

**Request for Non-Substantive Change to the  
Boundary and Annexation Survey  
Office of Management and Budget Control No. 0607-0151  
U.S. Department of Commerce  
U.S. Census Bureau**

## Purpose

The U.S. Census Bureau conducts the Boundary and Annexation Survey (BAS) annually to collect information about selected legally defined geographic areas. BAS provides tribal, state, and local governments an opportunity to review the Census Bureau's legal boundary data to ensure the Census Bureau has the correct boundary, name, and status. The Census Bureau uses the boundary information collected during BAS to tabulate data for the decennial and economic censuses, and for annual estimates and surveys such as the American Community Survey (ACS) and the Population Estimates Program. Title 13, Section 6, United States Code authorizes this survey.

Approved on November 30, 2021, the current BAS Office of Management and Budget (OMB) collection will expire on November 30, 2024. This non-substantive change (NSC) request is to provide the updated materials used for the 2023 BAS. Refer to [Table 2: 2023 BAS Material Changes](#) for a complete list of updates made to the BAS materials.

## Background

There are no substantive changes to BAS resulting from these modifications. The updated materials included do not alter the content or objective of BAS. The changes made were necessary to reflect the most current BAS cycle. Refer to [Table 1: 2023 BAS Material Descriptions](#) for a list and brief description of each BAS materials included with this NSC.

## Burden

The burden of the 2023 BAS is unchanged by this update.

## Attachments

**Table 1: 2023 BAS Material Descriptions**

BAS Material	Description
BAS-1L	To BAS contacts of governments that are not in a consolidated BAS (CBAS) or state BAS agreement.
BAS-2L	To BAS contacts of tribal governments.
BAS-3L	To the Highest Elected Official (HEO) of governments in a CBAS or state BAS agreement.
BAS-4L	To the BAS contact of governments not currently in a CBAS agreement but their county is.
BAS-5L	To the BAS contact of governments partially in a CBAS agreement. Entity in more than one county and one or more counties participates in CBAS (Partial CBAS).
BAS-6L	To CBAS county contacts.
BAS-ARF	Annual Response Form (ARF) included with the annual response letters.
BAS-E-7L	Courtesy copy of email sent to governments that receive the BAS-E-3L email to notify the Tribal Chair (TC)/HEO about the BAS but that their county submits to BAS on their behalf.
BAS-E-NRFU1	BAS non-response follow up (NRFU) email (true non-response).
BAS-E-NRFU2	BAS NRFU email to governments that responded they have changes to report, but have not yet submitted those changes.
BAS-E-SWIM-HasAcct	Email to respondents that request digital BAS materials or report they will provide updates digitally and the email address has a Secure Web Incoming Module (SWIM) account associated with it already.
BAS-E-SWIM-Token	SWIM token email to respondents that request digital BAS materials or report they will provide updates digitally and there is not a SWIM account associated with the email.
BAS Partnership Toolbox How-to Guide	Instructions for participating in BAS using the BAS Partnership Toolbox for ArcGIS Desktop.
BAS GUPS How-to Guide	Instructions for participating in BAS using the Geographic Update Partnership Software (GUPS).
BAS Paper How-to Guide	Instructions for participating in BAS using paper maps.
BASSC-1L	BAS State Certification (BASSC) State Certifying Official (SCO) Form.
BASSC-E-1L	BAS State Certification Governor's letter.

BAS Material	Description
BASSC-E-2L-CCD	BAS State Certification State Certifying Official email for Census County Divisions (CCD)s States.
BASSC-E-2L-MCD	BAS State Certification State Certifying Official email for Minor Civil Division (MCD) States.
BASSC-E-3L	BAS State Certification Discrepancy Add letter.
BASSC-E-4L	BAS State Certification Discrepancy Remove letter.
BASSC-E-NRFU1	BAS State Certification Governor's NRFU email.
BASSC-E-NRFU2	BAS State Certification State Certifying Official NRFU email.
BAS State Certification How-to Guide	Instructions for participating in BAS State Certification.

**Table 2: 2023 BAS Material Changes**

Reported Change	Material	Location in Material	Description/Summary of Change(s)
Updated acronyms	All submitted materials	Throughout Documents	Updated acronyms so that the acronym is spelled out in the first use and used only as an acronym through the rest of the document. Acronyms were removed completely if only used once. Acronyms were removed from document titles.
Updated links and references for various program dates	All Documents	Throughout Documents	Updated any references or links containing 2022 to 2023.
Removal of BAS Forms from Survey Materials	BAS1, BAS2, BAS3, BAS5	N/A	The BAS forms have been removed and the contents were incorporated in other survey materials. Participants are able to review their government name and status information, list of governments in their jurisdiction, and record their legal changes on the paper maps or digital files provided to them.
Updated Action Steps to include BAS ARF	BAS-1L, BAS-2L, BAS-4L, BAS-5L, BAS-6L	Action Step, Second Bullet	Replaced the second bullet with instructions for using the BAS ARF.

Reported Change	Material	Location in Material	Description/Summary of Change(s)
Removed Overprinting	BAS-1L, BAS-2L, BAS-4L, BAS-5L, BAS-6L	Action Step	Removed overprinting of contact information, information is included in the BAS ARF and online interactive BAS ARF.
Updated Action Step for clarity	BAS-1L, BAS-2L, BAS-3L, BAS-4L, BAS-5L, BAS-6L	Action Step, First Bullet	Reworded first bullet to add clarity for the online interactive BAS ARF.
Updated Action Step for clarity	BAS-3L	Action Step, Second Bullet	Reworded second bullet to clarify instructions for emailing contact updates.
Reworded for clarity	BAS-E-7L	Action Steps	Removed extra wording "or email <geo.bas@census.gov>" for clarity.
Added line to contact information	BAS-E-7L	Action Steps, Second Bullet	Added phone line to the overprinted contact information in the second bullet.
Added clarifying sentence	BAS-E-NRFU1	Introductory Paragraph	Added sentence to disregard email if they have already responded to the survey.
Added clarifying sentence	BAS-E-NRFU2	Introductory Paragraph	Added sentence to disregard email if they have already submitted updated.
Removed paragraph about responding with no changes.	BAS-E-SWIM-HasAcct, BAS-E-SWIM-Token	Action Steps, First Bullet	Removed the paragraph asking to respond with no changes. This paragraph was removed from all other materials last year.
Added clarifying sentence	BAS-E-SWIM-HasAcct, BAS-E-SWIM-Token	Introductory Paragraph	Added sentence to disregard email if they have already submitted updates.
New Material	BAS-ARF	N/A	Added BAS-ARF for participants to fill out and email back to the Census Bureau. Participants were previously instructed in the letter to provide this information via email without the use of a form.
Updated screenshots	BAS GUPS How-to Guide	Throughout Document	Updated screenshots throughout the document to reflect design updates to the user interface.

Reported Change	Material	Location in Material	Description/Summary of Change(s)
Reorganized arrangement and style of material	BAS GUPS How-to Guide	Throughout Document	Standardized section headings, applied consistent styles to the content within the guide, and reorganized content in the sections to promote better flow of instruction.
Reworded for clarification	BAS GUPS How-to Guide	Chapter 1	Reworded last sentence of the paragraph to better explain why they are more accurate than paper submissions.
Added link and language for the online ARF	BAS GUPS How-to Guide	Section 1.1	Added language and link to send participants to the online ARF for CD/DVD requests.
Removed language pointing to SWIM website software requirements	BAS GUPS How-to Guide	Section 1.1.1	Removed sentence stating that table contains software requirements for SWIM. These requirements were removed from the table last year but the wording was left.
Added image	BAS GUPS How-to Guide	Section 2.1	Added image of the QGIS icon.
Standardized references to BAS Partnership Shapefiles	BAS GUPS How-to Guide	Throughout Document	Updated all references to the BAS Partnership Shapefiles to be worded the same.
Updated list of supported operating systems	BAS GUPS How-to Guide	Section 1.1.1, Table 1	Updated list of supported operating systems to remove Windows 8.1® and add Windows 11®.
Removed reference to ftp2 site	BAS GUPS How-to Guide	Section 2.2.3	Removed reference to the Census Bureau ftp2 site since we did not provide instructions for how to do so.
Moved Census Designated Places (CDPs) in bulleted list	BAS GUPS How-to Guide	Section 2.3	Moved CDPs from the first bullet and move to its own bullet since they are not a legal geography.
Updated tool references	BAS GUPS How-to Guide	Throughout Document	Updated all tool references to remove the word “button” and refer to it as a “tool”.
Added instructions for modifying CDPs	BAS GUPS How-to Guide	Section 3.6	Added section to provide instructions for modifying CDPs in GUPS for BAS.

Reported Change	Material	Location in Material	Description/Summary of Change(s)
Reworded to remove duplicate information	BAS GUPS How-to Guide	Section 3.8	Reworded introductory paragraph to remove information already provided in the numbered list below.
Updated to clarify guide for ArcGIS Desktop	BAS Partnership Toolbox How-to Guide	Throughout Document	Updated wording to clarify that this toolbox and guide is written for ArcGIS Desktop, not ArcPro.
Updated screenshots	BAS Partnership Toolbox How-to Guide	Throughout Document	Updated screenshots throughout the document to reflect updated tool names within toolbox.
Reorganized arrangement and style of material	BAS Partnership Toolbox How-to Guide	Throughout Document	Standardized section headings, applied consistent styles to the content within the guide, and reorganized content in the sections to promote better flow of instruction.
Added section for ArcGIS Deprecation	BAS Partnership Toolbox How-to Guide	Section 1.1	Added section for ArcGIS Deprecation to inform participants of the decommissioning of ArcGIS Desktop and the transition to ArcPro.
Reworded for clarification	BAS Partnership Toolbox How-to Guide	Section 1.2	Reworded number 4 to clarify that a correction will not be made without proper attribution.
Standardized references to BAS Partnership Shapefiles	BAS Partnership Toolbox How-to Guide	Throughout Document	Updated all references to the BAS Partnership Shapefiles to be worded the same.
Changed tool name	BAS Partnership Toolbox How-to Guide	Throughout Document	The "Census Data Download tool" was renamed to the "Project Setup tool," the "Create Changes tool" was renamed to the "Create Additional Changes tool," and the "Format Working MXD tool" was renamed to the "Reformat Working MXD tool." All references to these tools were updated throughout document.
Added table for change types	BAS Partnership Toolbox How-to Guide	Section 2.3.4, Table 2	Table added for distinction between the types of changes allowed in the Project Setup tool, shows accepted legal and non-legal geographies.
Expanded instructions for the Project Setup tool	BAS Partnership Toolbox How-to Guide	Section 2.3.4	Added additional instructions for running the Project Setup tool to clarify available inputs and nuances in running the tool.

Reported Change	Material	Location in Material	Description/Summary of Change(s)
Updated input list options	BAS Partnership Toolbox How-to Guide	Section 2.4	Updated input list in steps 3 and 4 to reflect updates made to tool.
Reworded the first paragraph for clarification	BAS Partnership Toolbox How-to Guide	Section 2.6	Reworded the first paragraph including the description and purpose of the tool for clarification.
Added sentence for clarification	BAS Partnership Toolbox How-to Guide	Section 3.3	Added sentence to better describe purpose of numbered list.
Added sentence for clarification	BAS Partnership Toolbox How-to Guide	Section 3.4	Added sentence to better describe purpose of numbered list.
Added sentence	BAS Partnership Toolbox How-to Guide	Section 3.5.2	Added section stating that a change will not be made without proper attribution.
Removed references to paper BAS forms	BAS Paper How-to Guide	Throughout Document	Removed all references to and instructions for filling out the “BAS forms” as forms are no longer mailed with the paper map packages.
Removed instructions for mailing form	BASSC-1L	Fourth Box	Removed instructions to mail the completed form to the U.S. Census Bureau and removed the mailing address.
Removed text for clarity	BASSC-E-1L, BASSC-E-2L-CCD, BASSC-E-2L-MCD	Third Paragraph	Removed “the state of” to avoid state vs. commonwealth, the state or commonwealth name will be overprinted
Added date	BASSC-E-2L-CCD, BASSC-E-2L-MCD, BASSC-E-NRFU2	Third Paragraph	Added date of “Friday, March 10, 2023” for the return listings deadline.
Reworded for clarity	BASSC-E-NRFU1	Third Paragraph	Changed “The previous email” to “Attached” as the referenced form will now be attached to the email.
Added date	BASSC-E-NRFU1	Fourth Paragraph	Added date of “Friday, November 11, 2022” for the completed SCO appointment form return date.
Added overprinting	BASSC-E-NRFU2	Top of email	Added date overprinting to match other materials.

Reported Change	Material	Location in Material	Description/Summary of Change(s)
Removed reference to strong law states	BAS State Certification How-to Guide	Chapter 1	Removed reference to strong law states. Reworded section to better describe states with reporting laws.
Updated wording for clarification on legal change dates	BAS State Certification How-to Guide	Throughout Document	Removed “as of January 1, 2022” and replaced with “as reported through the 2022 BAS” to reflect that we add changes effective after January 1 to the database after the ACS benchmark.



BAS-1L  
OMB Control No.: 0607-0151  
Expiration Date: 11-30-2024



UNITED STATES DEPARTMENT OF COMMERCE  
U.S. Census Bureau  
Office of the Director  
Washington, DC 20233-0001

A Message from the Director, U.S. Census Bureau:

The U.S. Census Bureau is now conducting the Boundary and Annexation Survey (BAS). Do not miss this opportunity to participate in BAS to ensure that the Census Bureau has current and accurate legal boundary, name, and status information for your government. Participants may also provide updates to census designated places.

BAS is a voluntary survey. We strongly encourage your participation in BAS for the following reasons:

- The Census Bureau uses this boundary information for data collection, tabulation, and dissemination for the decennial census, American Community Survey (ACS), Population Estimates Program (PEP), and many other censuses and surveys.
- The federal government allocates more than \$675 billion in federal funds annually for health, welfare, infrastructure, education, and other federal programs and services. Correct boundaries ensure governments receive funds appropriately and have the best data available for their decision-making processes.

**Action Step:**

**Review your government's boundary and respond to BAS using one of the options below.** If you already responded to this year's BAS, then no additional action is required.

