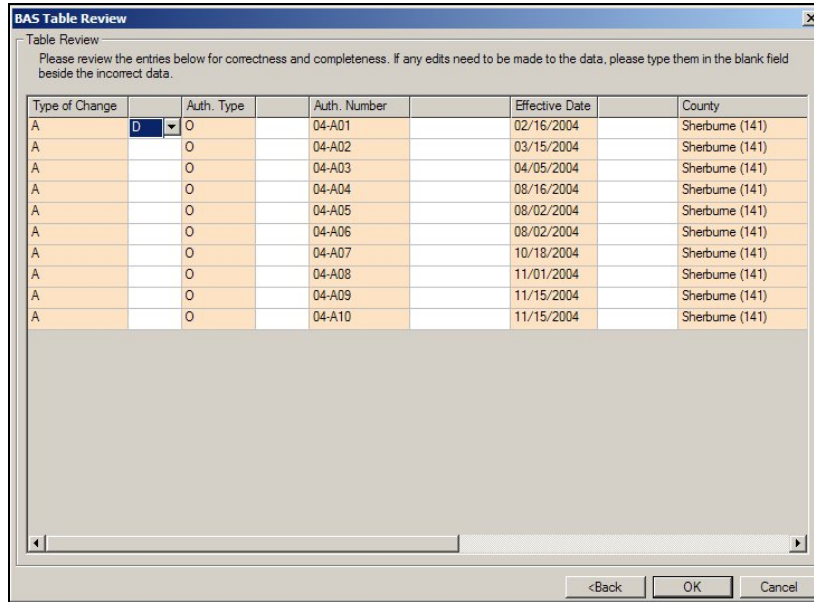
*Example 2.4.2.2: Updating or correcting the name and type of your MCD*

If your entity supplied the Census Bureau with legal boundary changes during the previous BAS cycle, select the **Next** button (  ) at the bottom of the screen to proceed to the BAS Table Review screen. This

screen displays data submitted for each boundary change that was reported for your entity during the previous BAS cycle.

**NOTE:** If your entity did not supply the Census Bureau with any legal boundary changes, an **OK** button will appear at the bottom of the first screen. Select the **OK** button to complete the form review. The next step to submitting your BAS is to review and update the boundaries on the maps. Skip to section 2.5 of this document for an explanation on how to open the BAS map in the MPTS.

On the BAS Table Review screen, please review each field to ensure that the data was accurately recorded (Example 2.4.2.3).



*Example 2.4.2.3: Reviewing legal boundary change data*

The values that may be present in the **Type of Change** field are **A (Addition)**, **B (Boundary Correction)**, **D (Deletion)**, and **O (Other)**. Table 2.4.2.1 explains the values that may be present in the **Auth. Type** field.

CODE	DEFINITION
O	Ordinance
R	Resolution
L	Local Law
S	State Level Action
X	Other Type

*Table 2.4.2.1: Auth. Type Codes*

If you determine that a field needs to be modified, complete the following steps:

- Enter the correct data into the white field to the right of the column that requires the correction. The fields next to **Type of Change** and **Auth. Type** require a value to be chosen from a dropdown



menu. If you wish to make a change to the effective date, double click in the field next to **Date** and a calendar will appear for you to choose the correct date. Note: additional fields exist for each record that are not viewable unless you scroll to the right.

When you have completed reviewing both portions of the form, select the **OK** button to complete your form review. The next step to submitting your BAS is to review and update the boundaries on the maps. Skip to section 2.5 of this document for an explanation on how to open the BAS map in the MPTS.

### 2.4.3 County Form

The BAS Form 2 screen provides a list of the entities located within your county (Example 2.4.3.1). Please review this list to determine if, as of the date listed at the top of the screen, all of the entities located within your county are present on the list, if their status and type are correct, and if their name is spelled correctly. All active entities will be listed first followed by, if any, inactive entities.

The screenshot shows the 'BAS Form 2' window. At the top, it says 'Entities' and 'Boundaries as of January 1, 2006'. Below that, it asks for an effective date for any change. A legend for column headings is provided: N - New incorporated place or MCD, D - Disincorporated place or MCD, X - Incorporated place or MCD never existed, A - Active entity became inactive, I - Inactive entity became active, O - Other (merger, consolidation, etc.).

Name	Type	N	D	X	A	I	O	Date
<b>Active Entities</b>								
Belcher	village	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Blanchard	town	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Gilliam	village	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Greenwood	town	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hosston	village	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Ida	village	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Mooringsport	town	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Oil City	town	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Rodessa	village	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Shreveport	city	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Vivian	town	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Inactive Entities</b>								
None								
<b>New Entities</b>								

Example 2.4.3.1: County Form entity list review

If an entity's name or type is incorrect, complete the following steps:

- Key in the correct name and/or type in the white column to the right of the applicable column.
- Enter a date into the **Date** field by double clicking in the field and selecting a date from the calendar that appears. An effective date is required if the change is due to a legal name or type change. If the change is due to a spelling error, it is not required.



Gilliam	Gilliam	village	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
---------	---------	---------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

*Example 2.4.3.2: Correcting the spelling of an entity's name*


If an entity's status is different from what is present on the list, such as it disincorporated or the entity never existed in your county, complete the following steps:

- Check the appropriate box for the type of change.
- Enter a date into the **Date** field by double clicking in the field and selecting a date from the calendar that appears. All status changes, other than "Incorporated place or MCD never existed," require an effective date to be recorded in the Date field.


Name	Type	N	D	X	A	I	O	Date
Belcher	village	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	01/01/200
Blanchard	town	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Gilliam	village	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Greenwood	town	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hosston	village	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	02/10/200

*Example 2.4.3.3: Changing an entity's status*

If an entity needs to be added to the list, complete the following steps:

- Press the **Add New Change** tool () at the bottom of the screen. A line will be added under **New Entities** and the check box for **New incorporated place or MCD** will be checked.
- Enter the entity's name and type in the appropriate fields.
- Enter the effective date of the incorporation or create into the **Date** field by double clicking in the field and selecting a date from the calendar that appears.

New Entities								
Washington	town	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	01/06/200

*Example 2.4.3.4: Adding a New Entity*

When you have completed reviewing this table, press the **OK** button at the bottom of the window to complete the form review. The next step to submitting your BAS is to review and update the boundaries on the maps. Skip to section 2.5 of this document for an explanation on how to open the BAS map in the MPTS.

**2.4.4 American Indian Areas Form**

The BAS Form 5 screen shows the name and geographic relationship information for the American Indian reservation and/or off-reservation trust land and asks the participant to verify the information.

The following information is provided in the **Title and Entity** section:

- **Part A** lists the name of the American Indian reservation and/or off-reservation trust land.
- **Part B** lists the names of counties located in the American Indian reservation and/or off-reservation trust land is located.
- **Part C** lists the FIPS codes for the reservation/off-reservation trust lands by state.

Please review the information provided in the **Title and Entity** section (Example 2.4.4.1).

