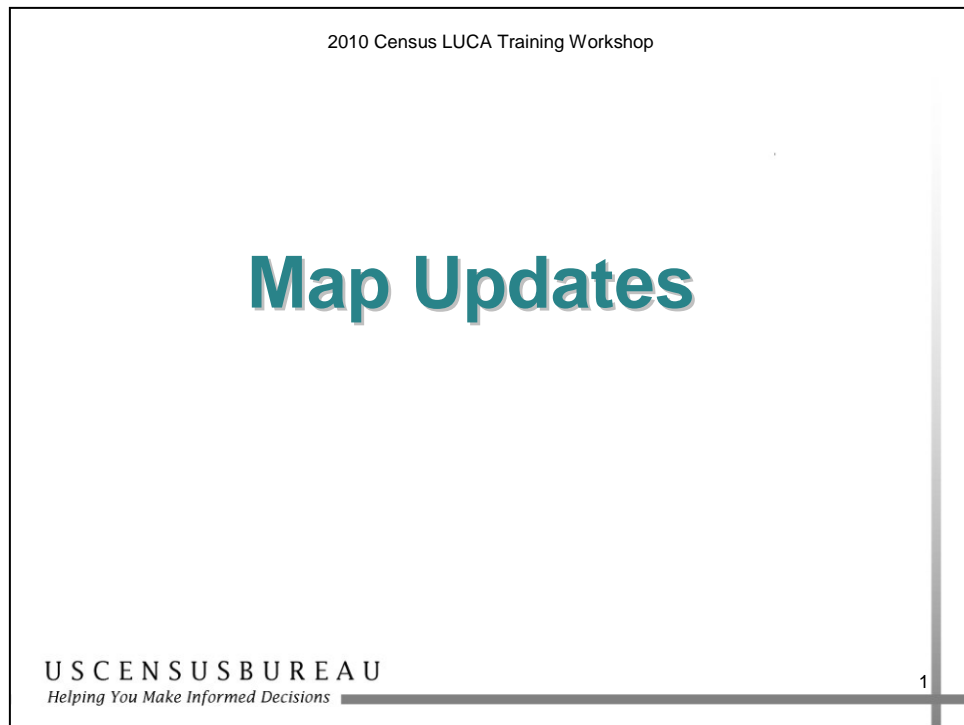

6 Map Updates



In this section, you will learn how to identify any additions, deletions, or corrections to features on the Census Bureau maps, and to identify any additions/annexations, deletions/deannexations, and boundary corrections to your governmental boundaries.

Overview

2010 Census LUCA Training Workshop

Objective

Upon completion of this lesson, you will be able to update Census Bureau maps.

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Objective

Upon completion of this lesson, you will be able to update Census Bureau maps.

Reading Census Bureau Maps

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Reading Census Bureau Maps

Three types of paper map sheets:

- Index sheets
- Parent sheets
- Insets

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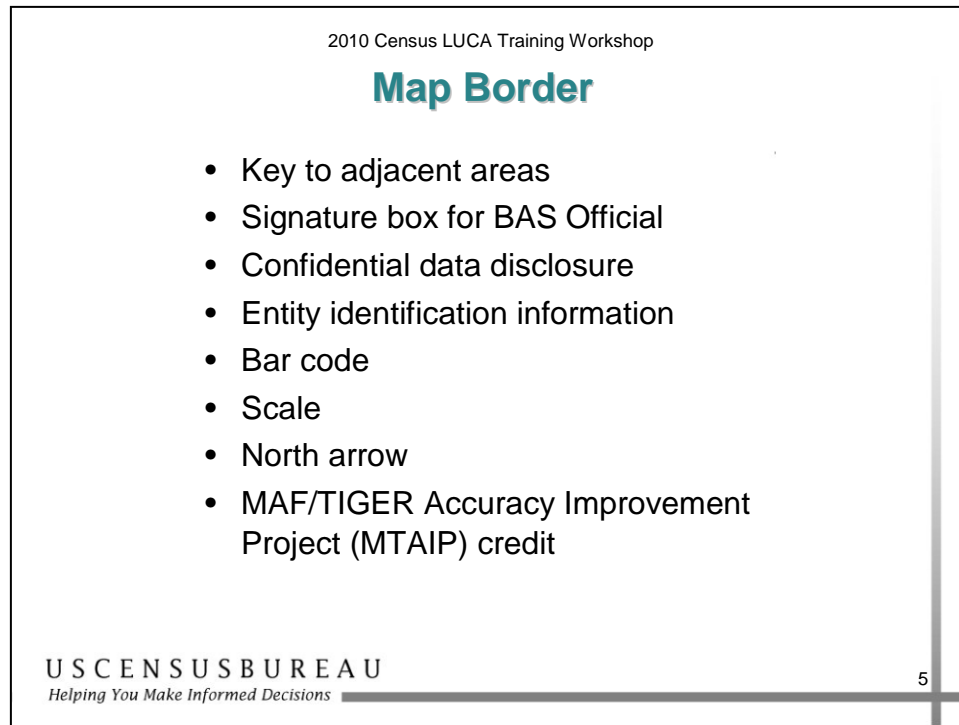
4