- Respond online using the interactive BAS Annual Response Form. The form includes all resources and instructions necessary to review boundaries and respond to BAS.  
Interactive BAS Annual Response Form: <[www.census.gov/geo/partnerships/bas/](http://www.census.gov/geo/partnerships/bas/)>.
- Complete the attached BAS Annual Response Form. Scan and email the form to <[geo.bas@census.gov](mailto:geo.bas@census.gov)>. Please include your BAS ID and "Annual Response" in the subject line.

**TRAINING OPPORTUNITIES**

The Census Bureau is offering training webinars for BAS. The webinar schedule and registration instructions are on the BAS Webinars webpage at <[www.census.gov/programs-surveys/bas/events.html](http://www.census.gov/programs-surveys/bas/events.html)>.

### KEY DATES

- January 1** Boundary updates must be legally in effect on or before this date to be reported in the current survey year.
- March 1** First BAS deadline - Boundary updates returned by this date will be reflected in the ACS and PEP data and in next year's BAS materials.
- May 31** Final BAS deadline - Boundary updates returned by this date will be reflected in next year's BAS materials.

### CONTACT INFORMATION

Email: <[geo.bas@census.gov](mailto:geo.bas@census.gov)>

Phone: 1-800-972-5651

Website: <[www.census.gov/programs-surveys/bas.html](http://www.census.gov/programs-surveys/bas.html)>

Thank you for your participation in BAS.

BAS-2L  
OMB Control No.: 0607-0151  
Expiration Date: 11-30-2024



UNITED STATES DEPARTMENT OF COMMERCE  
U.S. Census Bureau  
Office of the Director  
Washington, DC 20233-0001

A Message from the Director, U.S. Census Bureau:

The U.S. Census Bureau is now conducting the Boundary and Annexation Survey (BAS). Do not miss this opportunity to participate in BAS to ensure that the Census Bureau has current and accurate legal boundary, name, and status information for your tribal government. Participants may also provide updates to census designated places. The National American Indian Housing Council will also notify its members about BAS.

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- The Census Bureau uses this boundary information for data collection, tabulation, and dissemination for the decennial census, American Community Survey (ACS), and many other censuses and surveys.
- The federal government allocates more than \$675 billion in federal funds annually for health, welfare, infrastructure, education, and other federal programs and services. Correct boundaries ensure governments receive funds appropriately and have the best data available for their decision-making processes.

**Action Step:**

**Review your government's boundary and respond to BAS using one of the options below.** If you already responded to this year's BAS, then no additional action is required.

- Respond online using the interactive BAS Annual Response Form. The form includes all resources and instructions necessary to review boundaries and respond to BAS.  
Interactive BAS Annual Response Form: <[www.census.gov/geo/partnerships/bas/](http://www.census.gov/geo/partnerships/bas/)>.
- Complete the attached BAS Annual Response Form. Scan and email the form to <[geo.bas@census.gov](mailto:geo.bas@census.gov)>. Please include your BAS ID and "Annual Response" in the subject line.

**TRAINING OPPORTUNITIES**

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### KEY DATES

- January 1** Boundary updates must be legally in effect on or before this date to be reported in the current survey year.
- March 1** First BAS deadline - Boundary updates returned by this date will be reflected in the ACS data and in next year's BAS materials.
- May 31** Final BAS deadline - Boundary updates returned by this date will be reflected in next year's BAS materials.

### CONTACT INFORMATION

Email: <[geo.bas@census.gov](mailto:geo.bas@census.gov)>

Phone: 1-800-972-5651

Website: <[www.census.gov/programs-surveys/bas.html](http://www.census.gov/programs-surveys/bas.html)>

Thank you for your participation in BAS.

BAS-3L  
OMB Control No.: 0607-0151  
Expiration Date: 11-30-2024



UNITED STATES DEPARTMENT OF COMMERCE  
U.S. Census Bureau  
Office of the Director  
Washington, DC 20233-0001

A Message from the Director, U.S. Census Bureau:

The U.S. Census Bureau is now conducting the Boundary and Annexation Survey (BAS). Your state, county, or county equivalent government collaborates with the Census Bureau to provide a BAS response on your government's behalf. The Consolidated BAS (CBAS) representative reports all legal boundary, name, and status updates to the Census Bureau. Please work with your CBAS contact to ensure all boundary changes for your government are reported to BAS. Participants may also provide updates to census designated places.

BAS is a voluntary survey. We strongly encourage your participation in BAS for the following reasons:

- The Census Bureau uses this boundary information for data collection, tabulation, and dissemination for the decennial census, American Community Survey (ACS), Population Estimates Program (PEP), and many other censuses and surveys.
- The federal government allocates more than \$675 billion in federal funds annually for health, welfare, infrastructure, education, and other federal programs and services. Correct boundaries ensure governments receive funds appropriately and have the best data available for their decision-making processes.

**Action Step:**

**Review your government's boundary and contact information and respond to BAS using one of the options below.**

- Respond online using the interactive BAS Annual Response Form. The form includes all resources and instructions necessary to review boundaries and update contact information. Interactive BAS Annual Response Form: <[www.census.gov/geo/partnerships/bas/](http://www.census.gov/geo/partnerships/bas/)>
- Review the contact information on the next page and email any updates to <[geo.bas@census.gov](mailto:geo.bas@census.gov)>. Please include your BAS ID and "Annual Response" in the subject line.

**HEO CONTACT**

<FULL\_NAME>  
<POSITION>  
<DEPT\_NAME>  
<MAILING\_ADDRESS>  
<CITY\_STATE\_ZIP>  
<PHONE>  
<EMAIL>

**GOVERNMENT CONTACT**

<FULL\_NAME>  
<POSITION>  
<DEPT\_NAME>  
<MAILING\_ADDRESS>  
<CITY\_STATE\_ZIP>  
<PHONE>  
<EMAIL>

**CONTACT INFORMATION**

Please direct questions to your CBAS contact and work with them to ensure all boundary changes for your government are reported to BAS.

**<COUNTY\_NAME|SAD> OR <NAME>**

“Name:” <FULL\_NAME>  
“Position:” <POSITION>  
“Department:” <DEPT\_NAME>  
“Mailing Address:” <MAILING ADDRESS>  
“City, State, Zip, Zip+4:” <CITY\_STATE\_ZIP>  
“Phone:” <PHONE>  
“Email:” <EMAIL>

General BAS questions can be directed to:

Email: <[geo.bas@census.gov](mailto:geo.bas@census.gov)>  
Phone: 1-800-972-5651  
Website: <[www.census.gov/programs-surveys/bas.html](http://www.census.gov/programs-surveys/bas.html)>

Thank you for your participation in BAS.

BAS-4L  
OMB Control No.: 0607-0151  
Expiration Date: 11-30-2024



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U.S. Census Bureau  
Office of the Director  
Washington, DC 20233-0001

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Your county or county equivalent government currently participates in a Consolidated BAS (CBAS) agreement. If you prefer your county or county equivalent government provide the report on behalf of your government, please email <[geo.bas@census.gov](mailto:geo.bas@census.gov)> to request to join the CBAS agreement. Include your 11-digit BAS ID in the subject of the email.

BAS is a voluntary survey. We strongly encourage your participation in BAS for the following reasons:

- The Census Bureau uses this boundary information for data collection, tabulation, and dissemination for the decennial census, American Community Survey (ACS), Population Estimates Program (PEP), and many other censuses and surveys.
- The federal government allocates more than \$675 billion in federal funds annually for health, welfare, infrastructure, education, and other federal programs and services. Correct boundaries ensure governments receive funds appropriately and have the best data available for their decision-making processes.

**Action Step:**

**Review your government's boundary and respond to BAS using one of the options below.** If you already responded to this year's BAS, then no additional action is required.

- Respond online using the interactive BAS Annual Response Form. The form includes all resources and instructions necessary to review boundaries and respond to BAS.  
Interactive BAS Annual Response Form: <[www.census.gov/geo/partnerships/bas/](http://www.census.gov/geo/partnerships/bas/)>.
- Complete the attached BAS Annual Response Form. Scan and email the form to <[geo.bas@census.gov](mailto:geo.bas@census.gov)>. Please include your BAS ID and "Annual Response" in the subject line.

## TRAINING OPPORTUNITIES

The Census Bureau is offering training webinars for BAS. The webinar schedule and registration instructions are on the BAS Webinars webpage at <[www.census.gov/programs-surveys/bas/events.html](http://www.census.gov/programs-surveys/bas/events.html)>.

## KEY DATES

- January 1** Boundary updates must be legally in effect on or before this date to be reported in the current survey year.
- March 1** First BAS deadline - Boundary updates returned by this date will be reflected in the ACS and PEP data and next year's BAS materials.
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## CONTACT INFORMATION

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Phone: 1-800-972-5651

Website: <[www.census.gov/programs-surveys/bas.html](http://www.census.gov/programs-surveys/bas.html)>

Thank you for your participation in BAS.



BAS-5L  
OMB Control No.: 0607-0151  
Expiration Date: 11-30-2024



UNITED STATES DEPARTMENT OF COMMERCE  
U.S. Census Bureau  
Office of the Director  
Washington, DC 20233-0001

A Message from the Director, U.S. Census Bureau:

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Your government is in more than one county or county equivalent government, and at least one responds to BAS for a portion of your government. Please respond to BAS for the portion of your government located in <COUNTY\_NAMELSAD>.

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Phone: 1-800-972-5651

Website: <[www.census.gov/programs-surveys/bas.html](http://www.census.gov/programs-surveys/bas.html)>

Thank you for your participation in BAS.



FORM **BAS-ARF**  
(09-2022)

# BOUNDARY AND ANNEXATION SURVEY ANNUAL RESPONSE FORM

OMB No. 0607-0151 Approval Expires: 11/30/2024

Use the resources on the Boundary and Annexation Survey (BAS) website <[www.census.gov/programs-surveys/bas.html](http://www.census.gov/programs-surveys/bas.html)> to review the boundary data for your government. Select a response and planned submission method below, then review the provided contact information.

**RESPONSE:** Do you have boundary changes to report?

- Yes, we have boundary changes to report.
- No, we do not have boundary changes to report. The Census Bureau's boundary data is correct.

**SUBMISSION METHOD:** If you have boundary changes to report, select your planned submission method.

- Download** - We will download the Geographic Update Partnership Software (GUPS) **OR** we will download the Census Bureau shapefiles. (Preferred digital option)
- CD/DVD** - The Census Bureau will mail you the Geographic Update Partnership Software (GUPS) and shapefiles on CD/DVD.
- Paper Maps** - The Census Bureau will mail you large format paper maps.

**CONTACT INFORMATION:** Review and update the contact information for your government's Tribal Chair (TC)/Highest Elected Official (HEO) and BAS Contact. The BAS contact provided should be a representative from your government and not a state or county contact who submits on your behalf. This person is the point of contact for questions about your government's boundaries and will receive future BAS correspondence.

Our records indicate the **TC/HEO** contact is:

Our records indicate the **BAS** contact is:

Name of person filling out this form:

Position:

Date:

Scan and email the completed form to <[geo.bas@census.gov](mailto:geo.bas@census.gov)>. To respond over the phone, call 1-800-972-5651.

## **BAS 7L- TC/HEO CC-Email <Overprinting> and Text**

**Subject: YYYY Boundary and Annexation Survey – TC/HEO Courtesy Copy – BAS ID: <BAS\_ID>**

<DATE>

“BAS ID:” <BAS\_ID>, <NAME> <ENTITY\_LSAD\_PUB\_NAME>

**This is a courtesy copy to the tribal chair or highest elected official.**

The U.S. Census Bureau is now conducting the Boundary and Annexation Survey (BAS). Do not miss this opportunity to participate in BAS to ensure that the Census Bureau has current and accurate boundary, legal name, and status information for your government. Participants may also provide updates to census designated places.

BAS is a voluntary survey. We strongly encourage your participation in BAS for the following reasons:

- The Census Bureau uses this boundary information for data collection, tabulation, and dissemination for the decennial census, American Community Survey (ACS), Population Estimates Program (PEP), and many other censuses and surveys.
- The federal government allocates more than \$675 billion in federal funds annually for health, welfare, infrastructure, education, and other federal programs and services. Correct boundaries ensure governments receive funds appropriately and have the best data available for their decision-making processes.

### **Action Steps:**

- Verify that the BAS contact has responded to the survey. The BAS announcement email was recently sent to this BAS contact:

Name: <FULL\_NAME>  
Position: <POSITION>  
Department: <DEPT\_NAME>  
Mailing Address: <MAILING\_ADDRESS>  
City, State, Zip, Zip+4: <CITY\_STATE\_ZIP>  
Phone: <PHONE>  
Email: <EMAIL>

- Review and update your contact information. Reply to this email with updates. Please include the 11-digit BAS ID number listed at the top of this email in the subject line of your message.

Name: <FULL\_NAME>  
Position: <POSITION>  
Department: <DEPT\_NAME>  
Mailing Address: <MAILING\_ADDRESS>  
City, State, Zip, Zip+4: <CITY\_STATE\_ZIP>  
Term Expiration Date: <TERM\_EXP\_DATE>  
Election Cycle: <HEO\_ELECTION\_CYCLE>  
Phone: <PHONE>

## KEY DATES

- January 1** Boundary updates must be legally in effect on or before this date to be reported in the current survey year.
- March 1** First BAS deadline - Boundary updates returned by this date will be reflected in the ACS and PEP data and in next year's BAS materials.
- May 31** Final BAS deadline - Boundary updates returned by this date will be reflected in next year's BAS materials.

## CONTACT INFORMATION

Email: <[geo.bas@census.gov](mailto:geo.bas@census.gov)>

Phone: 1-800-972-5651

Website: <[www.census.gov/programs-surveys/bas.html](http://www.census.gov/programs-surveys/bas.html)>

Thank you for your participation in BAS.

**Email: BAS-E-NRFU1 <overprinting> and Text – BAS Non-Response Follow Up (True Non-Response)**

**Subject: YYYY Boundary and Annexation Survey (BAS)-March 1, YYYY Deadline – BAS ID: <BAS\_ID>**

The U.S. Census Bureau is sending this email to alert you that your government has not yet responded to the Boundary and Annexation Survey (BAS). You should have received an email and letter requesting your government's participation. You still have time to participate in the survey.

If you already responded online or mailed your response, you can disregard this email.

**Action Step:**

- **Review your government's boundary and respond to BAS** using our interactive BAS Annual Response Form. Additional details and instructions are found on the form.