**BAS Form 5**

Title and Entity

Boundaries as of January 1, 2006

A. American Indian reservation/off-reservation trust land name  
Acoma Pueblo

B. Counties  
Catron, NM (35-003)  
Cibola, NM (35-006)  
Socorro, NM (35-053)

C. Reservation/off-reservation trust land FIPS 55 code(s) by state  
35-00660

**Modifications**

a. Is the name of this reservation/off-reservation trust land correct as shown above?  
 Yes - SKIP to question b.     No - Enter correction here  
Name changes must be accompanied by supporting documentation such as a tribal resolution or other legal document.  
 Name: \_\_\_\_\_

b. Is the list of the counties and states within which this reservation/off-reservation trust land is located correct as shown in boxes B above?  
 Yes     No - Enter correction in item c.

c. Enter the correct information, AND the effective date of the change.

Add/Del	County Name	State Name	Date

Next>    Cancel

*Example 2.4.4.1: Reviewing the first screen of the American Indian Areas form*



The **Modifications** section includes questions about the validity of the information provided in the **Title and Entity** section. The default answer to each question is **yes**.

If you have changes to report for **Question a**, complete the following steps:

- Select the radio button next to **No**.
- Type in the new or correct name into the field below. You must submit supporting documentation such as a tribal resolution when reporting a name change.



If you have questions to report for **Question b**, complete the following steps:

- Select the radio button next to **No**. This selection will activate **question c**.


- To add or delete a county from the list, select the **Add New Change** tool (). Multiple rows can be added using this tool.
- After a record has been added, select **A for Add or D for Delete** from the **Add/Del** dropdown and type the name of the county and state that need to be added or removed from the list in the appropriate column.
- If a legal boundary change resulted in your entity being added or removed from a county, double click in the field in the **Date** column and select the effective date from the provided calendar. A date is not required if your entity was listed in the county erroneously.
- If you add a row and would like to remove it, use the **Drop Change** tool ().

c. Enter the correct information, AND the effective date of the change.

Add/Del	County Name	State Name	Date
A	Sierra	NM	02/01/2007

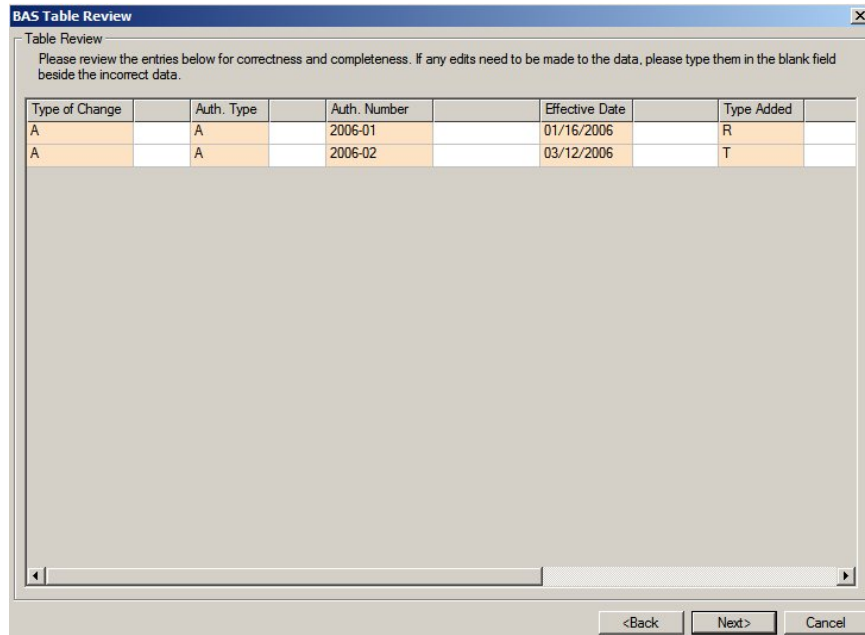
*Example 2.4.4.2: Correcting or updating the counties and states associated with your reservation/off-reservation trust lands*

If your entity supplied the Census Bureau with legal boundary changes during the previous BAS cycle, select the **Next** button () at the bottom of the first screen to proceed to the BAS Table Review screen. This screen displays data submitted for each legal boundary change that was reported for your entity during the previous BAS cycle.

**NOTE:** If your entity did not supply the Census Bureau with any legal boundary changes, the **Next>** button will bring you to the Tribal Subdivisions screen. This will list the tribal subdivisions within your reservation/off-reservation trust land.

**NOTE:** If your American Indian reservation and/or off-reservation trust land did not supply the Census Bureau with any legal boundary change information during the previous BAS cycle and the Census Bureau does not have any record of tribal subdivisions for your entity an **OK** button will appear at the bottom of the first screen. Press the **OK** button to complete your form review. The next step to submitting your BAS is to review and update the boundaries on the maps. Skip to section 2.5 of this document for an explanation on how to open the BAS map in the MPTS.

On the BAS Table Review screen, please look at each field to ensure that the data was accurately recorded (Example 2.4.4.3).



*Example 2.4.4.3: Reviewing legal boundary change data*

The values that may be present in the **Type of Change** field are **A (Addition)**, **B (Boundary Correction)**, **D (Deletion)**, and **O (Other)**. Table 2.4.4.1 explains the values that may be present in the **Auth. Type** field. There are two possible values for the **Type Added** column: **R (Reservation)** and **T (Off-reservation trust land)**.

CODE	DEFINITION
A	Act of Congress, Statute, or Federal Law
C	Federal Court Decision
D	Deed Placing Land into Trust
N	Federal Register Notice or Notice Published in a Local Newspaper by the Federal Government
X	Other Type

*Table 2.4.4.1: Auth. Type Codes*

If you determine that a field needs to be modified, complete the following step:

- Enter the correct data into the white field to the right of the column that requires the correction. The fields next to **Type of Change**, **Auth. Type**, and **Type Added** require a value to be chosen from a dropdown menu. If you wish to make a change to the effective date, double click in the field next to **Date** and a calendar will appear for you to choose the correct date. Note: additional fields exist for each record that are not viewable unless you scroll to the right.

When you have completed reviewing the BAS Table Review screen, press the **Next>** button to continue to the Tribal Subdivisions screen.

**NOTE:** If the Census Bureau does not have any record of tribal subdivisions for your entity, an **OK** button will appear at the bottom of the first screen. Press the **OK** button to complete your form review. The next step to submitting your BAS is to review and update the boundaries on the maps. Skip to section 2.5 of this document for an explanation on how to open the BAS map in the MPTS.

The Tribal Subdivisions screen provides a list the tribal subdivisions located within your reservation/off-reservation trust land (Example 2.4.4.4). Please review this list to determine if, as of the date listed at the top of the screen, all of the tribal subdivisions located within your reservation/off-reservation trust land are present on the list, if their type is correct, and if their name is spelled correctly. The type describes if they are **A (active)** or **I (inactive)**. All active subdivisions will be listed first followed by, if any, inactive subdivisions.