Paper Maps

There are three types of paper map sheets:

1. Index Sheets – for reference
2. Parent Sheets – for updates
3. Inset Sheets – for updates

Reading Census Bureau Maps



Map Border

The map border contains:

- The key to adjacent areas, if your jurisdiction has multiple map sheets.
- Signature box for the Boundary and Annexation Survey (BAS) Official.
- Confidential data disclosure statement, if Title 13.
- Entity identification information.
- Bar Code.
- Scale.
- North arrow.

Reading Census Bureau Maps

Map Border (cont.)

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

Reading Census Bureau Maps

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Map Legend

- Boundaries
- Transportation
- Other Features
- Census Blocks and Symbols
- Landmarks
- Footnotes and Notes

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LEGEND

SYMBOL	NAME STYLE
*****	INTERNATIONAL
*****	AIR (FEDERAL)
☆☆☆☆☆	Trust Land / Home Land
*****	AMERICAN INDIAN TRIBAL SUBDIVISION
▽▽▽▽▽	ANRC
///////	STATE (or statistically equivalent entity)
□□□□□	COUNTY (or statistically equivalent entity)
○○○○○○○	MINOR CIVIL DIVISION (MCD)
○	Consolidated City
■ ■ ■ ■ ■	Incorporated Place
-----	CENSUS BLOCK
-----	CENSUS TRACT
-----	Outside Subject Area

ABBREVIATION REFERENCE: AIR = American Indian Reservation
Trust Land = Off-Reservation Trust Land; Home Land = Hawaiian Home Land
ANRC = Alaska Native Regional Corporation

FEATURES

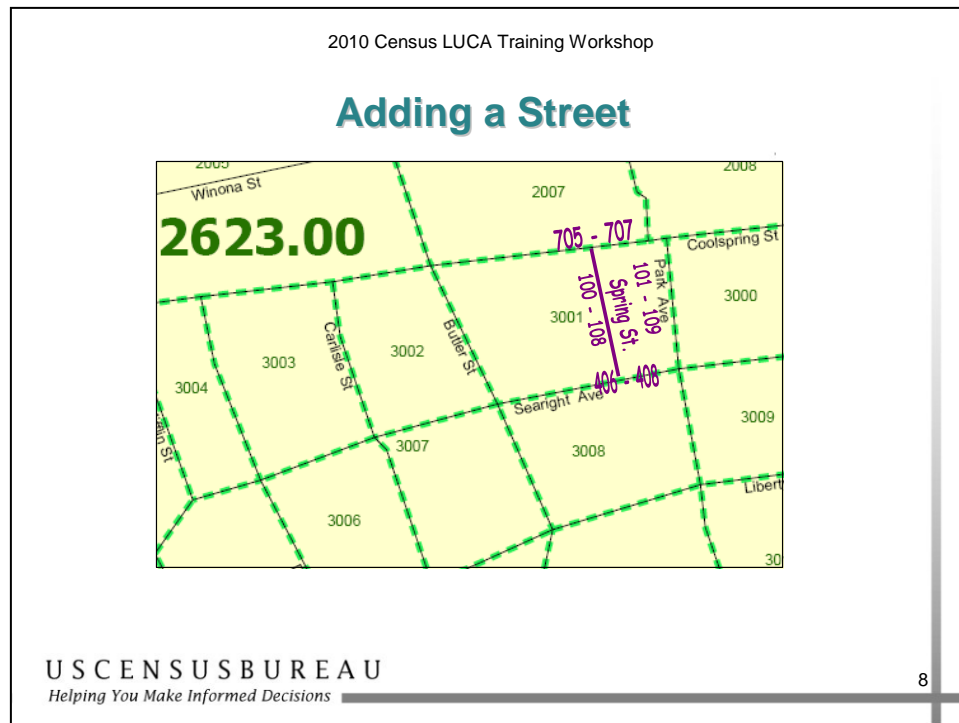
Interstate / Limited Access Highway	Traffic / Highway / Roadway	Stream / Streamlet
U.S. Highway	Proposed	Intermittent Stream
State Highway	Boundary / Property Line	Canal
Other Road	Ridge / Physical Feature	Channel
Waterway	Zone Line / Property Line	Station Point - Housing Unit
Waterway	Zone Line / Property Line	Station Point - Group Quarter
Waterway	Zone Line / Property Line	

6

Map Legend

- Boundaries
- Transportation
- Other Features
- Census Blocks and Symbols
- Landmarks
- Footnotes and Notes