[Click here to go to the Annual Response Form](#)

**TRAINING OPPORTUNITIES**

The Census Bureau is offering training webinars for BAS. The webinar schedule and registration instructions are on the [BAS Webinars webpage](#).

**KEY DATES**

- |                  |  |
|------------------|--|
| <b>January 1</b> | Boundary updates must be legally in effect on or before this date to be reported in the current survey year.   |
| <b>March 1</b>   | First BAS deadline - Boundary updates returned by this date will be reflected in the American Community Survey and Population Estimates Program data and in next year's BAS materials. |
| <b>May 31</b>    | Final BAS deadline - Boundary updates returned by this date will be reflected in next year's BAS materials.  |

**CONTACT INFORMATION**

Email: <[geo.bas@census.gov](mailto:geo.bas@census.gov)>

Phone: 1-800-972-5651

Website: <[www.census.gov/programs-surveys/bas.html](http://www.census.gov/programs-surveys/bas.html)>

Thank you for your participation in BAS.



**BAS Email: BAS-E-NRFU2 - BAS- Yes Change, No Return - Email Template**

**Subject: YYYY Boundary and Annexation Survey (BAS)--March 1, YYYY Deadline – BAS ID: <BAS\_ID>**

Thank you for your recent response to the Boundary and Annexation Survey (BAS). Your government indicated there are boundary changes to report, but we have not received these changes. You still have time to submit updates for BAS.

If you already submitted updates through the Secure Web Incoming Module or mailed your response, you can disregard this email.

**Action Step:**

- **Prepare and submit boundary updates.** On the BAS website, you will find resources and detailed instructions for submitting updates to BAS digitally or using paper maps.

Please respond to the BAS with a “No Changes” response if, after reviewing your government’s boundaries, you determine there are no boundary changes to report. If you do not respond, we will contact your government to confirm your boundary change status.

[Click here to go to the Annual Response Form](#)

**TRAINING OPPORTUNITIES**

The Census Bureau is offering training webinars for BAS. The webinar schedule and registration instructions are on the [BAS Webinars webpage](#).

**KEY DATES**

- |                  |  |
|------------------|--|
| <b>January 1</b> | Boundary updates must be legally in effect on or before this date to be reported in the current survey year.   |
| <b>March 1</b>   | First BAS deadline - Boundary updates returned by this date will be reflected in the American Community Survey and Population Estimates Program data and in next year’s BAS materials. |
| <b>May 31</b>    | Final BAS deadline - Boundary updates returned by this date will be reflected in next year’s BAS materials.  |

**CONTACT INFORMATION**

Email: <[geo.bas@census.gov](mailto:geo.bas@census.gov)>

Phone: 1-800-972-5651

Website: <[www.census.gov/programs-surveys/bas.html](http://www.census.gov/programs-surveys/bas.html)>

Thank you for your participation in BAS.

**Email: BAS-E-SWIM-HasAcct <Overprinting> and Text – Yes Change Response-Email Template-Has SWIM Account**

**Subject: YYYY BAS Digital Submission Information – BAS ID: <BAS\_ID>**

<Date>

BAS ID: <BAS\_ID>, <NAME> <EXPANDED\_LSAD>

The U.S. Census Bureau received your response to the Boundary and Annexation Survey (BAS) indicating that your government has boundary changes to report.

If you already submitted changes through the Secure Web Incoming Module (SWIM), you can disregard this email.

**Action Steps:**

- **Prepare boundary updates.** On the [BAS website](#), you will find resources and detailed instructions for creating a BAS submission.
- **Submit boundary updates to the Census Bureau using the SWIM website.** All digital submissions must be returned through the SWIM website, per the Census Bureau’s security policy.

**SWIM INFORMATION**

This email account: <<insert participant email>> already has a SWIM account. A new token is not required. Please sign in to the [SWIM website](#) using the previously established username and password. Usernames and passwords are case sensitive. Passwords can be reset on the SWIM website. If you have questions, contact us at the email or phone number listed below.

**TRAINING OPPORTUNITIES**

The Census Bureau is offering training webinars for BAS. The webinar schedule and registration instructions are on the [BAS Webinars webpage](#).

**KEY DATES**

- |                  |  |
|------------------|--|
| <b>January 1</b> | Boundary updates must be legally in effect on or before this date to be reported in the current survey year.   |
| <b>March 1</b>   | First BAS deadline - Boundary updates returned by this date will be reflected in the American Community Survey and Population Estimates Program data and in next year’s BAS materials. |
| <b>May 31</b>    | Final BAS deadline - Boundary updates returned by this date will be reflected in next year’s BAS materials.  |

**CONTACT INFORMATION**

Email: <[geo.bas@census.gov](mailto:geo.bas@census.gov)>

**Email: BAS-E-SWIM-HasAcct <Overprinting> and Text – Yes Change Response-Email Template-Has SWIM Account**

**Subject: YYYY BAS Digital Submission Information – BAS ID: <BAS\_ID>**

Phone: 1-800-972-5651

Website: <[www.census.gov/programs-surveys/bas.html](http://www.census.gov/programs-surveys/bas.html)>

Thank you for your participation in BAS.

**Email: BAS-E-SWIM-Token <Overprinting> and Text – Yes Change Response-Email Template-Needs SWIM Token**

**Subject: YYYY BAS Digital Submission Information**

<Date>

The U.S. Census Bureau received your response to the Boundary and Annexation Survey (BAS) indicating that your government has boundary changes to report.

If you already submitted changes through the Secure Web Incoming Module (SWIM), you can disregard this email.

**Action Steps:**

- **Prepare boundary updates.** On the [BAS website](#), you will find resources and detailed instructions for creating a BAS submission.
- **Submit boundary updates to the Census Bureau using the SWIM website.** All digital submissions must be returned through the SWIM website, per the Census Bureau’s security policy.

**SWIM INFORMATION**

An account is required to access SWIM. Use the provided SWIM Registration Token to create an account on the [SWIM website](#).

SWIM Registration Token – XXXXXXXXXXXXX

**TRAINING OPPORTUNITIES**

The Census Bureau is offering training webinars for BAS. The webinar schedule and registration instructions are on the [BAS Webinars webpage](#).

**KEY DATES**

- |                  |  |
|------------------|--|
| <b>January 1</b> | Boundary updates must be legally in effect on or before this date to be reported in the current survey year.   |
| <b>March 1</b>   | First BAS deadline - Boundary updates returned by this date will be reflected in the American Community Survey and Population Estimates Program data and in next year’s BAS materials. |
| <b>May 31</b>    | Final BAS deadline - Boundary updates returned by this date will be reflected in next year’s BAS materials.  |

**CONTACT INFORMATION**

Email: <[geo.bas@census.gov](mailto:geo.bas@census.gov)>

Phone: 1-800-972-5651

Website: <[www.census.gov/programs-surveys/bas.html](http://www.census.gov/programs-surveys/bas.html)>

**Email: BAS-E-SWIM-Token <Overprinting> and Text – Yes Change Response-Email Template-Needs SWIM Token**

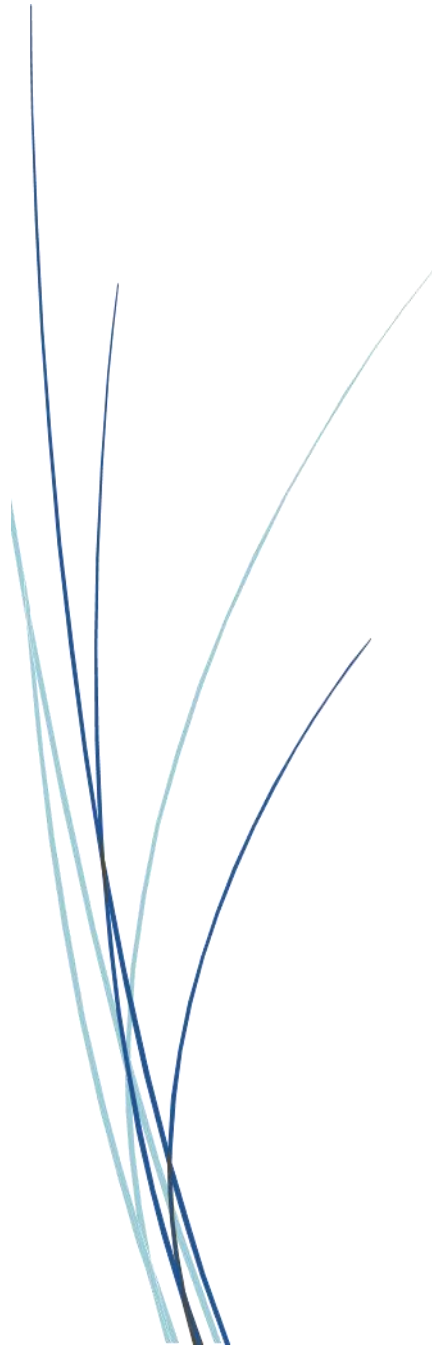
**Subject: YYYY BAS Digital Submission Information**

Thank you for your participation in BAS.

# Boundary and Annexation Survey Partnership Toolbox How-to Guide

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*Instructions for Participating in the Boundary and Annexation Survey Using the Partnership  
Toolbox for ArcGIS Desktop*



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## INTRODUCTION

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### A. The Boundary and Annexation Survey

The Boundary and Annexation Survey (BAS) provides tribal, state, and local governments an opportunity to review the Census Bureau’s legal boundary data to ensure the Census Bureau has the correct boundary, name, and status information. BAS also allows participants to review and provide updates to Census Designated Places (CDPs). Maintaining correct boundaries helps ensure that the Census Bureau assigns the appropriate housing and population counts to each government.

BAS fulfills the agency’s responsibility as part of the National Spatial Data Infrastructure, for which the Office of Management and Budget (OMB) Circular A–16 designates the Census Bureau as the lead federal agency for maintaining national data about legal government boundaries, as well as statistical and administrative boundaries. BAS supports the spatial data steward responsibilities of the OMB E-Gov, Data.gov, the National Map, Geographic Names Information System (GNIS) the Federal Geographic Data Committee, and the Geospatial One-Stop. Title 13, Section 6, United States Code authorizes this survey.

The Census Bureau uses the boundaries collected in BAS to tabulate data for various censuses and surveys including the decennial census, American Community Survey (ACS), and Population Estimates Program (PEP). It also uses the legal boundaries collected through BAS to support several other programs such as Congressional and State Legislative redistricting, the Economic Census, the Geographic Update Population Certification Program, and the Special Census program.

### B. Key Dates for BAS Respondents

- |                  |   |
|------------------|---|
| <b>January 1</b> | Boundary updates must be legally in effect on or before this date to be reported in the current survey year.                            |
| <b>March 1</b>   | First BAS deadline - Boundary updates returned by this date will be reflected in the ACS and PEP data and in next year’s BAS materials. |
| <b>May 31</b>    | Final BAS deadline - Boundary updates returned by this date will be reflected in next year’s BAS materials.                             |

### C. Adjacencies and Legal Disputes

The Census Bureau will not make any boundary change that affects adjacent legal governments without the appropriate documentation. Please review any changes that affect adjacent governments to determine if they are intentional legal changes.

If the Census Bureau discovers that an area of land is in dispute between two or more jurisdictions, the Census Bureau will not make any boundary corrections until the parties come to a written agreement, or there is a documented final court decision regarding the dispute.

To learn more, please contact the Census Bureau Legal Office at **1-301-763-2918**.

For disputes involving tribal areas, the Census Bureau must defer to the Office of the Solicitor at the Department of the Interior for a legal opinion. Often complicated land issues require an extended period for resolution, and in those cases, the Census Bureau will retain the current boundary in the database until a legal opinion is issued by the Solicitor's office.

## **D. Contact Us**

If assistance is required in preparing your BAS submission or if you are experiencing issues with the ArcGIS Partnership toolbox, please contact the Census Bureau at [<geo.bas@census.gov>](mailto:geo.bas@census.gov) or **1-800-972-5651**.

When emailing [<geo.bas@census.gov>](mailto:geo.bas@census.gov), please include the following details:

- BAS ID and Government Name,
- Level of geography for which you are submitting,
- Contact information such as a phone number or email address,
- Version of ArcGIS you are using,
- Full text of the error message received as a screenshot or text (if applicable), and
- Screenshots of discrepancies (if applicable).

## **E. Resources**

Additional resources are available on our website. Technical documentation and helpful videos are also available to walk through the BAS submission process.

### **Technical Documentation**

For more technical information about Census Bureau Geography, BAS Submission information, change types, and shapefiles, see the BAS Technical Guide at [<www.census.gov/programs-surveys/bas/information/respondent-guides.html>](http://www.census.gov/programs-surveys/bas/information/respondent-guides.html).

### **Videos**

The Census Bureau created training videos to give BAS participants detailed instructions and information on how to report and submit BAS changes. These videos are available on the BAS website at: [<www.census.gov/programs-surveys/bas/library/bas-videos.html>](http://www.census.gov/programs-surveys/bas/library/bas-videos.html).

# CHAPTER 1 GETTING STARTED WITH THE PARTNERSHIP TOOLBOX

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The Digital BAS Partnership Toolbox was created to ease the burden of creating change files on BAS and Tribal BAS participants. This toolbox simplifies the update process by automating the download of data, change creation, sliver removal, attribution formatting and checks, and exporting files for submission. This allows the Census Bureau to easily process returned BAS files. New tools have been added as of the 2022 BAS to facilitate the update of linear features, landmarks, and Census Designated Places (CDPs). This how-to guide will walk participants through all the above steps to create their digital submission.

## 1.1 ArcGIS Deprecation

Due to Esri's deprecation of the ArcGIS Desktop suite, these tools will not be updated further after the conclusion of the 2023 BAS. Support will be limited for the ArcGIS Desktop version of these tools starting in the 2024 BAS. A separate toolbox is available for ArcGIS Pro 2.9 and higher and can be found at [www.census.gov/programs-surveys/bas/information/response-methods.html](https://www.census.gov/programs-surveys/bas/information/response-methods.html).