The screenshot shows a window titled "Tribal Subdivisions" with a subtitle "Boundaries as of January 1, 2006". Below this, there is a text box: "Please enter your changes in the white columns, check the appropriate boxes and provide an effective date for any change made to this form, with the exception of a misspelling." Below the text box are column headings: "N - New subdivision", "D - Deleted subdivision", "X - Subdivision never existed", "B - Legal boundary change", and "C - Boundary correction".

Name	Type	N	D	X	B	C	Date
Beclabito	A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bird Springs	A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Black Mesa	A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bodaway	A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bread Springs	A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bumham	A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cameron	A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Canoncito	A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Casamero Lake	A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Chi Chil Tah	A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Chilchinbeto	A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Chinle	A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Church Rock	A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Coalmine Mesa	A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

At the bottom of the window, there is a "Total number of subdivisions" field showing "289" and buttons for "<Back", "OK", and "Cancel".

*Example 2.4.4.4: Tribal subdivision list review*

If a tribal subdivision’s name or type is incorrect, complete the following steps:

- Type the correct information in the white column beside name. You must submit supporting documentation such as a tribal resolution when reporting a name change.
- Enter a date into the **Date** field by double clicking in the field and selecting a date from the calendar that appears. A change to a tribal subdivision name requires an effective date. If the change is due to a spelling error an effective date is not required (Example 2.4.4.5).

Bird Springs	Bird Spring	A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------	-------------	---	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

*Example 2.4.4.5: Correcting the spelling of an entity's name*


If a tribal subdivision's status is different from what is present on the list, such as it has been deleted or the subdivision never existed, complete the following steps:



- Check the appropriate box for the type of change.
- Enter a date into the **Date** field by double clicking in the field and selecting a date from the calendar that appears. All status changes, other than **“Tribal subdivision never existed”** and **“Boundary correction,”** require an effective date to be recorded in the Date field.

Name		Type		N	D	X	B	C	Date
Beclabito		A		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bird Springs	Bird Spring	A		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Black Mesa		A		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11/15/2006
Bodaway		A	I - Inactive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	09/22/2006

*Example 2.4.4.7: Changing an entity's status*

If an entity needs to be added to the list, complete the following steps:

- Select the **Add New Subdivision** tool () at the bottom of the screen. A line will be added under **New Entities** and the check box for **New subdivision** will be checked.
- Enter the entity's name and type in the appropriate fields.
- Double click in the **Date** field to select the effective date of the creation.

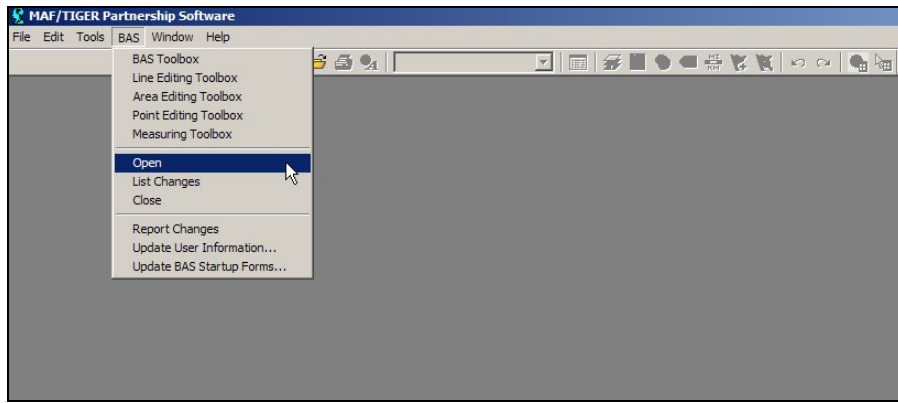
-New-	Cornfields	A - Active	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	08/19/2006
 		Total number of subdivisions 290						
		<Back		OK		Cancel		

*Example 2.4.4.8: Adding a New Entity*

When you have completed reviewing this table, press the **OK** button at the bottom of the window to complete the form review. The next step to submitting your BAS is to review and update the boundaries on the maps. Skip to section 2.5 of this document for an explanation on how to open the BAS map in the MPTS.

## 2.5 Opening the Map to Make Boundary Updates in the MPTS

To open the boundary update component of the software, select **BAS** from the general toolbar and then select **Open** (Example 2.5.1).



*Example 2.5.1: Opening the map*

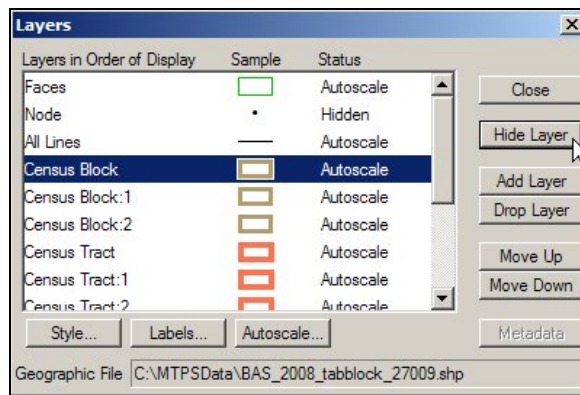
## 2.6 Customizing the Map View

If you determine that there is data being displayed that will not be helpful to you as you make your boundary updates, such as tract or block boundaries, you may hide the data. To make a type of data, or layer, hidden from your view, select the **Map Layers** tool (Example 2.6.1) in the main toolbar.



*Example 2.6.1: Map Layers tool*

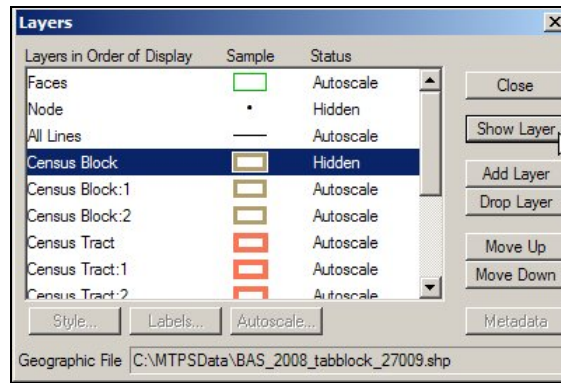
For each layer that you do not wish to view, select it from the list and click the **Hide Layer** button (Example 2.6.2). If multiple layers exist for a data type (such as Census Block, Census Block 1), select each layer and click the **Hide Layer** button. A data type is listed more than once if you have received information for multiple counties.



*Example 2.6.2: Hiding Layers Previously Viewable*

This tool can also be used if a layer is hidden and you wish to view the data. To show a layer that is currently hidden, select the layer and click the **Show Layer** button (Example 2.6.3).





*Example 2.6.3: Showing Layers Previously Hidden*

## 2.7 Editing the Boundary Data in the MTPS

The MTPS allows you to make many types of boundary updates to the map (e.g. add a new incorporation, add an addition or annexation, modify an area landmark, etc.). The following subsections will describe the how to use the software to make the changes to the map and the documentation needed for each type of change.