Walkthrough: Map Updates

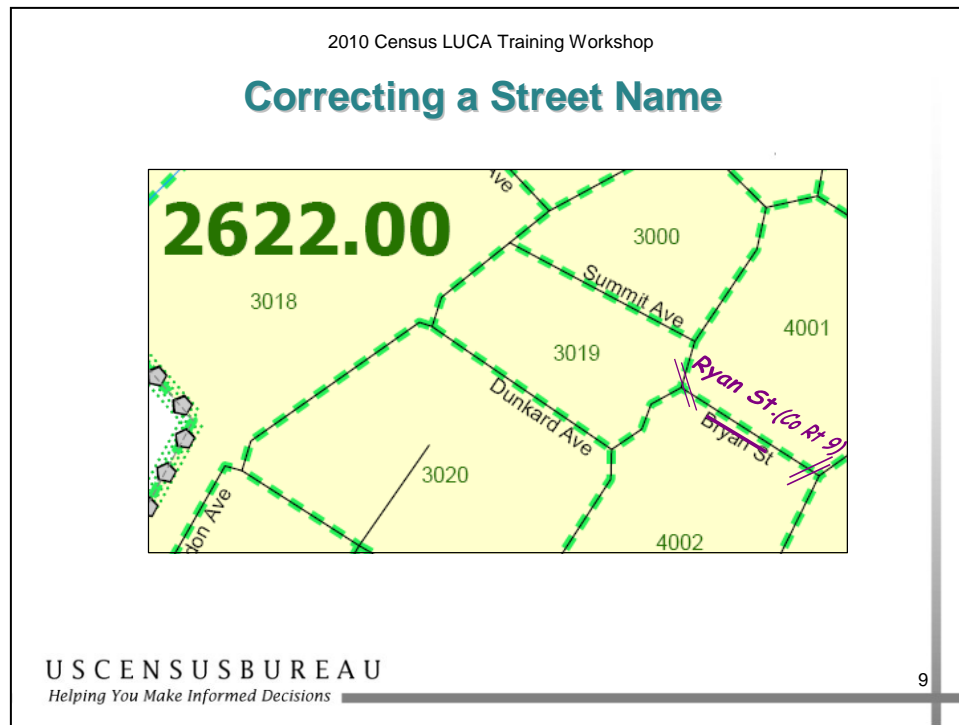


Adding a Street

There are four steps to adding a street:

1. Using a purple pencil, draw the location of the new street on the map.
2. Print the street name.
3. Print the address ranges for each side of the new street.
4. Print the address breaks where Spring Street intersects Coolspring St. and Searight Ave.

Walkthrough: Map Updates

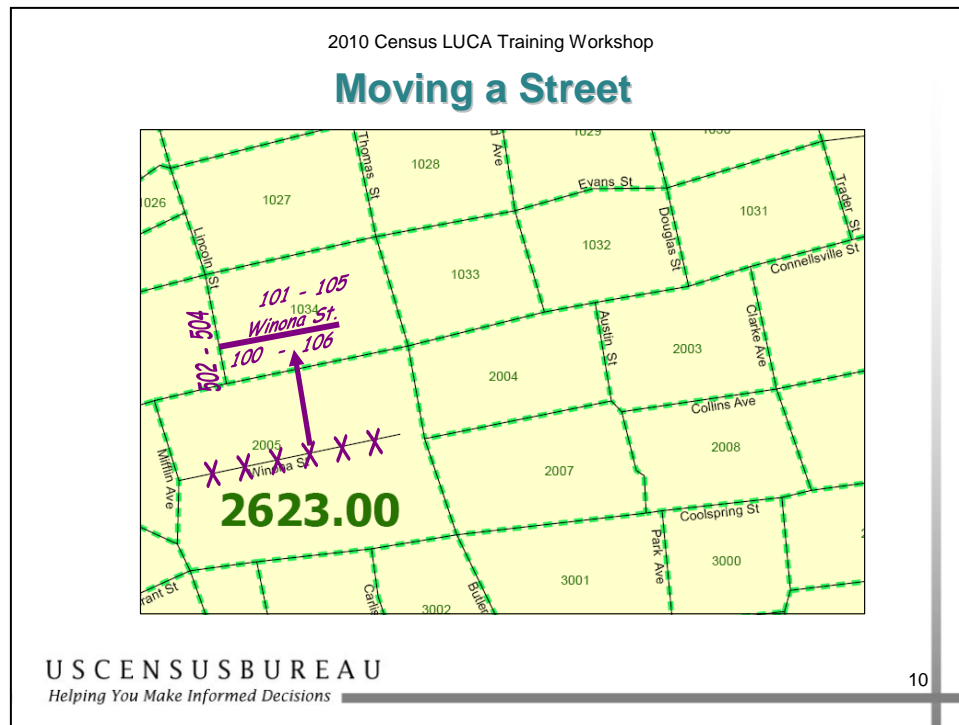


Correcting a Street Name

There are three steps to correcting a street name:

1. Using a purple pencil, cross out the incorrect name Bryan Street, and print the correct name, Ryan Street above it.
2. Use double hatch marks to show the extent of the name change.
3. Print the alternate name (County Route, Co Rt. 9) in parentheses, if applicable.