## 1.2 Submission Requirements

Participation in the current BAS cycle means that participants will provide the following:

1. A shapefile of boundary change polygons based off the current Census Bureau boundary. Submissions containing only a whole entity boundary shapefile of the current local data will not be accepted.
2. Legal documentation numbers, authorization types, and effective dates for all legal boundary changes (annexations and deannexations).
3. For tribal submissions, digital copies of the legal documentation to submit with the change polygons. Acceptable documents include but are not limited to a federal register notice, acceptance of conveyance and warranty deed, title status report, BIA certification or letter.
4. Each non-legal boundary correction with proper attribution according to boundary corrections guidelines laid out in [Chapter 3](#). If the correct attribution is not provided, the Census Bureau will not make the correction for this BAS cycle.
5. Current information for the BAS point of contact, the person updating the shapefiles, and the Highest Elected Official (HEO) or Tribal Chair (TC) for the government.

The BAS Partnership Toolbox simplifies the process for all the above requirements.

## 1.3 Partnership Toolbox Requirements

Before running these tools, users will need the following:

- **ArcGIS Desktop** 10.0 or higher (not ArcGIS Pro).
- The **BAS Partnership Toolbox zip**, which can be downloaded at: [www.census.gov/programs-surveys/bas/geographies/map-tools/arcmap-tools.html](https://www.census.gov/programs-surveys/bas/geographies/map-tools/arcmap-tools.html).

- The **BAS ID** for the government being processed. This can be found on the BAS Annual Response email, letter, or online at: [www.census.gov/programs-surveys/bas/technical-documentation/code-lists.html](https://www.census.gov/programs-surveys/bas/technical-documentation/code-lists.html).
- **A shapefile or feature class showing the legal boundary of the government.**
  - Data in this layer should include the name of the government being processed formatted to agree with the Census Bureau’s naming convention for the same government as found in the NAME field or the NAMELSAD field for Minor Civil Division (MCD) and American Indian / Alaska Native / Native Hawaiian (AIANNH).
- **Digital copies of the legal documentation** to be submitted with the change polygons. This is required for tribal submissions and requested for all other submissions.
  - For tribal changes: acceptable documents include, but are not limited to, a federal register notice, acceptance of conveyance and warranty deed, title status report, or BIA certification or letter.
  - For all other changes (optional): acceptable documents include, but are not limited to, ordinances, resolutions, changes to a local or state law, or court rulings.
- **(Optional) The 2023 BAS Partnership Shapefiles**, which may be downloaded manually from the Census Bureau website. These files are located at: [www.census.gov/geographies/mapping-files/2023/geo/bas/2023-bas-shapefiles.html](https://www.census.gov/geographies/mapping-files/2023/geo/bas/2023-bas-shapefiles.html).
  - The shapefile download is automated in the Partnership Toolbox, but in instances where downloads are restricted or internet connectivity is limited, participants may find that pre-downloading these files is simpler and faster.

## CHAPTER 2 CREATING A SUBMISSION

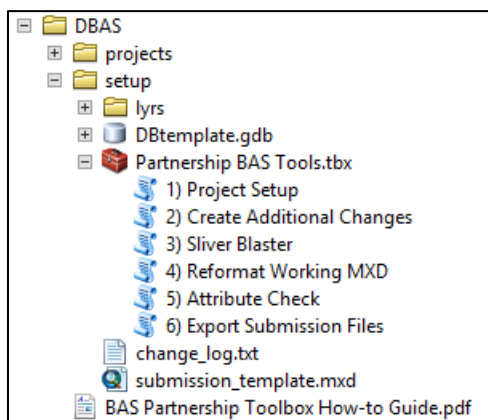
---

This chapter provides step-by-step instructions for using the BAS Partnership Toolbox to setup your workspace and create change polygons. For best results, use the toolbox in ArcGIS Desktop 10.0 and higher (not including ArcGIS Pro). These toolbox tools were designed primarily for use in ArcCatalog though they run in ArcMap as well. The instructions for most steps assume use in ArcCatalog.

### 2.1 Toolbox Tools Setup

After downloading the toolbox from the BAS website, locate the zip file in your File Explorer.

1. Unzip the **Digital BAS Partnership Tools.zip** to the C: drive or other preferred working folder. The folder location does not matter as long as it can be accessed from ArcCatalog. Inside there will be a folder called DBAS, containing all the files to work with for a government.
2. Open ArcCatalog and connect to the DBAS folder. When expanded, the following should be visible:



**Figure 1. Partnership BAS Tools Menu**

3. Do not attempt to change the file structure inside the DBAS folder. Moving folders or files from where they are located may cause issues later in the process.

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Note: To connect to a folder in ArcCatalog, click on the Connect to Folder button on the Standard Toolbar, find the DBAS folder, and then click OK.

---

### 2.2 Prepare Local Data

Before any of the Census Bureau tools can be run to create changes for a legal government, there must be an attribute field in the local boundary shapefile that contains the name of the government or governments as they appear in Census Bureau records (**Figure 2** and **Figure 3**). This includes matching capitalization, spacing, and in the case of MCDs and AIA's a descriptor of the geography (e.g., township, village, borough, etc.). If it is a new government or the legal name is changing, it does not need to agree though other attribution must be updated to reflect this change. Please refer to **Table 1** to see which feature class and field to use for each geography type.



FID *	ALPHA	new_name	Shape_Length
1	CONETOE	Conetoe	18798.2833
2	LEGGETT	Leggett	16515.9215
3	MACCLESFIELD	Macclesfield	16245.4801
4	PINETOPS	Pinetops	24335.0347
5	PRINCEVILLE	Princeville	51156.4595
6	ROCKY MOUNT	Rocky Mount	536948.7804
7	SHARPSBURG	Sharpsburg	38595.9219
8	SPEED	Speed	13134.1835
9	TARBORO	Tarboro	174112.0822

OBJE	NAME	STATEFP	COUNTYFP	PLACEFP
7	Conetoe	37	065	14200
8	Leggett	37	065	37640
3	Macclesfield	37	065	39960
5	Pinetops	37	065	52140
9	Princeville	37	065	53840
4	Rocky Mount	37	065	57500
1	Sharpsburg	37	065	61060
6	Speed	37	065	63720
10	Tarboro	37	065	66700

**Figure 2. NAME Field in Census Data vs Local Boundary Data**

The bas\_place layer on the right shows how the Census Bureau NAME field is populated for all the places in Edgecombe County, NC while the local places data on the left shows how local data may need to be manipulated to agree with the Census Bureau NAME field.

FID	Shape *	OBJECTID_1	OBJECTID	MUNICIPALI	MCN_CODE
28	Polygon	0	49	Adams township	010
3	Polygon	0	7	Allegheny township	020
9	Polygon	0	16	Brady township	030
31	Polygon	0	55	Buffalo township	040
20	Polygon	0	35	Butler township	050
15	Polygon	0	27	Center township	060
6	Polygon	0	11	Cherry township	070
10	Polygon	0	18	Clay township	080
22	Polygon	0	38	Clearfield township	090
30	Polygon	0	54	Clinton township	100

Shape *	STATEFP	COUNTYFP	COUSUBFP	NAMELSAD	COUSUBNS	LS
Polygon	42	019	00300	Adams township	01216040	44
Polygon	42	003	00724	Aleppo township	01215797	44
Polygon	42	007	00820	Aliquippa city	01214861	25
Polygon	42	121	00884	Allegheny township	01217138	44
Polygon	42	019	00860	Allegheny township	01216041	44
Polygon	42	007	02288	Ambridge borough	01214862	21
Polygon	42	005	02720	Apollo borough	01214844	21
Polygon	42	005	02752	Applewold borough	01214845	21
Polygon	42	031	03248	Ashland township	01216200	44
Polygon	42	003	03320	Aspinwall borough	01214783	21

**Figure 3. Appropriate Attribution for MCD or AIANNH Changes**

The bas\_cousub attribution on the right in the NAMELSAD field shows how the local MUNICIPALI field on the left should be formatted to ensure that the Create Changes tool works for the MCD changes in Butler County, PA. The bas\_aial attribution appears in a similar way.

**Table 1: Feature class and field names to match based on geography type.**

GEOGRAPHY TYPE	FEATURE CLASS	FIELD
Incorporated Place	bas_place	NAME
MCD	bas_cousub	NAMELSAD
County	bas_county	NAME
Tribal	bas_aial	NAMELSAD
Consolidated City	bas_concity	NAME

## 2.3 Project Setup Tool

The Project Setup tool gathers all the BAS partnership shapefile data needed to create changes from the Census Bureau website, creates an initial change file, and formats the map document (.mxd) for the given BAS ID. Before using this tool, review [Sections 2.3.1](#) through [2.3.3](#) for additional guidance.

### 2.3.1 Data Provided on a CD/DVD

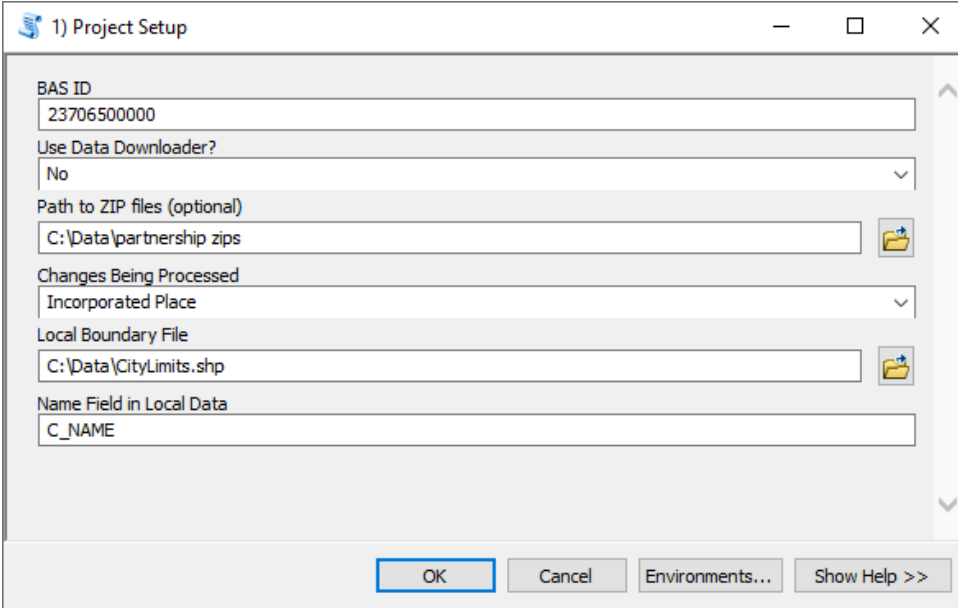
If the Census Bureau data is provided on a CD/DVD, this tool will also work but only if the data is loaded to the computer before running the tool. This tool can also use the zip files downloaded from the 2023 BAS Partnership Shapefiles site:

[www.census.gov/geographies/mapping-files/2023/geo/bas/2023-bas-shapefiles.html](http://www.census.gov/geographies/mapping-files/2023/geo/bas/2023-bas-shapefiles.html).

### 2.3.2 Offline Use

There are two ways to use this tool: one that downloads the data from the Census Bureau for the user and one that takes in a folder with the Census Bureau data already downloaded. If you have already downloaded the data, you must unzip the downloaded pvs batch zip file (e.g., pvs\_batch\_from\_<st>) to display the partnership shapefiles zip files (e.g., partnership\_shapefiles\_22v2\_<st> and partnership\_shapefiles\_22v2\_<stcou>). The tool will look for these partnership\_shapefiles zip files when it runs.

- To use previously downloaded Census Bureau data, select No under the **Use Data Downloader?** field and navigate or drag the folder into **Path to zip files** field. Make sure the folder only contains the Census Bureau zip files to ensure there are no future data issues. [Figure 4](#) shows how a user will complete the fields if they already have the partnership shapefiles downloaded and saved on their computer.



The screenshot shows a dialog box titled "1) Project Setup". It contains several input fields and dropdown menus. The "BAS ID" field has the value "23706500000". The "Use Data Downloader?" dropdown menu is set to "No". The "Path to ZIP files (optional)" field contains the path "C:\Data\partnership zips". The "Changes Being Processed" dropdown menu is set to "Incorporated Place". The "Local Boundary File" field contains the path "C:\Data\CityLimits.shp". The "Name Field in Local Data" field contains the value "C\_NAME". At the bottom of the dialog box, there are four buttons: "OK", "Cancel", "Environments...", and "Show Help >>".

**Figure 4. The Project Setup Window with 'No' in the Use Data Downloader Field**

### 2.3.3 Change Types

The Project Setup tool and the Create Additional Changes tool allows the user to input a boundary file so that an initial set of changes can be created at the same time the Census Bureau data is being downloaded. We recommend using this opportunity to create changes for legal geographies. Examples of legal geographies are:

- Incorporated Place,
- County,
- County Subdivision (MCDs),
- Tribal, and
- Consolidated City.

If a user is not ready to create changes for a legal geography or does not have changes for a legal geography, the user can select the desired non-legal geography they wish to submit. This may include:

- CDP,
- Linear Features,
- Area Landmark, and
- Point Landmark.

If the user has more than one change type for which they want to create changes, users will run the Project Setup tool and then create additional change feature classes with the Create Additional Changes tool.

### 2.3.4 The Project Setup Tool

Please follow the steps below to run the Project Setup tool.

1. Expand the **DBAS folder** and the **setup subfolder**. In the setup subfolder, find the **Partnership BAS Tools Toolbox**. Expand the toolbox and double click on the **1) Project Setup** tool.

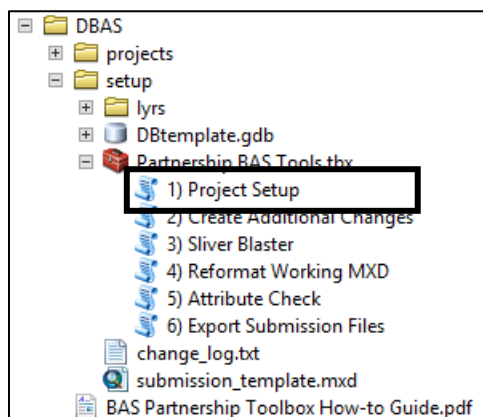


Figure 5. Partnership BAS Tools Menu with Project Setup Selected

2. Enter the 11-digit BAS ID in the **BAS ID** field.
3. The **Use Data Downloader?** field, select how you would like to get your Census Bureau Data:

- To have the Census Bureau data downloaded automatically, select Yes under the **Use Data Downloader?** field then proceed to step 5.
  - To use previously downloaded Census Bureau data, select No under the **Use Data Downloader?** field then proceed to step 4.
4. The **Path to zip files** field will only take an input if No was selected earlier in the **Use Data Downloader?** field. Navigate or drag the folder into **Path to zip files** field. Make sure the folder only contains the Census Bureau zip files to ensure there are no future data issues. Refer to [Section 2.3.2](#) for more guidance.