### 2.7.1 Map Editing Toolboxes

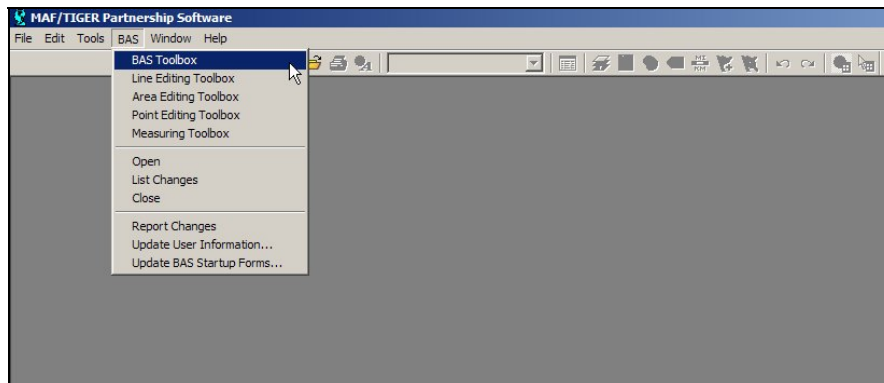
There are four map editing toolboxes: the **BAS** toolbox, **Line Editing** toolbox, **Area Editing** toolbox, and **Point Editing** toolbox. Table 2.7.1.1 describes the data that is able to be edited using the different toolboxes.

TOOLBOX	DATA EDITED
BAS toolbox	Boundaries of legally defined areas <ul style="list-style-type: none"> <li>American Indian areas</li> <li>Counties</li> <li>Minor Civil Divisions</li> <li>Incorporated Places</li> </ul>
Line Editing toolbox	Features <ul style="list-style-type: none"> <li>Roads, 1 dimensional stream, railroad, etc.</li> <li>All feature updates should be made in the LUCA module, unless they are coincident with a boundary. Please review the CBT for further information about feature updates.</li> </ul>
Area Editing toolbox	Boundaries of an Area Landmark <ul style="list-style-type: none"> <li>Airport, bodies of water, cemeteries, etc.</li> </ul>
Point Editing toolbox	Point landmarks <ul style="list-style-type: none"> <li>Marina, dormitory, hospital, school, etc.</li> </ul>

*Table 2.7.1.1: Data Edited Using Each Toolbox*



These toolboxes can be accessed by clicking on **BAS** on the main toolbar at the top of the screen and then selecting the toolbox of interest (Example 2.7.1.1).



*Example 3.8.1.1: Opening the BAS toolbox*

**NOTE:** Some toolboxes can not be open at the same time, such as the **BAS** toolbox and the **Area Editing** toolbox. If you receive a message that a toolbox can not be opened due to another toolbox being open, please close the conflicting toolbox and try again.

[Appendix 1](#) contains tables showing the tools contained within each toolbox and their functionality. Although these tables describe each of the tools and how to use them, an in depth description on all of the necessary steps to complete each type of change will be described in the following sections. The Computer Based Trainings also offer visual demonstrations of how to complete map updates.

### **2.7.2 Boundary Changes Using the BAS Toolbar**

As stated in Table 2.7.1.1, changes to the boundaries of legal areas are made through the BAS toolbox. An explanation of the tools in this toolbox is given in [Appendix 1 Table 2](#). Although the different kinds of boundary changes require different types of documentation, the steps to complete the map updates are similar. Section 2.7.2.1 will describe the steps to completing a boundary change using the **BAS** toolbox, and potentially the **Line Editing** toolbox. Section 2.7.2.2 will provide a series of tables describing the required documentation for each of the types of boundary changes.

**NOTE:** Although the software lists all of the change types for each entity type (American Indian Reservation, Incorporated Place), only specific types of changes will be processed for entity type. Please see [Appendix 2](#) for a list of acceptable types of change by entity type.





The CBT provides visual demonstrations of how to perform boundary updates. These demonstrations will be helpful in showing the different tools and steps to complete a change on the map. Please ensure that you have reviewed these demonstrations before completing boundary updates.

### 2.7.2.1 Creating Boundary Change Polygons


To create boundary change polygon, complete the following steps:

- 1) Select the level of geography that the change is being made to from the **Edit Layer** dropdown menu on the **BAS** toolbox. This step only applies to county or American Indian area participants. All other participants will have the selection set for them.
- 2) Select the entity you wish to edit from the **Target Area** dropdown menu on the **BAS** toolbox. This step only applies to county or American Indian area participants. All other participants will have the selection set for them.
- 3) Select the appropriate type of change from the **Action** dropdown menu on the **BAS** toolbox<sup>8</sup>. The available types of change are:
  - Addition or Annexation.
  - Boundary Correction (add).
  - Boundary Correction (remove).
  - Geographic Corridor.
  - Deletion or Deannexation.
  - Geographic Offset.
  - New Entity.
  - Other.

**NOTE:** Boundary Corrections are fixes to the representation of our boundary that are not related to a new or unreported legal action. These are what in a paper environment were referred to as drafting corrections.

- 4) Zoom to the area of change by using the **Zoom In** tool () on the **General** toolbox or the **Zoom to Target Area** tool () on the **BAS** toolbox.
- 5) Select the faces that make up the area of change. The **Select by Pointing** tool () and **Select by Shape** tool () on the **BAS** toolbox can both be used to identify an area of change. If a face is accidentally selected, you may unselect the face by using the **Select by Pointing** tool.
- 6) If you would like to select only a portion of a current face, you will need to add a line to divide the face. Please refer to the Editing Linear Features CBT for instruction on how to add a line to divide the face. If the line is being added as a boundary and a feature does not exist there, give the line a MTFCC of T1100. Type the word **Boundary** into the **fullname** field. Once your added line has been saved, the MTPS will

split the face into two separate faces. You will then be able to select the desired area.

- 7) Check to ensure that the correct faces were selected. Small faces may occur in congested areas, so it is important that you use the **Zoom In** tool to view an area in detail and check that you have selected all of the area you intended.
- 8) Click the **Save Edits** tool () on the **BAS** toolbox.

### **2.7.2.2 Populating the BAS Entity Update Form**

After the edit is saved, a popup box will appear requesting the attribute information for the change. Boundary correction, either in or out, and geographic offsets do not require any attribute information.

The following fields are present on the **Update Form**:

- **Authorization Type**
  - This field is requesting for the type of legal action that was taken to change the boundary. A drop down menu is available for the appropriate Authorization Type to be chosen.
- **Authorization Number**
  - This field is asking for the record number associated with the legal action that changed the boundary.
- **Effective Date**
  - This field requests date in which the boundary change was in effect. A calendar is available to choose the date.
- **MCD**
  - This field is asking information regarding the MCD the area was in prior to the boundary update.
- **Type of Land Added**
  - This field has a drop down menu listing the appropriate types for American Indian Area boundary updates.

The required information for each of the change types, excluding boundary correction and geographic offset, is displayed by entity type in the Tables 2.7.2.2.1 - 2.7.2.2.3. In the tables, **Y** means that the information is required, **N** means that the field is uneditable, and **A** means that the field is editable but the information is not required.