Walkthrough: Map Updates

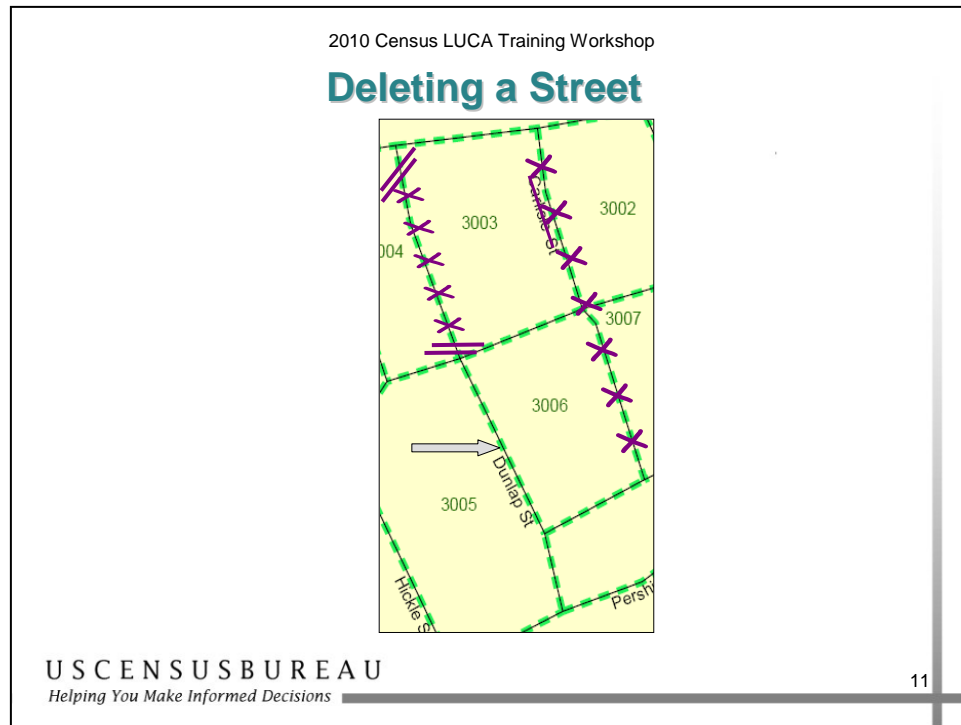


Moving a Street

To move a street:

1. Using a purple pencil, cross out the incorrect location of Winona Street with a series of “Xs.”
2. Redraw Winona Street in its correct Census Block, 1034, and print the street name and address ranges along the moved street.
3. Draw an arrow to the correct location of Winona Street.
4. Print the address breaks where Winona Street intersects Lincoln Street.

Walkthrough: Map Updates



Deleting a Street

Dunlap Street

1. To delete the portion of Dunlap Street that no longer exists, use a purple pencil to “X” out the section that no longer exists.
2. Use double hatch marks to define the extent of the deleted segment when deleting only part of the street.
3. As you can see, a portion of Dunlap Street still exists to the north of Pershing Court.

Carlisle Street

4. To delete Carlisle Street, “X” out the entire street within blocks 3002, 3003, 3006, and 3007 and put a purple line through the name.

Shapefiles

Key Terms and Concepts

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.

North American Datum 1983 – Geocentric datum based on the Geodetic Reference System (GRS) of 1980 with the center of the earth as a reference point.

Change Type Codes – Codes entered by the LUCA participant on the database tables of the shapefiles indicating the type of modification made to the Census Bureau shapefiles.

Metadata – Data that describe other data. The Census Bureau requests that metadata be submitted using the Federal Geographic Data Committee's (FGDC) Content Standard for Digital Spatial Metadata.

Data dictionary – A data dictionary describes the fields included in any data tables associated with your submission. A data dictionary should list all the fields, describe the data in each field, and provide the legal values and their definitions for each field.

All lines layer – Shapefile containing all of the lines contained in the TIGER program in a single layer. Shapefile updates must be made to the all lines layer.

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

Shapefiles

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Shapefiles Overview

- Created to facilitate digital updates
- Requires the use of GIS software
- Contains no Title 13 information
- Provided in Environmental Systems Research Institute (ESRI) shapefile format
- Provided with shapefile layers for legal boundary edits

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Census Bureau's Shapefiles Overview

The Census Bureau provides shapefile layers for legal boundaries that you may edit.