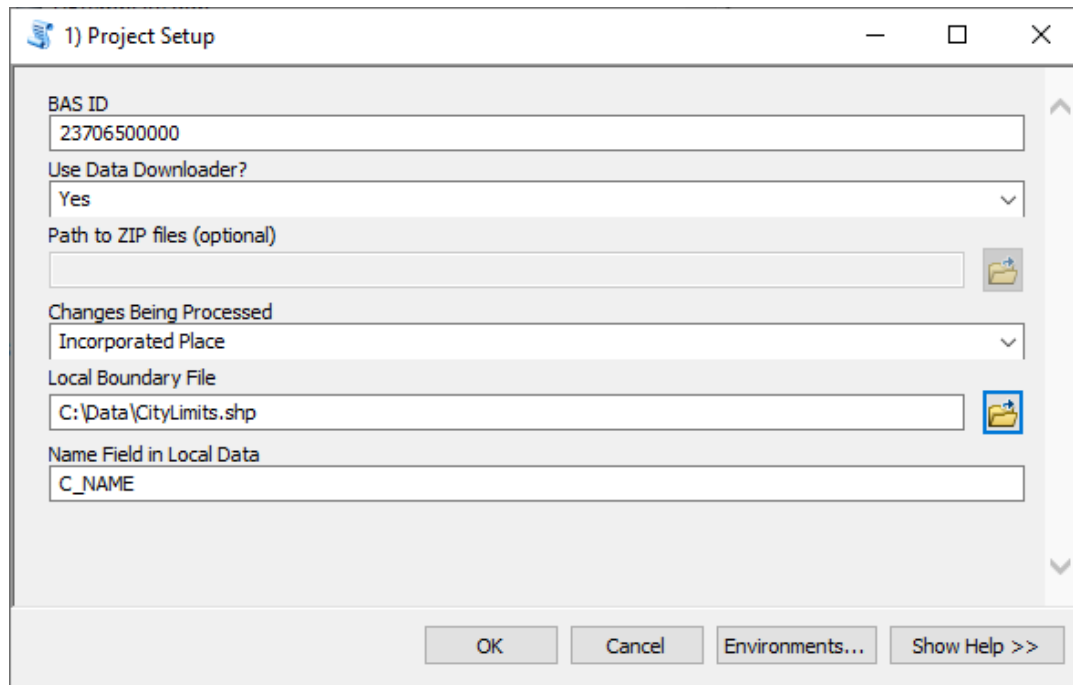
Note: If you get an error message when trying to use the automatic download, please manually download the partnership files and try the tool that way. If an error still occurs, please contact the Census Bureau using the format laid out in the [Contact Us](#) section.

5. Under **Changes Being Processed**, choose the type of changes to create from the dropdown options. Available inputs are listed in [Table 2](#). If a legal geography is selected proceed to step 6. If a non-legal geography is selected, proceed to step 8.

**Table 2: Distinction between the types of changes allowed in the Project Setup tool**

LEGAL GEOGRAPHY	NON-LEGAL GEOGRAPHY
Incorporated Place	CDP
County Subdivision (MCDs)	Linear Features
County	Area Landmark
Tribal	Point Landmark
Consolidated City	

6. In the **Local Boundary File** field, enter the path or navigate to the full boundary polygon.
7. For the **Name Field in Local Data**, type the name of the field (as it appears in your local data in ArcCatalog) containing the information matching the Census Bureau’s NAME or NAMELSAD field as appropriate from [Section 2.2](#).
8. Once all fields are complete, click **OK**.



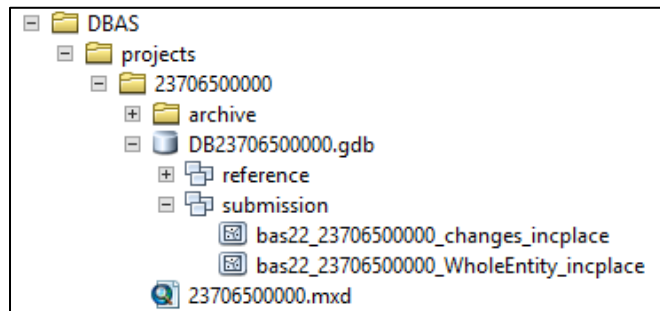
**Figure 6: Project Setup Window for Legal Changes**

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Note: If a non-legal geography type was selected for Changes Being Processed, the last two fields will be blank and disabled. Please see [Section 2.4](#) for examples of what this looks like.

---

9. When this tool is complete, there should now be a folder for the BAS ID in the projects folder. Inside that folder, there will be a geodatabase (gdb) with reference data in it, an archive folder, your project .mxd, and change polygons for the submitted change type inside the submission feature dataset.



**Figure 7. Partnership Tools Menu Showing a Folder for the BAS ID in the Projects Folder**

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Note: The archive folder contains other Census Bureau data that may be useful as well.

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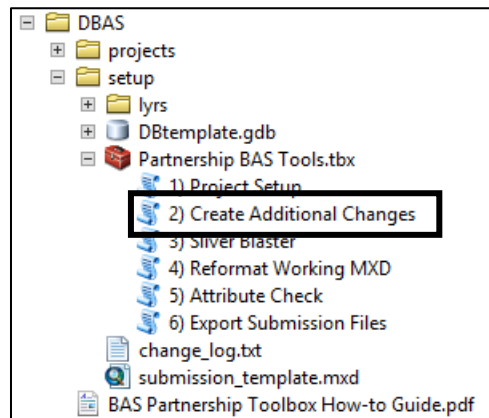
10. At this point, there are a few different options for next steps.
  - To create additional changes, proceed to [Section 2.4](#).
  - To remove slivers that you know are present in your new change file, proceed to [Section 2.5](#). Please only proceed straight to the Sliver Blaster if you have no other legal change files to create as it will run on all change files at the same time.
  - To begin reviewing your changes, proceed to [Chapter 3](#).

## 2.4 Create Additional Changes Tool (Optional)

You can run the **2) Create Additional Changes** tool to create change files for additional levels of geography. If you only need changes for one level of geography and they were already made in the Project Setup Tool, proceed to [Section 2.5](#) if you want to remove slivers or proceed to [Chapter 3](#) to begin reviewing your changes.

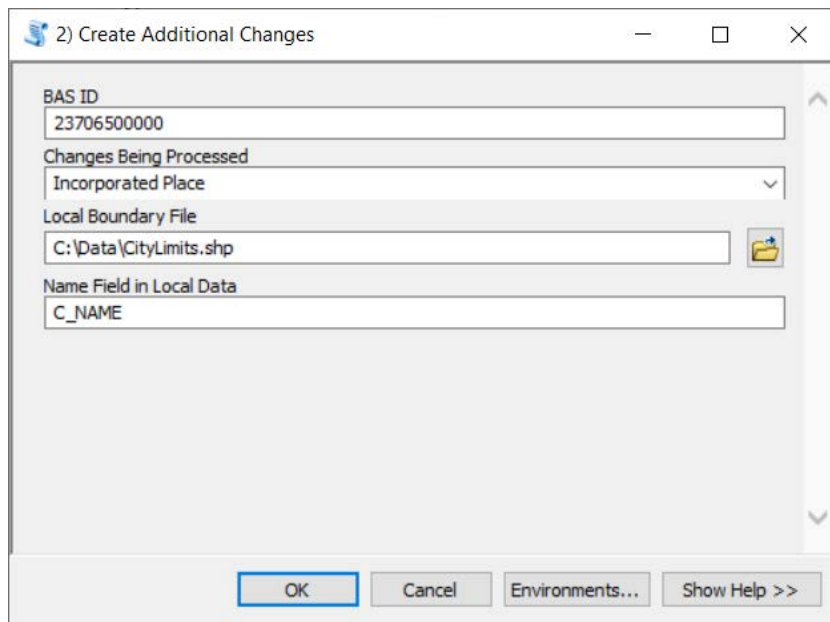
To create additional change types in your project:

1. If you have not prepared your local data already, please refer to [Section 2.2](#) before proceeding to create legal changes. If you are using this tool to create changes for a non-legal geography, continue to step 2.
2. Double click on the **2) Create Additional Changes** tool.



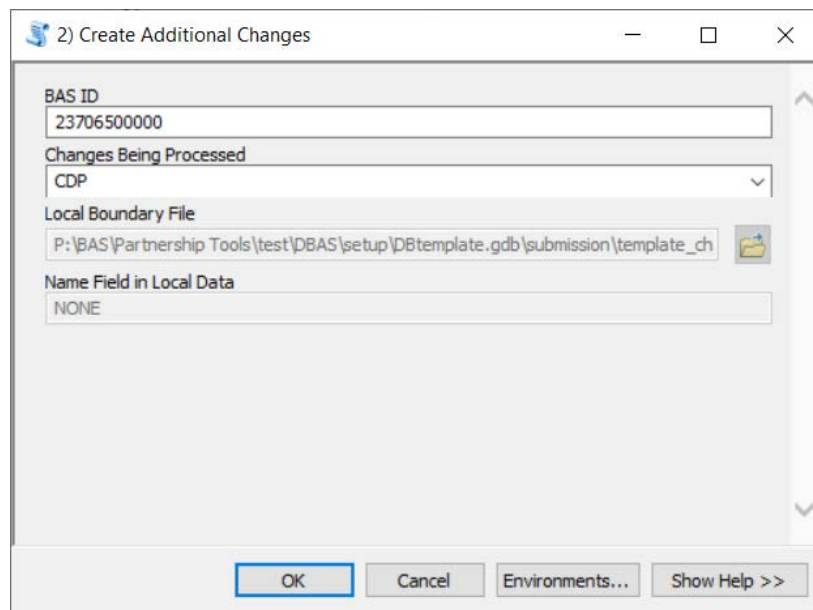
**Figure 8. Partnership Tools Menu with Create Additional Changes Tool Selected**

3. To create changes for legal geographies, in the **Create Additional Changes** window:
  - Enter the 11-digit BAS ID in the **BAS ID** field.
  - Under **Changes Being Processed**, choose the type of changes to create from the dropdown options:
    - Incorporated Place.
    - County.
    - County Subdivision (MCDs).
    - Tribal.
    - Consolidated City.
  - In the **Local Boundary File** field, enter the path or navigate to the full boundary polygon.
  - For the **Name Field in Local Data**, type the name of the field (as it appears in ArcCatalog) containing the information matching the Census Bureau's NAME or NAMELSAD field as appropriate from [Section 2.2](#).



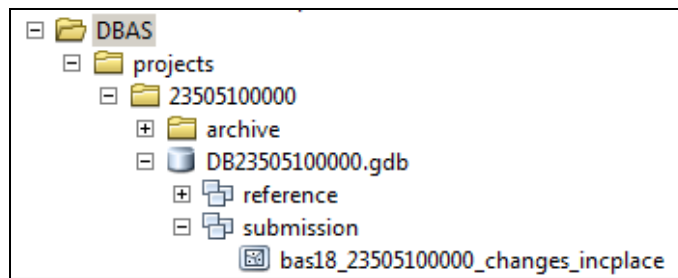
**Figure 9. Create Additional Changes Window for Legal Changes**

4. To create changes for any other geography, in the **Create Changes** window:
  - Enter the 11-digit BAS ID in the **BAS ID** field.
  - Under **Changes Being Processed**, choose the type of changes to create from the dropdown options:
    - a. CDP.
    - b. Linear Features.
    - c. Area Landmark.
    - d. Point Landmark.



**Figure 10. Create Additional Changes Window for Non-Legal Changes**

5. Click **OK** to run the tool.
6. Once the tool is complete, the output will be placed in the geodatabase under the submission feature dataset.



**Figure 11. Partnership Tools Menu with Geodatabase**

7. Repeat steps for any other levels of geography that need changes created.
8. Once all legal changes have been created, users can proceed to [Section 2.5](#) if they want to automatically remove small sliver polygons.
9. If multiple change feature classes have been created with this tool, it's recommended to run the Reformat Working MXD tool however it is not required.

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Note: The BAS year used in screenshots throughout this document may vary, however, functionality remains the same.

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## 2.5 Sliver Blaster Tool (Optional)

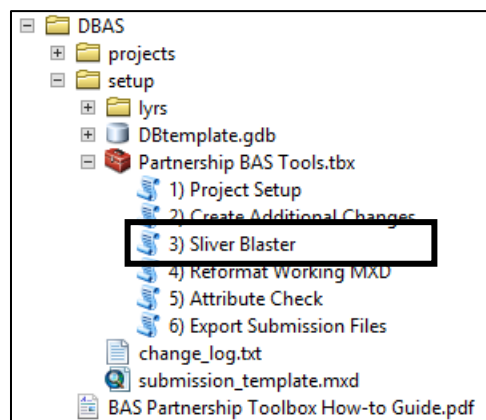
The Sliver Blaster tool is useful for governments that have numerous very small change polygons that are time consuming to manually parse through for deletion. Since the Census Bureau cannot guarantee inclusion of changes under 30 feet wide, use this tool to remove changes that are lower than that threshold. Participants can also change the tolerance for slivers if they know there are small changes that need to be included. This automated tool will vary in processing time depending on the number of features in the entity.

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Note: This tool should only be used on legal geographies. Do not use this on CDPs, linear features, or landmarks of any kind.

---

1. Double click on the **3) Sliver Blaster** tool.



**Figure 12. Partnership Tools Menu with Sliver Blaster Selected**

2. In the **Sliver Blaster** tool window:



- The **BASID Folder** refers to the folder in the projects folder that corresponds with the area you are working.
  - The **Boundary Buffer and Road Buffer** fields are set to 15 feet and 30 feet by default but can be adjusted to accommodate smaller changes.
3. Click **OK** to run.