<b>ATTRIBUTE INFORMATION REQUIRED FOR ADDITIONS OR ANNEXATIONS AND DELETIONS OR DEANNEXATIONS</b>					
	Authorization Type	Authorization Number	Effective Date	MCD	Type of Land Added
American Indian Areas	Y	Y	Y	N	Y
Tribal Subdivisions	Y	Y	Y	N	Y
Counties	Y (except GA*)	Y (except GA*)	Y	N	N
Minor Civil Divisions (MCD)	Y	Y	Y	N	N
Incorporated Places	Y (except GA*)	Y (except GA*)	Y	A**	N

*Table 2.5.2.2.1*

\* GA state law does not require entities to record an Authorization type or number but it requires participant to submit the acreage of annexations. The MTPS automatically calculates the acreage of the area and inputs it into the form.

\*\*The MCD field only needs to be entered when a change is made to an incorporated place in a state that has MCDs. If such a change is made, please enter the MCD that contained the area prior to the annexation.

<b>ATTRIBUTE INFORMATION REQUIRED FOR GEOGRAPHIC CORRIDORS</b>					
	Authorization Type	Authorization Number	Effective Date	MCD	Type of Land Added
American Indian Areas	A	A	A	A	Y
Minor Civil Divisions (MCD)	A	A	A	A	N
Incorporated Places	A	A	A	A	N

*Table 2.5.2.2.2*


ATTRIBUTE INFORMATION REQUIRED FOR NEW ENTITY			
	Entity Name	Status	Effective Date
Tribal Subdivisions	Y	Y	Y
Incorporated Places	Y	N	Y

Table 2.5.2.2.3

The update will not be able to be finalized until each required field in completed. If you do not have information, for a required field, place the word Unknown in the field. The Census Bureau will review each record with an Unknown to determine if the update can be integrated into MAF/TIGER database. If an issue arises with such a record, the person listed on the Participant Information form will be contacted.

**2.7.2.3 Deleting a Change Polygon After It has been Finalized**

If you determine that a change polygon was created in error, complete the following steps to delete the change:

- 1) Select the **Delete a Change** () tool from the **BAS** toolbox.
- 2) Select the change polygon that you wish to delete.
- 3) The software will ask you to verify that you wish to delete the change. Answer **yes**.

**2.7.3 Linear Feature Updates**






Refer to the Editing Linear Features CBT for instruction on how to add a feature. This instructional demonstration will provide information on the steps to create a feature and the required information. The Help menu in the MTPS also provides a list of classification codes that can be selected when creating a line.

**2.7.4 Area Landmark Updates**

As stated in Table 2.7.1.1, changes to the boundaries of area landmarks are made through the **Area Editing** toolbox. An explanation of the tools in this toolbox is given in [Appendix 1 Table 2](#). The following sections will describe the types of changes that can be made to area landmarks, the steps to complete those changes, and the required information that must accompany the map update, if any.

**2.7.4.1 Boundary Corrections to Area Landmarks**

Since area landmarks and water features are not legal entities, the only types of boundary change that can be done to an existing landmark are boundary correction (add) and boundary correction (remove). To create boundary correction change polygons complete the following steps:





- 1) Select the type of geography that the change is being made to from the **Edit Layer** dropdown menu on the **Area Editing** toolbox. The choices will be either “**Area Landmark**” or “**River, Lake, or Ocean.**”
- 2) Select the geography you wish to edit from the **Target Area** dropdown menu on the **Area Editing** toolbox.
- 3) Select the type of change you want to make from the **Action** dropdown menu on the **Area Editing** toolbox. The available types of change that relate to adjusting a boundary are:
  - Boundary Correction (add).
  - Boundary Correction (remove).
- 4) Zoom to the area in which the change is located by using the **Zoom In** tool () on the **General** toolbox or the **Zoom to Target Area** tool () on the **Area Editing** toolbox.
- 5) Select the faces that make up the area of change. The **Select by Pointing** tool () and the **Select by Shape** tool () on the **Area Editing** toolbox can both be used to identify an area of change. If a face is accidentally selected you may unselect the face by using the **Select by Pointing** tool.
  - a) If you would like to select only a portion of a current face, you will need to add a line to divide the face. Please refer to the Editing Linear Features CBT for instruction on how to add a line to divide the face. If the line is being added as a boundary and a feature does not exist there, give the line a MTFCC of T1100. Type the word **Boundary** into the fullname field. Once your added line has been saved, the MTPS will split the face into two separate faces. You will then be able to select the desired area.
- 6) Check to ensure that the correct faces were selected. Small faces may occur in congested areas, so it is important that you use the **Zoom In** tool to view an area in detail and check that you have selected all of the area you intended.
- 7) Click the **Save Edits** tool () on the **Area Editing** toolbox.

Boundary corrections do not require any additional information to be completed. This means that a popup box, such as the ones that appeared when an annexation was made to a legal boundary, will not appear when the **Save Edits** tool is used to complete the change.

#### **2.7.4.2 New Landmark**


New area landmarks and water features can be added to the map using the **Area Editing** toolbox. To create a new area landmark or water feature, complete the following steps:

- 1) Select the type of geography that the change is being made to from the **Edit Layer** dropdown menu on the **Area Editing** toolbox. The choices will be either “**Area Landmark**” or “**River, Lake, or Ocean.**”

- 2) Select **New Landmark** from the **Action** dropdown menu on the **Area Editing** toolbox.
- 3) Zoom to the area in which the new landmark is located by using the **Zoom In** tool () on the **General** toolbox.
- 4) Select the faces that make up the new landmark. The **Select by Pointing** tool () and the **Select by Shape** tool () on the **Area Editing** toolbox can both be used to identify an area of change. If a face is accidentally selected, you may unselect the face by using the **Select by Pointing** tool.
  - a) If you would like to select only a portion of a current face, you will need to add a line to divide the face. Please refer to the Editing Linear Features CBT for instruction on how to add a line to divide the face. If the line is being added as a boundary and a feature does not exist there, give the line a MTFCC of T1100. Type the word **Boundary** into the fullname field. Once your added line has been saved, the MTPS will split the face into two separate faces. You will then be able to select the desired area.
- 5) Check to ensure that the correct faces were selected. Small faces may occur in congested areas, so it is important that you zoom in close to the area and check that you have selected all of the area you intended.
- 6) Click the **Save Edits** tool () on the **Area Editing** toolbox.
- 7) A window will appear asking for the name of the geography. Type the name into the box and select **OK**.

#### **2.7.4.3 Deletion or Deannexation**


Area landmarks and water features can be removed from the map if they no longer exist or if they are erroneous. To remove an area landmark or water feature, complete the following steps:

- 1) Select the type of geography that the change is being made to from the **Edit Layer** dropdown menu on the **Area Editing** toolbox. The choices will be either “**Area Landmark**” or “**River, Lake, or Ocean.**”
- 2) Select the geography you wish to delete from the **Target Area** dropdown menu on the **Area Editing** toolbox.
- 3) Select **Deletion or Deannexation** from the Action dropdown menu on the **Area Editing** toolbox.
- 4) Click the **Save Edits** tool () on the **Area Editing** toolbox.