Shapefiles

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Shapefile Setup Guidelines

1. Verify CD-ROM contains the zip file with the shapefiles that contain your entity
 - Shapefiles are county based files
2. Copy and decompress shapefiles to a directory on your hard drive
3. Open the shapefiles in a GIS program

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Shapefile Setup Guidelines

To set up the file:

1. Open the CD to ensure that it contains the zip file with the shapefiles for your entity.
2. Copy and decompress the shapefiles to a directory on your hard drive.
3. Open the shapefiles in a GIS program.

You will primarily be using two shapefiles provided: one is the block layer that shows the census blocks and the other is the all lines layer.

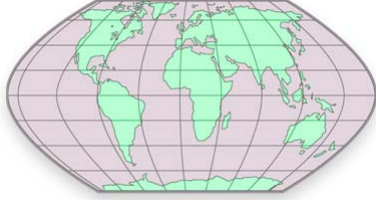
- Contact the Help Desk if you need assistance or more information.

Shapefiles

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Matching Coordinate System

- Provided in Geographic Coordinate System
GCS_NAD83 format
- Can be projected into local coordinate system



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Matching Coordinate Systems

Census Bureau's files are in Geographic Coordinate System
GCS_NAD83 format.

You can transform the Census Bureau's shapefile to your local
coordinate system. However, they will need to be converted back to
GCS_NAD83 format before you return them to the Census Bureau.

Shapefiles

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All Lines Layer Data Dictionary

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

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All Lines Layer Data Dictionary

The data dictionary defines the attribute information for each field in the attribute table of the all lines layer.

The table in the slide displays the fields of the All Lines Layer Data Dictionary.

Shapefile Updates

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Change Type Codes	
<u>Code</u>	<u>Description</u>
AL	Add Line
CN	Change Name
CF	Change Feature Class
DL	Delete Line
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Change Type Codes

There are four change type codes:

1. Add Lines
2. Change Name
3. Change Feature Class
4. Delete Line

Shapefile Updates

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Shapefile Updates – Adding a Feature

1. Add or copy missing features into the All Lines Layer
2. Leave TLID and Fidelity fields blank
3. Enter the appropriate MTFCC
4. Enter the feature name in the FULLNAME field (if any)
5. Enter change code in the CHNG_TYPE field

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Adding a Feature

There are five steps to adding a feature:

1. Add or copy missing features into the All Lines Layer.

In the attribute table:

2. Leave the TLID and Fidelity fields blank.
3. Enter the appropriate MTFCC.
4. Enter the feature name in the FULLNAME field (if any).
5. Enter the change code in the CHNG_TYPE field.

Shapefile Updates

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Shapefile Updates – Correcting a Feature Name

- To change the name of an existing feature:
 1. Edit the FULLNAME field
 2. Enter CN in the CHNG_TYPE field
- To change the MTFCC of an existing feature:
 1. Edit the MTFCC
 2. Enter CF in the CHNG_TYPE field

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Correcting a Feature Name

To correct a feature name:

1. Edit the FULLNAME field.
2. Enter CN in the CHNG_TYPE field.

To change the MTFCC of an existing feature:

1. Edit the MTFCC.
2. When changing the feature class code of a feature, enter CF in the CHNG_TYPE field (i.e., a local road was mistakenly coded as a highway).

Shapefile Updates

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Shapefile Updates – Deleting a Feature

- To delete a feature:
 - Enter DL in the CHNG_TYPE field

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Deleting a Feature

To delete a feature, enter DL in the CHNG_TYPE field for all deleted segments.

Shapefile Updates

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Shapefile Updates – Move or Reshape a Feature

1. Enter DL in the CHNG_TYPE field
2. Add the street at the correct location in the All Lines Layer
3. Enter the appropriate MTFCC
4. Enter Winona Street in the FULLNAME field
5. Enter AL in the CHNG_TYPE field

❖ Updates are temporary until confirmed by the Address Canvass Operation

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Move or Reshape a Feature

To move or reshape a feature:

1. Enter DL in the CHNG_TYPE field.
2. Add the street at the correct location in the All Lines Layer.
3. Enter the appropriate MTFCC.
4. Enter the street name in the FULLNAME field.
5. Enter AL in the CHNG_TYPE field.

Updates are temporary until confirmed by the Address Canvass Operation.

Shapefile Updates

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Sample Attribute Table Updates

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

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Sample Attribute Table Updates

The slide displays the sample updated attribute table to show all of the corrections you just performed:

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

Shapefile Updates

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Digital Road Correction Sample

Copy all features with values in CHNG_TYPE field into new shapefile layer

Road Name Change: In the attribute table, populate the CHNG_TYPE field with 'CN' and the new road name in the FULLNAME field for each affected segment.

New Road Feature: Include all new road segments, in the attribute table. Populate the new road name in the FULLNAME field for all new segments, and populate the CHNG_TYPE field with 'AL.'