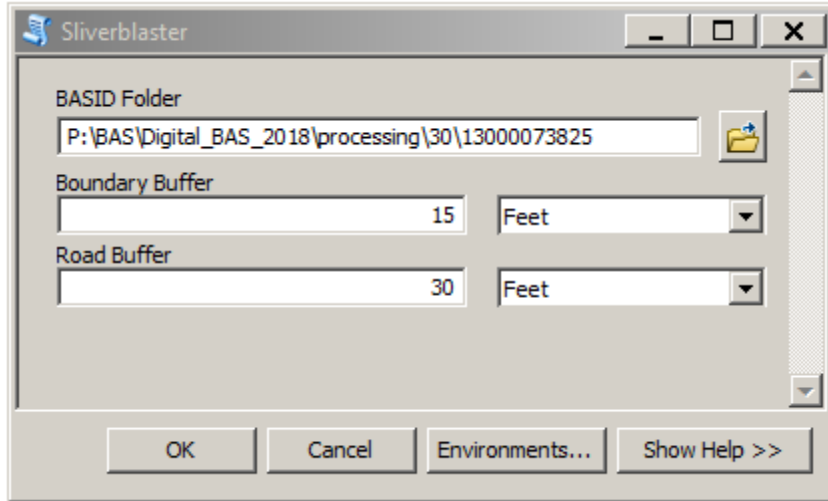


Figure 13. Sliver Blaster Window

## 2.6 Reformat Working MXD Tool (Optional)

An .mxd is created in the Project Setup tool. However if users create many new change feature classes in the Create Additional Changes tool or if an .mxd becomes corrupted or otherwise unusable, this tool can be used to recreate the .mxd. If users would prefer to use their own .mxd, this step is not required.

1. Double click on the **4) Reformat Working MXD** tool.

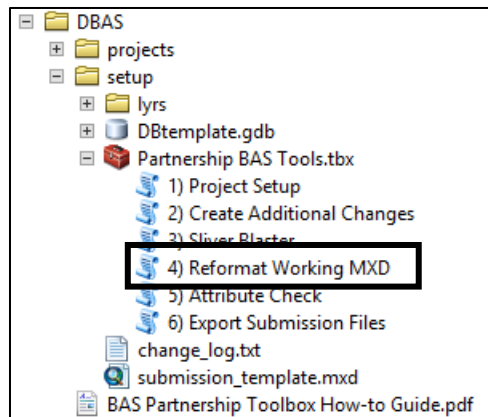
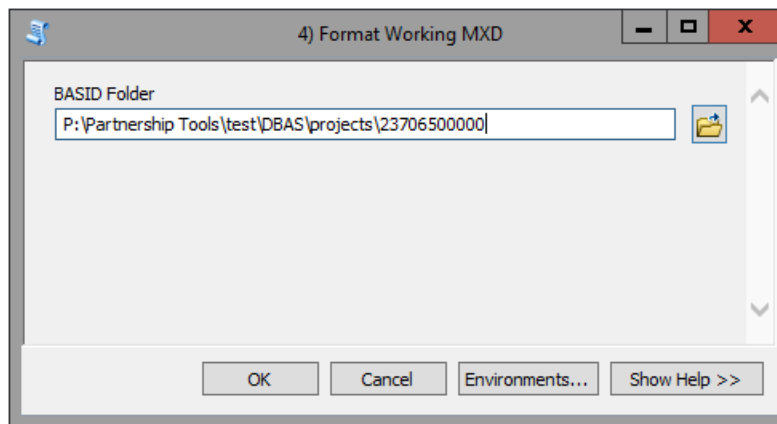


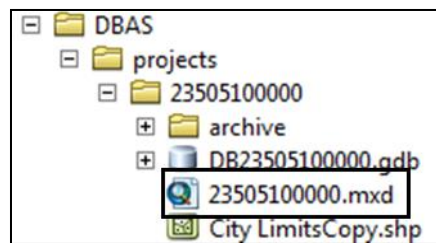
Figure 14. Partnership Tools Menu with Reformat Working MXD Selected

2. The only input for this tool is the **Working Folder**, which is the folder with the government's BAS ID as its name.



**Figure 15. Reformat Working MXD Window**

3. Click **OK** to run the tool.
4. Open the new .mxd and begin working with the change polygons.



**Figure 16. Projects Submenu with .mxd file Selected**

## CHAPTER 3 REVIEWING AND EXPORTING A SUBMISSION

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At this point in the process, a review of the created changes is necessary to ensure proper attribution is contained in each record. This chapter will discuss the types of changes you may want to update or remove from your submission based on current relationships within the Census Bureau data.

1. Please open the <BASID>.mxd created in the previous chapter and start an editing session. Open the attribute table for your changes layer(s) so you can go line by line through the requested changes.
2. Review each change polygon for any of the following potential issues:
  - Required attribution information ([Section 3.1](#))
  - Large boundary corrections ([Section 3.2](#))
  - Boundary-to-Feature Relationships ([Section 3.3](#))
  - Corridors and Offsets ([Section 3.4](#))

As a reminder, the Census Bureau will snap boundary changes to any linear feature that is correctly located within thirty feet of the change. Additionally, changes that are less than 30 feet at their widest point may not be incorporated into the Master Address File/Topologically Integrated Geographic Encoding and Referencing (MAF/TIGER) System due to system constraints. Refer to the BAS Technical Guide [www.census.gov/programs-surveys/bas/information/respondent-guides.html](http://www.census.gov/programs-surveys/bas/information/respondent-guides.html) for more information.

3. Edit landmark, feature, and CDP changes as necessary.
4. Save your edits to your change feature classes.
5. Export submission and proceed to [Chapter 4](#).

### 3.1 Required Attribute Information

It is important to review each change polygon and confirm that the correct attribute information is included. Without the correct attribute information, the Census Bureau will be unable to process and incorporate the changes into the MAF/TIGER System.

1. All changes are coded as a “B” for Boundary Correction by the Create Changes tool. If you know there are legal changes in your file, navigate to the area the legal change is in and select the change polygon.
2. Update the required fields for the selected change polygon. Refer to [Table 3](#) for the required attributes that will need to be manually updated. [Table 4](#) lists the acceptable values for each required field or expected values for fields that do not take a specific Census Bureau code.
3. Once the attribution is updated, save the edits, move to the next change polygon, and repeat the process in steps 1 and 2.
4. Once the known legal changes are complete, review the rest of the changes using the guidance in [Sections 3.2](#), [3.3](#), and [3.4](#).

**Table 3: Required attribution information for the different types of geographic change polygons.**

	CHNG_TYPE	NAME	EFF_DATE	AUTHTYPE	DOCU	AREA	RELATE
Annexation/ Addition	✓	✓	✓	✓	✓*	✓*	
Deannexation/ Deletion	✓	✓	✓	✓	✓*	✓*	
Boundary Correction	✓	✓					✓
Geographic Corridor	✓	✓					✓
Geographic Offset	✓	✓					✓
Disincorporation	✓	✓	✓	✓	✓		
New Incorporation	✓	✓	✓	✓	✓		
Name Change	✓	✓	✓	✓	✓		

(Note: ✓ = Required Field; \*DOCU is not required in Georgia, AREA is required in Georgia)

**Table 4: Acceptable field inputs for changes submitted to BAS.**

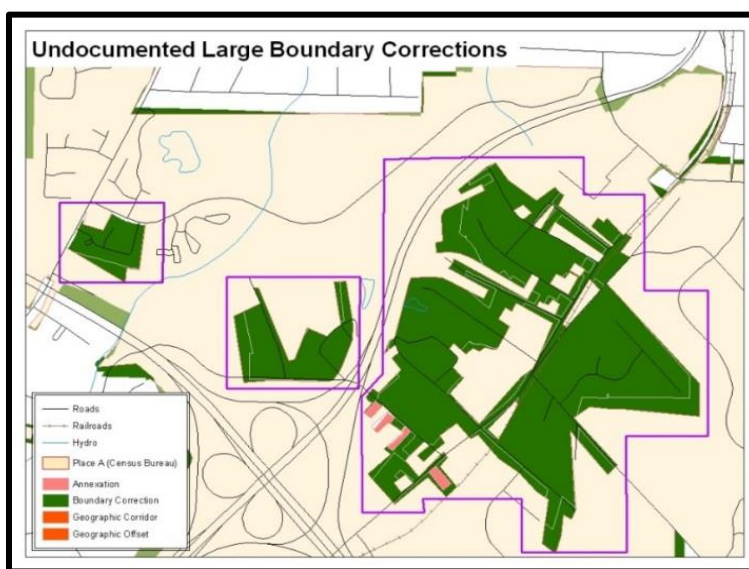
ATTRIBUTE FIELD	DESCRIPTION
<b>CHNG_TYPE</b>	Type of area update. Addition and Deletion are used for Tribal submissions only. Allowable values include:
	Annexation/Addition   A
	Deannexation/Deletion   D
	Boundary Correction   B
	Geographic Corridor   C
	Geographic Offset   F
	Disincorporation   X
	New Incorporation   E
Name Change   G	
<b>EFF_DATE</b>	Effective date of legal change
<b>AUTHTYPE</b>	Authorization type. Allowable values include:
	Ordinance   O
	Resolution   R
	Local Law   L
	State Level Action   S
	Executive Order (Tribal)   E
	BIA Certification (Tribal)   C
	Deed (Tribal)   D
Other   X	
<b>DOCU</b>	Supporting documentation number (not the book-deed page, file name, or plat); not required in the state of Georgia

ATTRIBUTE FIELD	DESCRIPTION
AREA	Area of update in acres; only required in the state of Georgia
RELATE	Relationship description. <ul style="list-style-type: none"> <li>• IN</li> <li>• OUT</li> </ul>

### 3.2 Large Boundary Corrections

The Census Bureau will not accept large boundary corrections that substantially change the current boundary of a government without the appropriate legal documentation numbers and effective dates. These large boundary corrections (

[Figure 17](#)) may be legal boundary changes that occurred in the past and were never reported to the Census Bureau.



**Figure 17. Large Boundary Corrections**

Without the appropriate documentation, the Census Bureau will not accept large boundary corrections.

If you identify a large boundary correction that is a previous legal change, please do the following:

1. Submit the appropriate legal documentation number and effective date (no matter how old), so the changes may be incorporated into the MAF/TIGER System. Refer to [Table 3](#) and [Table 4](#) and the steps in [Section 3.1](#) to fill out required attribution for legal changes.
2. If legal documentation cannot be provided for any reason, please [Contact Us](#) to discuss your submission options.

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Note: There may be a few instances when large boundary corrections need to be made because of incorrect digitizing or where the boundary appears in the incorrect location due to other Census Bureau activities. If unsure how to proceed, [Contact Us](#) to discuss submission options.

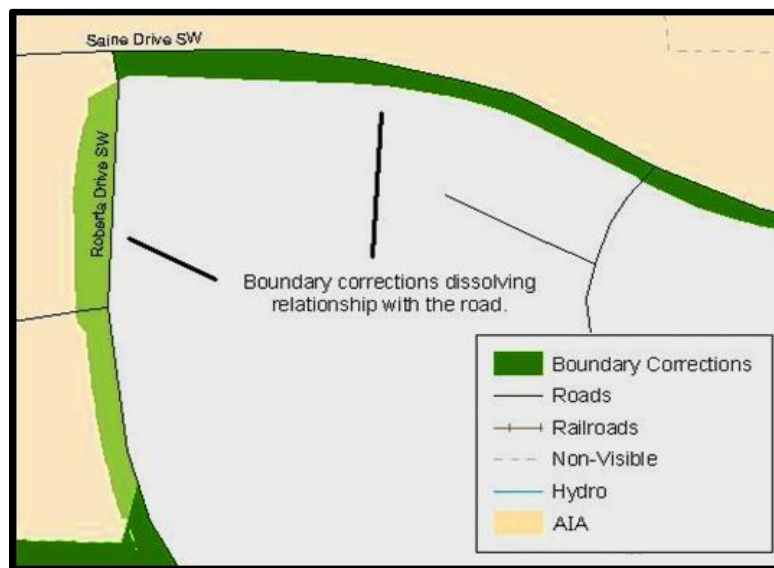
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### 3.3 Boundary-to-Feature Relationships

Please review all changes to ensure that the correct boundary-to-feature relationships are being created or maintained. The Census Bureau is aware that many governments base their legal boundaries on cadastral (parcel-based) right-of-way mapping; however, the Census Bureau bases maps on spatial data that is topologically integrated (see the BAS Technical Guide <[www.census.gov/programs-surveys/bas/information/respondent-guides.html](http://www.census.gov/programs-surveys/bas/information/respondent-guides.html)>). This helps establish a more accurate population count for governments.

The Census Bureau will not accept boundary corrections that dissolve the current relationship between an existing boundary and linear feature without specific instruction that the relationship is incorrect. The Census Bureau will not incorporate any boundary corrections that create a 30-foot, or less, gap or overlap between the existing linear feature and boundary into the MAF/TIGER System. **Figure 18** shows an example of changes that will not be accepted.



**Figure 18. Small Spatial Correction Not Accepted**

Small spatial boundary corrections (<30ft) would dissolve the boundary-to-feature relationship with multiple streets. Incorporating these changes would affect the population counts for the area. Therefore, the Census Bureau will not accept these small boundary corrections.

If there are changes in your submission that would remove boundary-to-feature relationships, use the following information to determine if the change should be kept or deleted from the submission:

1. Changes that are based on cadastral data and are not legally required to accurately display the boundary can be deleted from the submission.

2. If the change is along a roadway and must be incorporated, please consider marking it as an offset or corridor. Please refer to [Section 3.4](#) to learn how to add corridors and offsets.
3. If the feature is incorrectly located, the change can remain in the submission. Please note the incorrect feature in the JUSTIFY field.

### 3.4 Corridors and Offsets

The Census Bureau does not require places and AIAs to report rights-of-way. Geographic corridors are not essential to the mission of the Census Bureau and the right-of-way should only be included if it is crucial to the place or AIA, or if state or local laws require it. For more information on appropriate uses of corridors and offsets, refer to the BAS Technical Guide [www.census.gov/programs-surveys/bas/information/respondent-guides.html](http://www.census.gov/programs-surveys/bas/information/respondent-guides.html).

Use the following guidance to properly add and attribute a corridor or offset to your submission:

1. Navigate to the change polygon and select it.
2. Using the Attribute table or the Attribute Window, change the **CHNG\_TYPE** to the appropriate value. For a corridor set it to C and for an Offset set it to F.
3. If this change is due to legal action, provide the **AUTHTYPE**, **DOCU**, **EFF\_DATE**, and **AREA** as appropriate as well. Information on these required fields can be found in [Section 3.1](#).