The deletion of an area landmark or water feature does not require any additional information to be completed. This means that a popup box will not appear when the **Save Edits** tool is used to complete the change.

#### **2.7.4.4 Change Name**

The names of area landmarks and water features can be updated if the name has changed or if the name appears incorrectly on the map. To change the name of an area landmark or water feature, complete the following steps:



- 1) Select the type of geography that the change is being made to from the **Edit Layer** dropdown menu on the **Area Editing** toolbox. The choices will be either “**Area Landmark**” or “**River, Lake, or Ocean.**”
- 2) Select the geography whose name has changed from the **Target Area** dropdown menu on the **Area Editing** toolbox.
- 3) Select **Change Name** from the **Action** dropdown menu on the **Area Editing** toolbox.
- 4) Click the **Save Edits** tool (  ) on the **Area Editing** toolbox.
- 5) A window will appear asking for the new name of the geography. Type the name into the box and select **OK**.

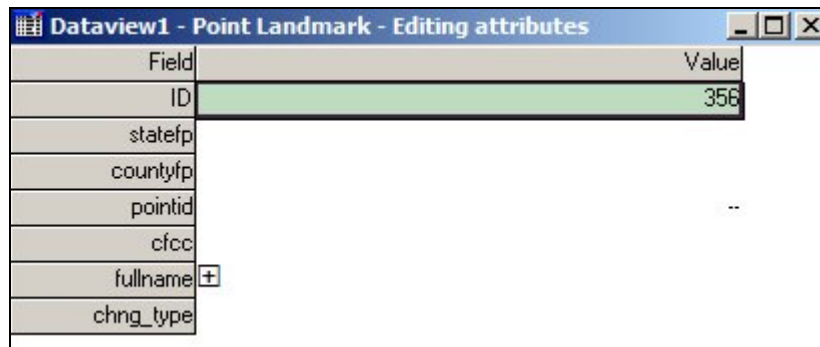
### 2.7.5 Point Landmark Updates

As stated in Table 2.7.1.1, changes to point landmarks are made through the **Point Editing** toolbox. An explanation of the tools in this toolbox is given in [Appendix 1 Table 4](#). The following sections will describe the types of changes that can be made to point landmarks, the steps to complete those changes, and the required information that must accompany the map update, if any.

#### 2.7.5.1 Adding a Point Landmark

New point landmarks can be added to the map using the **Point Editing** toolbox. To create a new point landmark, complete the following steps:

- 1) Select the **Add Point** tool (  ).
- 2) Click in the location where the point landmark is located.
- 3) A window will appear with fields where the attribute information for the landmark can be filled (Example 2.5.4.1.1). Click in the white area next to MTFCC. A list of point landmark types will appear. Select the appropriate type. Type the name of the point landmark in the white area next to fullname. If the point landmark does not have a name, click the plus sign next to fullname.
- 4) Select the **Save Edits** tool (  ) to finalize the change.





Field	Value
ID	356
statefp	
countyfp	
pointid	...
cfcc	
fullname	+
chng_type	

*Example 2.5.4.1.1: Attribute window for Point Landmarks*



### **2.7.5.2 Deleting a Point Landmark**



Point landmarks that exist on the map can also be deleted using the **Point Editing** toolbox. To delete a point landmark, complete the following steps:

- 1) Select the **Delete Point** tool (  ).
- 2) Click on the existing point landmark.
- 3) Select the **Save Edits** tool (  ) to finalize the change.

If a point landmark is erroneously deleted, select the undo button at the top of the MTPS screen.

### **2.7.5.3 Renaming or Recoding a Point Landmark**

Point landmarks that exist on the map can also be renamed or recoded using the **Point Editing** toolbox. To rename or recode a point landmark, complete the following steps:

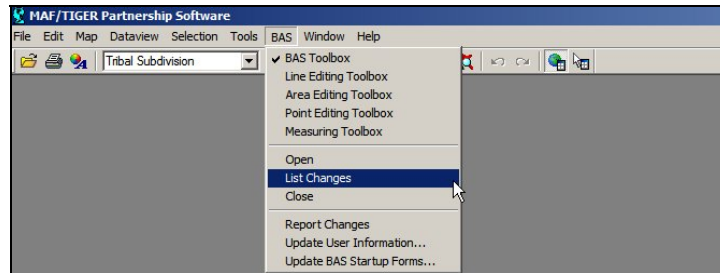
- 1) Select the **Edit Point Attributes** tool (  ).
- 2) Click on the existing point landmark.
- 3) Change the name and/or code of the landmark.
- 4) Select the **Save Edits** tool (  ) to finalize the change.

## BAS PROCEDURES

### 3.0 Reviewing Updates




#### 3.0 Reviewing Updates

It is very important that you review each boundary update you made to a legal entity before submitting your changes to the Census Bureau. The changes that you make using the MTPS will be processed for inclusion in to the MAF/TIGER database and will move the legal boundaries of the entities you specified. A very helpful tool to use for the review of boundary changes to legal boundaries is the List Changes tool. This tool can be accessed by selecting **BAS** from the MTPS toolbar and then select **List Changes** (Example 3.1)



*Example 3.1: Opening the List Changes Tool*

Use this review tool to complete the following steps for the review of your changes:

- 1) Select the level of geography you would like to review from the dropdown.
- 2) Select the change you would like to review from the list.
- 3) Select the **Zoom to Changes** tool () located at the top of the window.
- 4) Zoom into the area of change and make sure all of the appropriate faces have been selected.
  - a) If faces are missing or incorrect faces have been added, delete the change polygon using the **Delete a Change** tool () on the **BAS** toolbox and recreate the change polygon.
- 5) While zoomed into an area of change, ensure that any needed geographic offsets and corridors have been created. If they have not been created, use your **BAS** toolbox to do so.
- 6) Review the attribute information by selecting the **Information** tool () and clicking on the change polygon. The popup window will appear and the attribute data can be corrected, if necessary.
- 7) Ensure that boundary corrections do not dissolve relationships between features and the boundary.

## **BAS PROCEDURES**

### 4.0 Printing Maps of Your Boundary Changes

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#### **4.0 Printing Maps of your Boundary Changes**

If you would like to retain a printed copy of the changes you made while using the MTPS, please review the **Printing a Map** section of the **Help** menu.








## BAS PROCEDURES


### Appendix 1: Tool Explanation by Toolbox

#### Appendix 1: Tool Explanations by Toolbox



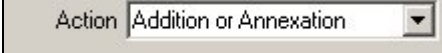

This appendix will describe each tool that is important to a BAS submission. The description of the tools will be organized by toolbox to ensure that you are able to locate them when necessary. Please refer back to the main portion of the User's Guide for the explanation of how use these tools together to complete different types of changes.