Delete Feature: Include all road segments that you want to delete, and populate the CHNG_TYPE field with 'DL' in the attribute table

Road Segments

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Digital Road Correction Sample

Copy all features with values in the CHNG_TYPE field into a new shapefile layer.

The feature updates shapefile will resemble what is shown on the slide.

Shapefile Updates

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Metadata

- Submit appropriate metadata with your file
- The Federal Geographic Data Committee's (FGDC) Content Standard for Digital Spatial Metadata
 - www.fgdc.gov/metadata

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1110100100010010
0010101001001001

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Metadata

Metadata describes the data content, coordinate system/projection, author, source, and other characteristics of GIS files, and are critical for Census Bureau staff to efficiently and accurately process files.

You must submit the appropriate metadata with your file.

Shapefile Updates

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Metadata

- Citation
- Description
- Time period of content
- Spatial domain
- Point of contact Data quality information
- Spatial reference information
- Entity and attribute information
- For more information visit the FGDC website at www.fgdc.gov/metadata

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Metadata

You must complete the following sections of the Federal Geographic Data Committee's (FGDC) metadata form:

- Citation
- Description
- Time period of content
- Spatial domain
- Point of contact
- Data quality information
- Spatial reference information
- Entity and attribute information

Shapefile Updates

Metadata (cont.)

For more information visit the FGDC website at www.fgdc.gov/metadata.

If you edit the existing fields or add fields to the attribute table, you must submit an updated data dictionary either as part of the metadata or as a separate file.

If you do not modify the existing fields in the Census Bureau's original attribute table, you are not required to submit a data dictionary.

Shapefile Updates

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Shapefile Submission

1. Name layer:
LUCA_2010_<entity ID>_FEAUpdates.shp
2. Include appropriate metadata
3. Compress all updated materials into ZIP* file
called: LUCA_2010_<entity ID>_Return.ZIP
4. Burn file to CD-ROM
5. Save back-up copy for your jurisdiction

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

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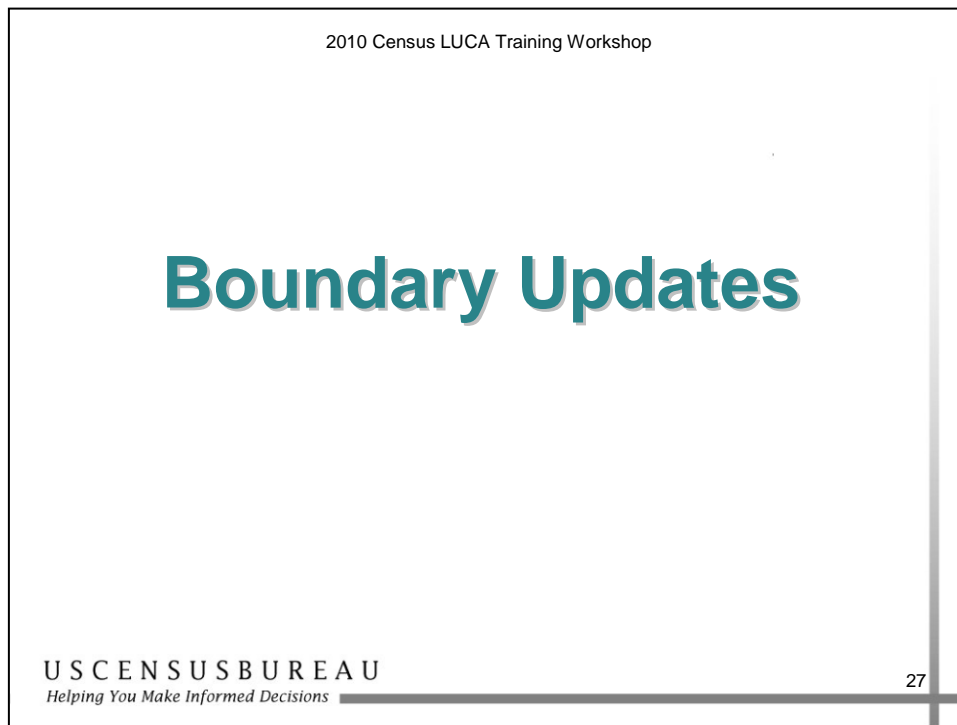
Shapefile Submission

1. Name the new shapefile: LUCA_2010_ <your entity ID>_FEAUpdates.shp.
2. Include appropriate metadata.
3. Compress all updated materials, Shapefile, and Metadata into one ZIP formatted file* called: LUCA_2010_ <your entity ID>_Return.ZIP.
4. Burn the file to a CD-ROM or DVD.
5. Save a back-up copy for yourself.