### 3.5 CDP, Linear Feature, and Landmark Changes

CDPs, linear features, area landmarks (e.g., lakes), and point landmarks (e.g., mountain peaks) can be updated through BAS, but they are not required. The Census Bureau accepts updates to these areas in a similar manner to legal boundary changes. However, since they are not legal governments, no documentation or effective dates are required.

#### 3.5.1 CDP Changes

To create changes to CDPs, make sure you have already run the **2) Create Additional Changes Tool** with CDP selected. That tool creates an empty feature class called **bas<yy>\_<BAS ID>\_changes\_cdp**.

Each CDP update must have the required attributes and corresponding change type populated (refer to [Table 5](#)). The steps below document how to properly update your CDP layer.

**Table 5: Required Attribution for CDP Changes**

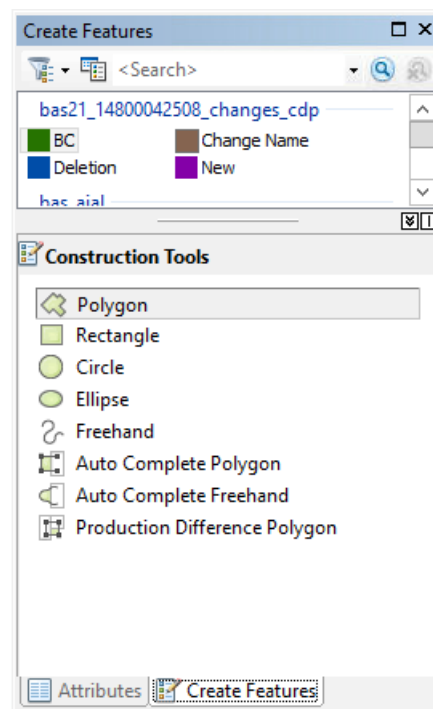
	CHNG_TYPE	NAME	RELATE
Boundary Correction	✓	B	✓
Delete CDP	✓	X	✓
New CDP	✓	E	✓
Name Change	✓	G	✓

(Note: ✓ = Required Field)

1. Start an editing session if you have not already. Navigate to the area where you would like to modify, add, or remove a CDP. Make sure the **Create Features** window is open as it should list all the appropriate types of CDP edits you may want to make.



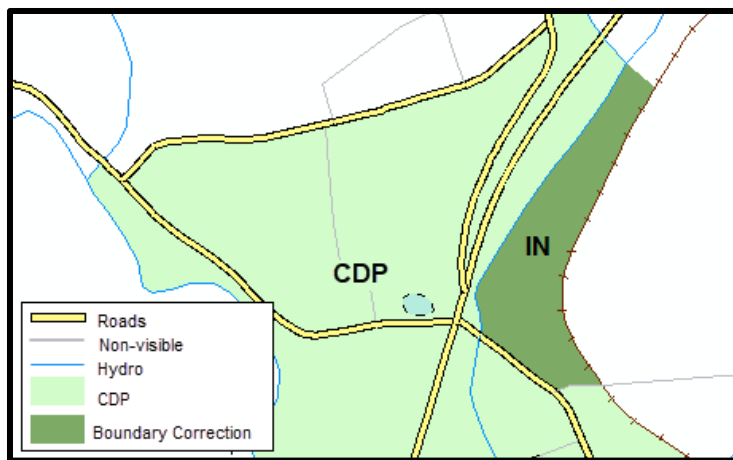
**Figure 19: The Editor Toolbar with the Create Features Tool highlighted**



**Figure 20: The Create Features window as it appears in ArcMap**

2. To modify a CDP's shape, you will use the built in ArcGIS edit tools to draw the difference between the boundaries as you would like it to appear. Select the **BC (Boundary Correction)** template for these changes and draw the areas that should be added or removed from the CDP. Once the polygon is complete, update the following fields in the attribute table:
  - a. Enter the feature name in the **NAME** field. If you're not sure of the name, you can use the identify tool to get the name from the bas\_cdp layer.
  - b. Fill out the **RELATE** field to designate if the area is being added (IN) or removed (OUT) from the CDP.
  - c. Make sure the **CHNG\_TYPE** field has the appropriate designator (B). If it does not, change it to B.





**Figure 21. A Boundary Correction to CDP A**

3. To modify a CDP's Name:
  - a. Select the CDP from the `bas_cdp` layer. Copy and paste it into the `bas<yy>_<BAS ID>_changes_cdp` layer.
  - b. Begin editing the attributes for the pasted change. Enter a 'G' in the **CHNG\_TYPE** field and enter the new name in the **NAME** field.
4. To add a CDP, use the built in ArcGIS edit tools to draw the new boundaries as you would like it to appear, using the **New Incorporation** template. Once the polygon is complete, make sure to update the following fields in the attribute table:
  - a. Enter the new name in the **NAME** field.
  - b. Make sure the **CHNG\_TYPE** field has the appropriate designator (E). If it doesn't, change it to 'E.'
5. To delete a CDP:
  - a. Select the CDP from the `bas_cdp` layer. Copy and paste it into the `bas<yy>_<BAS ID>_changes_cdp` layer.
  - b. Begin editing the attributes for the pasted change. Enter an 'X' in the **CHNG\_TYPE** field.

### 3.5.2 Linear Feature Changes

The Census Bureau will accept linear feature modifications when needed. If you have linear feature changes to submit, make sure you have already run the **2) Create Additional Changes Tool** with Linear Features selected. That tool creates an empty feature class called `bas<yy>_<BAS ID>_In_changes`. There are multiple valid approaches to populating this layer with appropriate change data. Since these would include potential updates to local data sources, we cannot say which would be most appropriate for each individual user.

Each linear feature update must have the required attributes and corresponding change type populated (refer to [Table 6](#)). If the correct attribution is not provided, the Census Bureau will not make the correction for this BAS cycle. The steps below document how to properly update your linear feature layer.

**Table 6: Required Attribution for Linear Feature Updates**

	CHNG_TYPE		TLID	FULLNAME	MTFCC	LTOADD	RTOADD	LFROMADD	RFROMADD
Add Feature	✓	AL		✓	✓	✓	✓	✓	✓
Delete Feature	✓	DL	✓						
Rename Feature	✓	CA	✓	✓					
Recode Feature	✓	CA	✓		✓				

(Note: ✓ = Required Field; LTOADD, RTOADD, LFROMADD, and RFROMADD are not required but requested only for Add Feature records)

1. Some possible methods for adding lines include:
  - Load the data (with or without a query) into the changes feature class so that individual fields can be mapped into the Census Bureau requested schema.
  - During an edit session, trace the local data source or create streets from imagery using the appropriate **bas<yy>\_<basid>\_In\_changes** template to create new records, or
  - During an edit session, copy and paste data from the local streets data source.
2. For adding linear features, modify the attribution for the features using your preferred editing method:
  - a. Enter 'AL' in the **CHNG\_TYPE** field (if it is not already populated) and enter the appropriate MTFCC in the **MTFCC** field. If the feature has a name, enter the name in the **FULLNAME** field.
  - b. If this is a new street (MTFCC starts with S), you must provide the name of the street in the **FULLNAME** field and you may also provide Address Ranges (**LTOADD**, **RTOADD**, **LFROMADD**, and **RFROMADD**).
3. To modify or delete lines, start an edit session if you haven't already. Then copy and paste the records from the **bas\_edges** feature class you want to change. By doing this you preserve the TIGER/Line ID (TLID) in the **TLID** field to ensure the correct features are affected.
4. If a feature that does not exist is in the Census Bureau's feature network, mark the feature for deletion by entering 'DL' in the **CHNG\_TYPE** field.
5. If a feature is in the incorrect location in the Census Bureau's feature network, mark the feature for deletion and re-add it in the correct location using the steps laid out above. Only do this if the feature is very far off, or it is in the wrong position relative to boundaries or other features.
6. If a feature has an incorrect name and/or MTFCC, enter 'CA' in the **CHNG\_TYPE** field. Populate the correct MTFCC in **MTFCC** and/or the correct name in **FULLNAME**.

---

Note: A list of MTFCCs can be found at [www.census.gov/library/reference/code-lists/mt-feature-class-codes.html](http://www.census.gov/library/reference/code-lists/mt-feature-class-codes.html).

---

### 3.5.3 Area Landmark, Hydrographic Area, and Point Landmark Updates

Area landmarks, hydrographic areas (e.g., lakes), and point landmarks (e.g., mountain peaks) can be updated through BAS, but are not required. Hydrographic area changes should be included in the area landmark changes file so for this section the term “area landmark” includes hydrographic updates. Landmark updates that are accepted through BAS are listed in [Table 7](#). For more guidance on MTFCCs, acceptable values, and how they are used, please visit [www.census.gov/library/reference/code-lists/mt-feature-class-codes.html](http://www.census.gov/library/reference/code-lists/mt-feature-class-codes.html).

**Table 7: Examples of acceptable landmark updates**

Area Landmarks	Area or Point Landmarks	Point Landmarks
<ul style="list-style-type: none"> <li>• Water bodies</li> <li>• Swamps</li> <li>• Quarries</li> <li>• National parks</li> <li>• Forests</li> </ul>	<ul style="list-style-type: none"> <li>• Airports</li> <li>• Parks</li> <li>• Schools</li> <li>• Golf courses</li> <li>• Museums</li> <li>• Cemeteries</li> </ul>	<ul style="list-style-type: none"> <li>• Mountain peaks or summits</li> <li>• Libraries</li> <li>• City halls</li> <li>• Community centers and police stations</li> </ul>

It is important to note that the Census Bureau cannot delete or modify any point landmarks imported from the USGS GNIS database. Therefore, changes submitted for the following types of landmarks may be left unchanged even though they are acceptable updates:

- K2451 (Airport).
- K2582 (Cemetery).
- C3022 (Summit or Pillar).
- C3081 (Locale or Populated Place).
- C3061 (Cul-de-sacs).

In order to submit updates, make sure you have run the **2) Create Additional Changes Tool** with Point Landmark or Area Landmark selected as described in [Section 2.4](#) for each type of change you want to submit. That tool creates an empty feature class called **bas<yy>\_<BAS ID>\_pointlm\_changes** or **bas<yy>\_<BAS ID>\_arealm\_changes** based on the requested input. The types of updates that can be submitted for point and area landmarks are laid out in [Table 8](#).

**Table 8: Methods for Updating Landmarks**

Update Type	Area (arealm_changes)	Points (pointlm_changes)
Boundary Corrections (adding and removing area)	✓	
Create New	✓	✓
Remove	✓	✓
Name changes	✓	✓

Each area landmark or hydrographic area update must have the required attributes and corresponding change type populated (refer to [Table 9](#)). The steps below document how to properly update your point and area landmark changes layer(s).

**Table 9: Required Attribution for Point Landmark, Area Landmark, and Hydrographic Area Updates**

	FULLNAME	CHNG_TYPE	RELATE	MTFCC	AREAID/POINTID
Boundary Correction (Area landmarks only)	✓	✓	B	✓	✓
Delete Landmark		✓	X		✓
Change Landmark Name	✓	✓	G		✓
New Landmark	✓	✓	E	✓	

(Note: ✓ = Required Field)

1. To modify the shape of an area landmark, create the change polygons using the built in ArcGIS Editing tools in the **Create Features** window. This window should list all the appropriate types of landmark edits you may want to make. Select the Boundary Correction template for these changes and draw the areas that should be added or removed from the landmark.
2. Once you have completed the change polygon, modify the attribution for the features using your preferred editing method:
  - a. Enter the feature name in the **FULLNAME** field. If you're not sure of the name, you can use the identify tool to get the name from the bas\_arealm and/or bas\_water layer.
  - b. Fill out the **RELATE** field to designate if the area is being added (IN) or removed (OUT) from the area landmark.
  - c. Make sure the **CHNG\_TYPE** field has the appropriate designator (B). If it doesn't, change it to B.
3. To add new features, use the built in ArcGIS editing tools to create new point/area landmarks or to copy/paste landmarks from another data source.
  - a. Enter the name of the new feature in the **FULLNAME** field.
  - b. Enter an MTFCC in the **MTFCC** field. The acceptable MTFCC codes for new landmarks are listed at <[www.census.gov/library/reference/code-lists/mt-feature-class-codes.html](http://www.census.gov/library/reference/code-lists/mt-feature-class-codes.html)>.
  - c. Make sure the **CHNG\_TYPE** field has the appropriate designator (E). If it doesn't, change it to 'E.'

When adding new area landmarks, please only add the following types of areas:

- Water bodies.
- Glaciers.
- Airports.
- Cemeteries.
- Golf courses.

- Parks.

The Census Bureau cannot add other types of areas at this time (although some may already exist in the MAF/TIGER System).

---

Note: If adding an MTFCC K2457 (Airport – Area Representation) area landmark, please limit the updates to major airports (major regional and international airports). The feature should show the full extent of the airport facility, that is, do not limit the addition to simply the landing strips.

---

4. To delete any type of landmark, copy and paste the records from the bas\_arealm, bas\_pointlm, or bas\_water feature class that you want to remove into the appropriate changes feature class. Edit the **CHNG\_TYPE** field so that they are marked with an 'X.'
5. To modify the location of a point landmark, mark the feature for deletion and re-add it in the correct location using the steps laid out above. Only do this if the feature is very far off or in the wrong position relative to boundaries or other features.
6. If a landmark has an incorrect name and/or MTFCC, copy and paste the records from the bas\_arealm, bas\_pointlm, or bas\_water feature class that you want to remove into the appropriate changes feature class. Enter 'G' in the **CHNG\_TYPE** field. Populate the correct MTFCC in **MTFCC** and/or the correct name in **FULLNAME**.

### 3.6 Attribute Check Tool

This tool is used to verify that there are no inconsistencies with the data included in the submission. Run this tool during or after change polygons have been reviewed for spatial accuracy to produce a report of attribution errors. It may also run for all levels of geography that have changes since it is run on each individual change file.