**Table 1: General Toolbox**

TOOL	EXAMPLE SITUATION	INSTRUCTIONS
	You wish to zoom into a specific area.	<ul style="list-style-type: none"> <li>Select the <b>Zoom In</b> tool from the toolbox.</li> <li>Click in the area map you would like to see larger.</li> </ul>
	You would like to see a larger area than is currently in view.	<ul style="list-style-type: none"> <li>Select the <b>Zoom Out</b> tool.</li> <li>Click on the map.</li> </ul>
	You would like to view a different portion of the map while keeping it the same scale.	<ul style="list-style-type: none"> <li>Select the <b>Pan</b> tool.</li> <li>Click on the map.</li> <li>While holding the mouse button down, drag your cursor to move the map.</li> </ul>
	While navigating the map you may accidentally change the scale.	<ul style="list-style-type: none"> <li>Select the <b>Previous Scale</b> tool.</li> <li>Click on the map.</li> </ul>
	After working in the MTPS you may be interested in seeing the extent of the map which was visible when you first opened it that day.	<ul style="list-style-type: none"> <li>Select the <b>Initial Scale</b> tool.</li> <li>Click on the map.</li> <li>The tool will display the map as it did when your current session began. This tool does not have the ability to show the map that was initially displayed when you installed the program.</li> </ul>
	You are interested in learning about the attribute information of different features or geographies.	<ul style="list-style-type: none"> <li>Select the <b>Info</b> tool.</li> <li>Click on the item in the map window.</li> <li>A popup box will provide attribute information.</li> </ul>
	You are adding an annexation or addition and you know that it begins a certain distance down a road from an intersection.	<ul style="list-style-type: none"> <li>Select the <b>Measure Distance</b> tool.</li> <li>Click along the feature you would like to measure.</li> <li>A popup box will appear stating the distance in miles.</li> </ul>


	<p>You know the area of the annexation, as well as the distance that the annexation spans along the road but you do not know how far the annexation goes into a field.</p>	<ul style="list-style-type: none"> <li>• Select the <b>Measure Area</b> tool.</li> <li>• Click multiple locations to create a polygon.</li> <li>• Double click to complete the polygon.</li> <li>• A popup box will appear stating the area, in square miles and acres, and the perimeter, in miles.</li> </ul>
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**Table 2: BAS and Area Editing Toolboxes: Tools to Identify Entity and Type of Change**










TOOL	FUNCTION	INSTRUCTION
	<p>To specify the level of geography that you wish to edit.</p>	<ul style="list-style-type: none"> <li>• Choose the level of geography that you wish to edit from the dropdown menu.</li> <li>• Note: If you are a county or American Indian area participant you will be able to select multiple levels of geography. The edit layer will default to your entity's level of geography, if you are a place or MCD participant.</li> </ul>
	<p>To specify the entity you wish to edit.</p>	<ul style="list-style-type: none"> <li>• Choose the entity you wish to edit from the dropdown menu.</li> <li>• Note: If you are a county or American Indian area participant you may be able to select multiple target areas. The target area will default to your entity, if you are a place or MCD participant.</li> </ul>
	<p>To specify the type of change you would like to make to an entity.</p>	<ul style="list-style-type: none"> <li>• Choose the <b>Action</b> from the dropdown menu.</li> </ul>
	<p>To change the target area in the toolbox by clicking on an entity, after selecting the appropriate Edit Layer.</p>	<ul style="list-style-type: none"> <li>• Select the level of geography you are interested in from the <b>Edit Layer</b> dropdown.</li> <li>• Click on <b>tool</b>.</li> <li>• Click on an area of interest.</li> <li>• The program will change the target area to the entity which you clicked on.</li> </ul>

	<p>To zoom to the area that you have specified in the Target Area.</p>	<ul style="list-style-type: none"> <li>• Choose the level of geography you are interested in from the <b>Edit Layer</b> dropdown.</li> <li>• Choose the entity you are interested in from the <b>Target Area</b> dropdown.</li> <li>• Click the <b>Zoom to Target Area</b> tool.</li> <li>• The program will zoom to the entity you have specified in the Target Area.</li> </ul>
	<p>To identify the attributes of a face.</p>	<ul style="list-style-type: none"> <li>• Click on the <b>Identify</b> tool.</li> <li>• Select the face you are interested in.</li> <li>• The attributes of that face for the <b>Edit Layer</b> selected will be shown.</li> </ul>
	<p>To delete a change after it has been saved.</p>	<ul style="list-style-type: none"> <li>• Click on the <b>Delete a Change</b> tool.</li> <li>• Select the change you would like to delete.</li> <li>• Verify that you would like to delete the change.</li> </ul>
	<p>To select a face as part, or all, of an area of change.</p>	<ul style="list-style-type: none"> <li>• Click on the Select by <b>Pointing</b> tool.</li> <li>• Select each face that is part of the change area.</li> </ul>
	<p>To select an area of faces as an area of change.</p>	<ul style="list-style-type: none"> <li>• Click on the <b>Select by Shape</b> tool.</li> <li>• Draw a polygon around the area that has changed. Double click to close the polygon.</li> </ul>
	<p>To complete a change and save it.</p>	<ul style="list-style-type: none"> <li>• Click on the <b>Save Edits</b> tool.</li> <li>• An update form will appear asking for the information required for the type of change that is being made.</li> </ul>
	<p>To cancel a change before it is saved.</p>	<ul style="list-style-type: none"> <li>• Click on the <b>Cancel Edits</b> tool.</li> </ul>



**Table 3: Line Editing Toolbox**

TOOLS	FUNCTION	INSTRUCTIONS
	<p>To add a feature.</p>	<ul style="list-style-type: none"> <li>• Click the <b>Add Line</b> tool.</li> <li>• Draw the feature on the map with your mouse.</li> <li>• Double click to end drawing.</li> <li>• A popup box will appear listing the possible attributes that can be edited.</li> <li>• The minimum attribute requirement for all added features is a MTFCC and a name.</li> <li>• Double click in the area beside MTFCC to display a list of possible MTFCCs.</li> <li>• If the feature is unnamed, click on the plus sign beside fullname. If the feature is named, type the name in the space.</li> </ul>