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

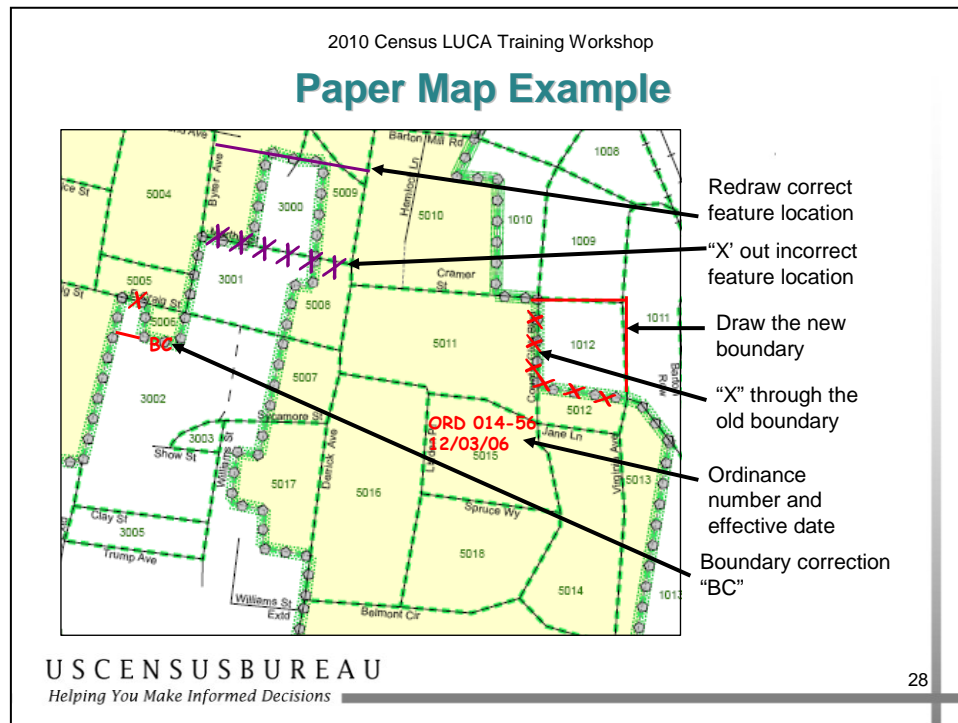
Refer to your User Guide for detailed instructions.

Boundary Updates



If your government provides legal boundary updates during LUCA, the Census Bureau will not contact your government to participate in the 2008 Boundary and Annexation Survey (BAS). You must register to participate in the LUCA program before October 31, 2007 to receive your 2008 BAS materials with your LUCA program materials.

Boundary Updates



Paper Map Boundary Changes and Corrections

To update boundaries on the paper map:

1. Draw the boundary in its correct location and cross out the portion of the old boundary using a string of red "X's."
 2. For each annexation or deannexation that you draw on the map, add the ordinance number or other legal identifier of the action authorizing the change, along with the effective date.
 3. Complete the red signature box found in the lower right corner of the Census Bureau map.
- For each location where you correct the accuracy of the boundary, print the letters "BC" for "boundary correction" within the corrected area.

Boundary Updates

Paper Map Boundary Changes and Corrections (cont.)

- If a boundary is shown as coincident with a feature, but the feature location is not shown correctly, use a purple pencil to cross out the incorrect feature location and redraw the feature in purple pencil in the correct location. There is no need to make any updates to the boundary.

Boundary Updates

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Boundary and Annexations Survey Form

- Required to process your boundary updates
- Form included with your LUCA materials

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Boundary and Annexations Survey Form

This form is included with your LUCA materials and is required for the Census Bureau to process boundary updates.

Boundary Updates

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Digital Boundary Changes and Corrections

- Digital BAS Respondent Guide and form are included with your LUCA materials

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Shapefile Boundary Changes and Corrections

Submit boundary corrections using digital files as described in the Digital BAS Respondent Guide included with your LUCA materials.

Exercise: Map Updates

Instructions

1. This is an individual exercise.
2. Read the scenarios on the following page.
3. For each scenario, determine the appropriate change to the Census Bureau map and record that change on the map provided.
4. You have 15 minutes to complete this exercise.

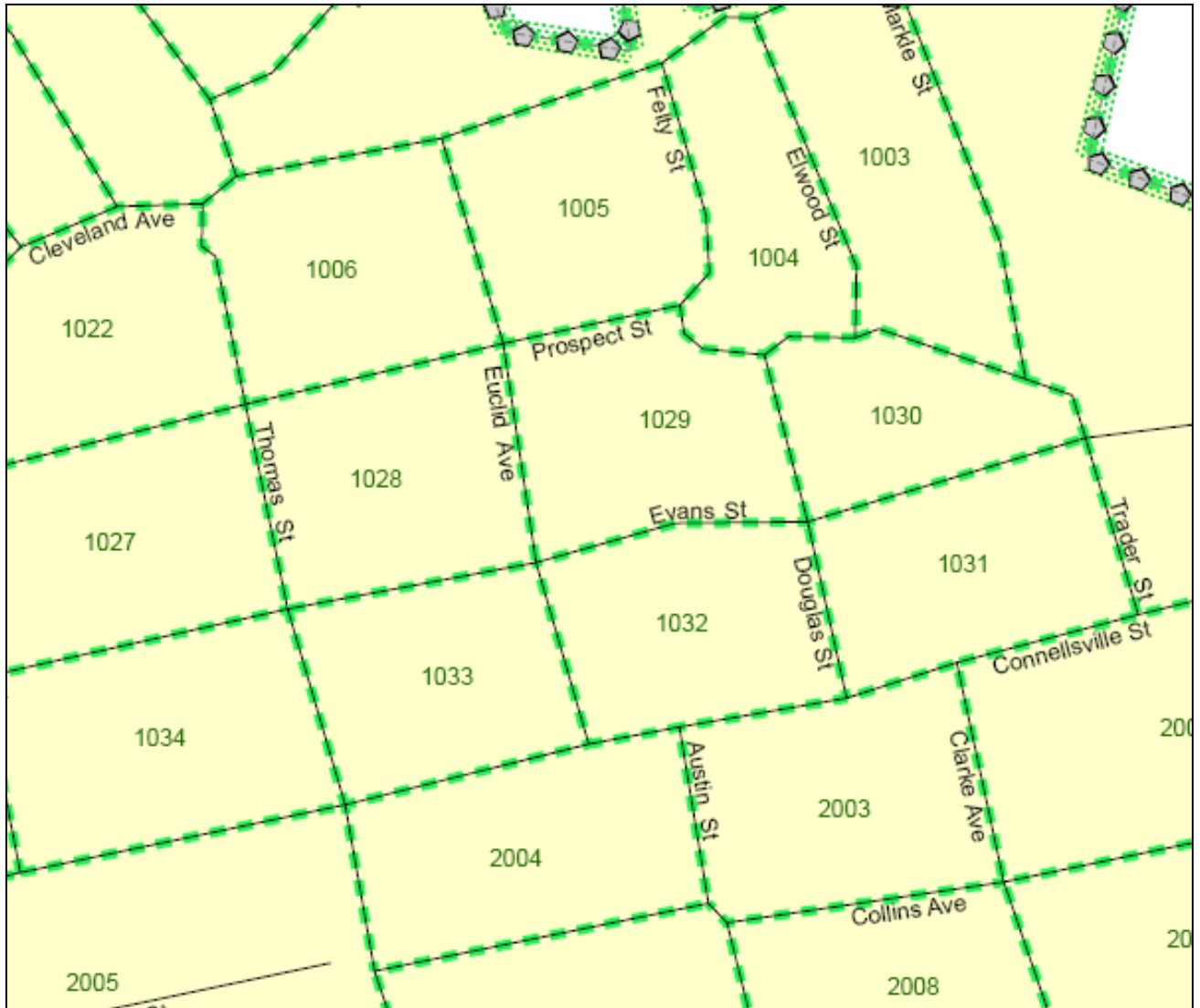
Exercise: Map Updates

Scenarios

1. Thomas Street is actually Thompson Street.
2. Oak Street is a new street in census block 1006 that runs north to south from Cleveland Avenue to Prospect Street, halfway between Euclid Avenue on the east and Thompson Street on the west.
 - a. The address ranges are 100 – 106 on the east and 101-107 on the west of Oak Street.
 - b. The address breaks are 503 and 505 on the north at the intersection with Cleveland Avenue and 804 and 806 on the south at the intersection with Prospect Street.
3. The city demolished the houses on Felty Street located south of Cleveland Avenue and north of Prospect Street, to construct a new park. Felty Street no longer exists.
4. Austin Street, shown between census blocks 2003 and 2004, is actually located in census block 1032 directly north of where it is shown on the map.
 - a. The address ranges are 100 – 104 on the east and 101 – 105 on the west of Austin Street.
 - b. The address breaks are 703 on the west and 705 on the east at the intersection with Evans Street and 1104 on the west and 1106 on the east at the intersection with Connellsville Street.

Exercise: Map Updates

Map Corrections



Summary

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Summary

- Map updates may be made in paper form or digitally.
- Changes made to maps should be reflected on the Address List, and vice versa.
- LUCA participants who register for the LUCA program by October 31, 2007 will not be asked to participate in the 2008 BAS program
- The User Guide contains complete directions for all updates. Additionally, the Census Bureau Help Desk is available, as needed.

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Remember, map updates may be in paper form or electronic, and changes made to maps must also be reflected on the Address List and vice versa.

If you have any questions, please refer to your User Guide or call the Census Bureau help desk. Remember, help is just a phone call away!