Appendix F: BAS Procedures

	To delete a feature.	<ul style="list-style-type: none"> <li>Click the <b>Delete Line</b> tool.</li> <li>Select the feature you would like to have deleted.</li> </ul>
	To split a feature.	<ul style="list-style-type: none"> <li>Click the <b>Split Line</b> tool.</li> <li>Click on the line at the spot where you would like the line to be split.</li> </ul>
	To delete a feature but save the attributes.	<ul style="list-style-type: none"> <li>Click on the <b>Copy and Delete Line</b> tool.</li> <li>Click on the line that you would like deleted. The tool will save the attributes so that you can use the <b>Replace Copied Line</b> tool.</li> </ul>
	To add a feature and add the saved attributes.	<ul style="list-style-type: none"> <li>Click on the <b>Replace Copied Line</b> tool.</li> <li>Draw the feature on the map with your mouse. The attributes from the feature that you deleted using the <b>Copy and Delete Line</b> tool will be added to the line that was just created.</li> </ul>
	To edit a feature's attributes.	<ul style="list-style-type: none"> <li>Click on the <b>Edit Line Attribute</b> tool.</li> <li>Select the line of interest.</li> <li>A window will popup displaying the attributes. Use this window to edit.</li> </ul>
	To display a feature's alternative names.	<ul style="list-style-type: none"> <li>Click on the <b>Display Alternative Names</b> tool.</li> <li>Click on the line that you are interested in.</li> <li>A window will popup that will display the primary and secondary names, if they exist for the feature.</li> </ul>
	To display the direction of the line.	<ul style="list-style-type: none"> <li>Click the <b>Show Right/Left Direction Arrows</b> tool. The direction of all features will appear.</li> </ul>
	To save an edit.	<ul style="list-style-type: none"> <li>Click on the <b>Save Edits</b> tool.</li> <li>The software will not allow you to save an added feature without updating the attribute information.</li> </ul>
	To cancel an edit.	<ul style="list-style-type: none"> <li>To cancel an edit before saving, click the <b>Cancel Edit</b> tool.</li> <li>All edits made since the last save will be deleted.</li> </ul>

**Table 4: Point Editing Toolbox**

TOOL	FUNCTION	INSTRUCTIONS
	To add a point landmark.	<ul style="list-style-type: none"> <li>Click on the <b>Add Point</b> tool.</li> <li>Click at the location with the point landmark should be placed.</li> <li>A window will popup where the name and the type of the point landmark must be entered.</li> </ul>
	To delete a point landmark.	<ul style="list-style-type: none"> <li>Click on the <b>Delete Point</b> tool.</li> <li>Select a point landmark that is present on the map.</li> </ul>

Appendix F: BAS Procedures

	To edit the attributes a point landmark.	<ul style="list-style-type: none"><li>• Click on the <b>Edit Point Attributes</b> tool.</li><li>• Select the point landmark that you wish to edit.</li><li>• Type the correct information into the attribute window.</li></ul>
	To cancel an edit.	<ul style="list-style-type: none"><li>• To cancel an edit before saving, click the <b>Cancel Edit</b> tool.</li><li>• All edits made since the last save will be deleted.</li></ul>
	To save an edit.	<ul style="list-style-type: none"><li>• Click on the <b>Save Edits</b> tool.</li><li>• The software will not allow you to save an added point landmark without adding attribute information.</li></ul>



## BAS PROCEDURES

### Appendix 2: Acceptable Changes by Entity Type

#### Appendix 2: Acceptable Changes by Entity Type

GEOGRAPHY	AVAILABLE CHANGE TYPES
Place	<ul style="list-style-type: none"> <li>• Addition or Annexation</li> <li>• Boundary Correction (in)</li> <li>• Boundary Correction (out)</li> <li>• Deletion or Deannexation</li> <li>• Geographic Corridor</li> <li>• Geographic Offset</li> <li>• New Entity</li> <li>• Other</li> </ul>
County Subdivision	<ul style="list-style-type: none"> <li>• Addition or Annexation</li> <li>• Boundary Correction (in)</li> <li>• Boundary Correction (out)</li> <li>• Deletion or Deannexation</li> <li>• Geographic Offset</li> <li>• New Entity</li> </ul>
County	<ul style="list-style-type: none"> <li>• Addition or Annexation</li> <li>• Boundary Correction (in)</li> <li>• Boundary Correction (out)</li> <li>• Deletion or Deannexation</li> </ul>
Tribal Subdivision	<ul style="list-style-type: none"> <li>• Addition or Annexation</li> <li>• Boundary Correction (in)</li> <li>• Boundary Correction (out)</li> <li>• Deletion or Deannexation</li> <li>• Geographic Offset</li> <li>• New Entity</li> <li>• Other</li> </ul>
American Indian Areas	<ul style="list-style-type: none"> <li>• Addition or Annexation</li> <li>• Boundary Correction (in)</li> <li>• Boundary Correction (out)</li> <li>• Deletion or Deannexation</li> <li>• Geographic Corridor</li> <li>• Geographic Offset</li> <li>• New Entity</li> <li>• Other</li> </ul>



**APPENDIX G**  
**U.S. CENSUS BUREAU REGIONAL OFFICES**

## U.S. CENSUS BUREAU REGIONAL OFFICES TOLL FREE 1-866-511-LUCA (5822)



**Atlanta Regional Office**  
ATTN: Geography  
101 Marietta Street, N W, Ste. 3200  
Atlanta, GA 30303-2700

**Detroit Regional Office**  
ATTN: Geography  
1395 Brewery Park Blvd, Ste. 100  
Detroit, MI 48207



**Boston Regional Office**  
ATTN: Geography  
4 Copley Place, Ste. 301  
Boston, MA 02116

**Kansas City Regional Office**  
ATTN: Geography  
1211 North 8th Street  
Kansas City, KS 66101-2129



**Charlotte Regional Office**  
ATTN: Geography  
901 Center Park Drive, Ste. 106  
Charlotte, NC 28217-2935

**Los Angeles Regional Office**  
ATTN: Geography  
15350 Sherman Way, Ste. 400  
Van Nuys, CA 91406



**Chicago Regional Office**  
ATTN: Geography  
1111 W 22nd Street, Ste. 400  
Oak Brook, IL 60523-1918

**New York Regional Office**  
ATTN: Geography  
395 Hudson Street, Ste. 800  
New York, NY 10014



**Dallas Regional Office**  
ATTN: Geography  
8585 N Stemmons Freeway, Ste. 800 S  
Dallas, TX 75247

**Philadelphia Regional Office**  
ATTN: Geography  
833 Chestnut Street, Ste. 504  
Philadelphia, PA 19107-4405



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## GLOSSARY

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

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

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

**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, county, or state.

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

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

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

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

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

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

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

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

**Chief executive/highest elected official** - The 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.

**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.

**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 Database** - The Census Bureau's new nationwide geographic database, which integrates the MAF (Master Address File) and TIGER (Topologically Integrated Geographic Encoding and Referencing) files.

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

**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. Now part of the MAF/TIGER Database.

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

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

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

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

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

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

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

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

**Structure Point** - A dot on a Census Bureau map, used to show the location of one or more living quarters. A 4-digit number plus 1-digit alpha character



assigned within a census block to each structure point. Structure points are stored in the TIGER® database.

**Topologically Integrated Geographic Encoding and Referencing**

**(TIGER®)** - A computer database that contains a digital representation of all map features (streets, roads, rivers, railroads, lakes, and so forth) required to support Census Bureau operations, the related attributes for each, and the geographic identification codes for all entities used by the Census Bureau to tabulate data for the United States, Puerto Rico, and Island Areas. Now part of the MAF/TIGER Database.

**Vacant housing unit** - A habitable structure containing living quarters that is not occupied. New housing units not yet occupied are classified as vacant housing units if construction has reached a point where exterior windows and doors are installed and final usable floors and a roof are in place. Vacant units are excluded if open to the elements, or if there is positive evidence, such as a sign on the house, that the housing unit is to be demolished or has been condemned.

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