1. Double click on the **5) Attribute Check** tool.

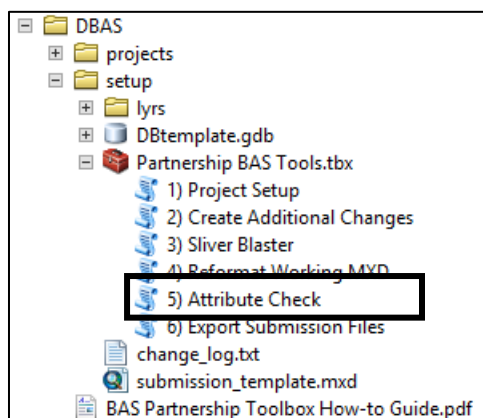
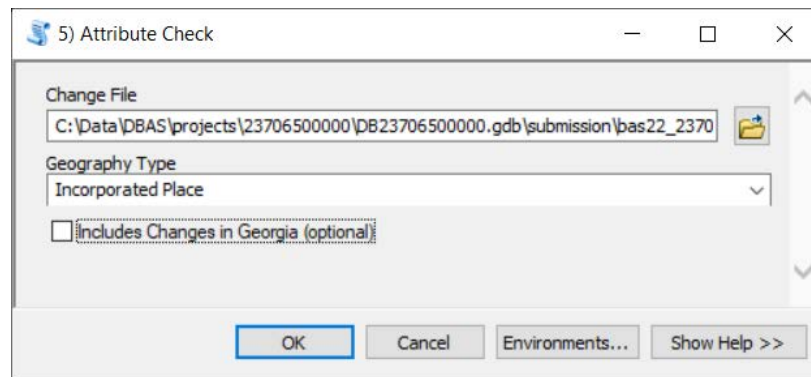


Figure 22. Partnership Tools Menu with Attribute Check Selected

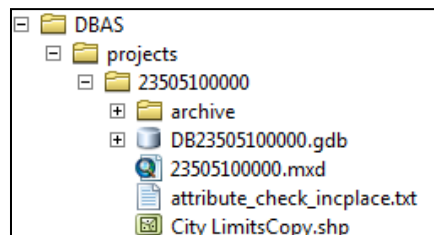
2. In the **Attribute Check** window:
  - The **Change File** should be the change file created in the **2) Create Additional Changes Tool** to generate a report.
  - In **Geography Type**, choose the type of geography being worked on from the dropdown. The same options as the Create Changes tool are available here.

- The last input is the optional check box for **Includes Changes in Georgia**. This box only needs to be checked if responding in the state of Georgia.



**Figure 23. Attribute Check Window**

3. Click **OK** to run the tool.
4. There should now be a text file in the working folder called **attribute\_check\_<geogtype>.txt** containing all the discrepancies identified in the change file that still need to be fixed.



**Figure 24. Projects Submenu Showing an Attribute Check Text File**

5. Reopen the working .mxd and correct any attribution errors identified in the error text file. Use the tables in the above sections to assist in correcting those errors.

### 3.7 Export Submission Tool

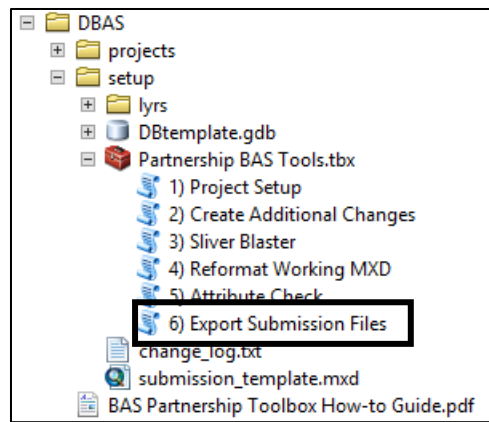
Upon review of the changes file and the attribute error report, the finalized changes may be exported for submission to the Census Bureau. This tool can also be used to provide updated contact information with the submission.

---

Note: This tool does not submit the changes, it just makes a file for submission. Please follow steps listed in [Chapter 4](#) to submit the changes through the Secure Web Incoming Module (SWIM).

---

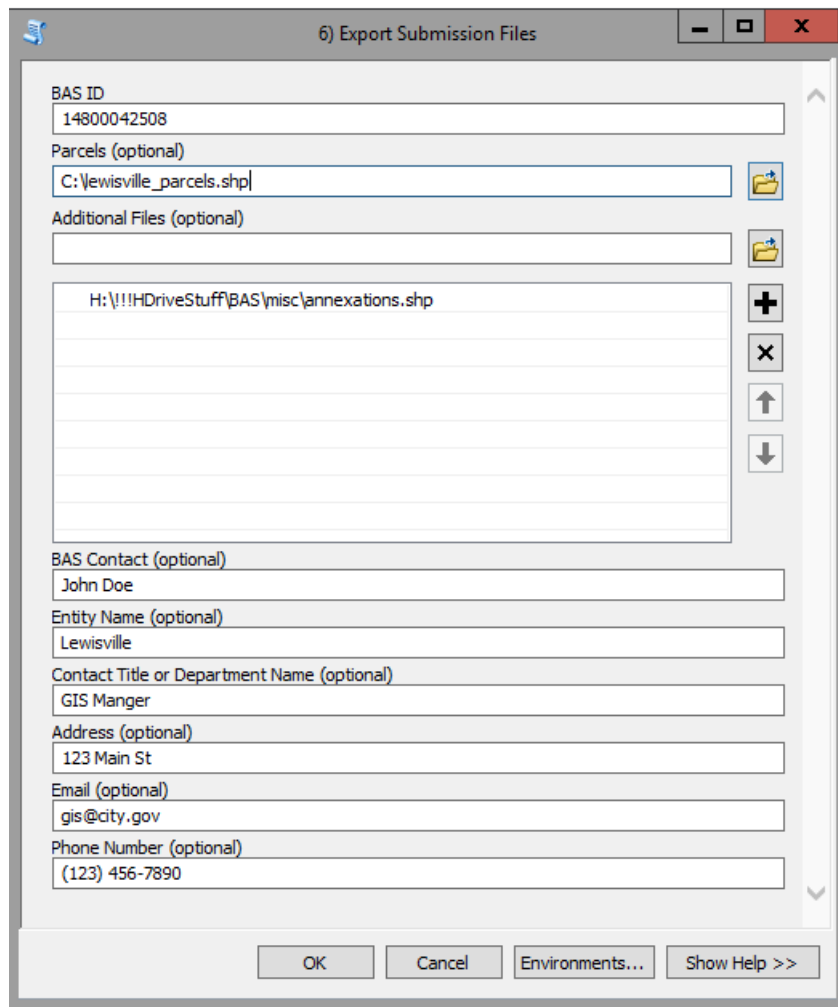
1. Double click on the **6) Export Submission Files** tool.



**Figure 25. Partnership Tools Menu with Export Submission Files Selected**

2. In the Export Submission Files tool window:

- Enter the 11-digit BAS ID in the **BAS ID** field.
- Parcel data can be included as supplemental information in the **Parcels** field. This is an optional field so it can also be left blank.
- Under **Additional Files**, drag in or navigate to any additional files to be included in the submission. This can include streets data, maps, legal documentation, or any other helpful supporting data. This is an optional field so it can also be left blank. There is no need to add the changes layers here as the tool will handle those already based on the BAS ID.
- For **BAS Contact, Entity Name, Contact Title or Department Name, Address, Email,** and **Phone Number**, please include any or all contact information updates that are to be sent to the Census Bureau. These fields can be left blank if there are no updates, though if someone other than the BAS Contact prepared the submission, include the contact information.



**Figure 26. Export Submission Files Window**

3. Click **OK** to run the tool.
4. When the tool completes, a new browser window will open and load the SWIM webpage. The zip file with your submission will be located inside the BAS ID folder and named **BAS<yy>\_<BASID>\_return.zip**.



## CHAPTER 4 SUBMIT CHANGES TO THE CENSUS BUREAU

---

All participants must use the Secure Web Incoming Module (SWIM) to submit their changes to the Census Bureau. Due to security requirements, the Census Bureau cannot accept submissions via File Transfer Protocol, email, or any protocol other than the SWIM site.

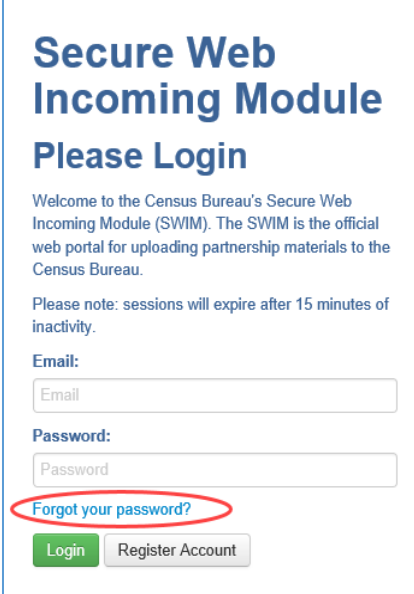
To upload and transmit update files to the Census Bureau, participants must access their accounts for SWIM.

1. Open a web browser window and enter the SWIM URL: <<https://respond.census.gov/swim/>>. SWIM runs on the two most recent versions of each of these major browsers:
  - Microsoft Edge®
  - Google Chrome®
  - Mozilla Firefox®
  - Apple Safari®
2. Participants who already have a SWIM account should proceed to Step 4 to log in.
3. Participants who do not have a SWIM account click 'Register Account':
  - **Enter the 12-digit token provided by the Census Bureau.**
  - **Create a password following the five criteria below:**
    - a. Username and password are case sensitive.
    - b. It must be at least eight characters in length.
    - c. It must have at least one upper case character.
    - d. It must have at least one lower case character.
    - e. It must have at least one number.
    - f. It must have at least one special character (valid characters are: #, !, \$, &, ?, ~).
  - Complete the registration information form.
4. Log in to SWIM using your email address and password.
5. Upload a BAS submission:
  - a. Select the **Start New Upload** button.
  - b. Select the **BAS** radio button.
  - c. Select the **Entity** type (State, Place, County, MCD, Tribal Area, or Consolidated City).
  - d. Select the State and County.
  - e. Click the **+ Add File** button.
  - f. Select the **.zip file** to upload.
  - g. Double-click on the **.zip file** to upload. Add additional files in the same manner.
  - h. Add any additional information to the Comments field.
6. Click **Next**. A **Thank You** screen will appear.
7. Logout of SWIM.

## 4.1 Troubleshooting SWIM

If you are having trouble accessing your SWIM account, here are some tips for using SWIM:

- SWIM email addresses *and* passwords are case sensitive.
- If you forgot your password, participants may reset their password using the “Forgot your password?” link on the login page. Follow the prompts to enter the case-sensitive email address and provide the security answer. If the security answer is correct, the SWIM system sends a password reset link to the email account for use in resetting the password. Once logged into SWIM, users can modify their password and security answer by selecting the ‘Change Security’ link at the top, right-hand side of the page.



**Secure Web Incoming Module**  
**Please Login**

Welcome to the Census Bureau's Secure Web Incoming Module (SWIM). The SWIM is the official web portal for uploading partnership materials to the Census Bureau.

Please note: sessions will expire after 15 minutes of inactivity.

**Email:**

**Password:**

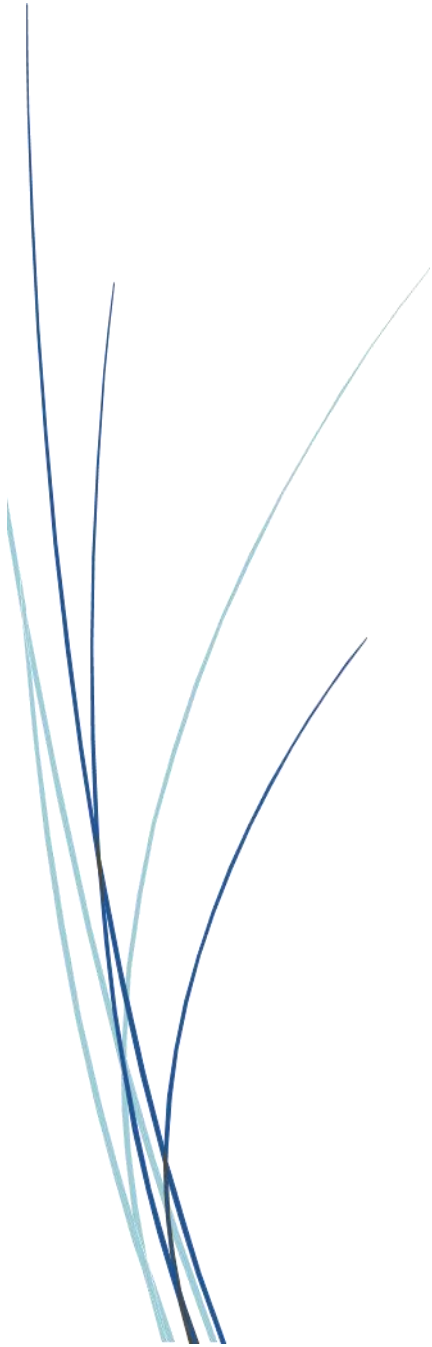
[Forgot your password?](#)

- If you cannot recover your password through the “Forgot your Password?” menus, please email <[geo.bas@census.gov](mailto:geo.bas@census.gov)> with the subject line “SWIM Account Assistance” with a brief description of the issue.
- SWIM accounts are specific to users, not to your government so we do not advise sharing an account. You may always request another account for a new BAS Contact.
- If you already created an account through another program such as PSAP, LUCA, or GSS, you do not need another account. You may use the same previously established login information.

# Boundary and Annexation Survey Geographic Update Partnership Software How-to Guide

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*Instructions for Participating in the Boundary and Annexation Survey Using the Geographic Update Partnership Software*



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## INTRODUCTION

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### A. The Boundary and Annexation Survey

The Boundary and Annexation Survey (BAS) provides tribal, state, and local governments an opportunity to review the Census Bureau’s legal boundary data to ensure the Census Bureau has the correct boundary, name, and status information. BAS also allows participants to review and provide updates to Census Designated Places (CDPs). Maintaining correct boundaries helps ensure that the Census Bureau assigns the appropriate housing and population counts to each government.

BAS fulfills the agency’s responsibility as part of the National Spatial Data Infrastructure, for which the Office of Management and Budget (OMB) Circular A–16 designates the Census Bureau as the lead federal agency for maintaining national data about legal government boundaries, as well as statistical and administrative boundaries. BAS supports the spatial data steward responsibilities of the OMB E-Gov, Data.gov, the National Map, the Geographic Names Information System, the Federal Geographic Data Committee, and the Geospatial One-Stop. Title 13, Section 6, United States Code authorizes this survey.

The Census Bureau uses the boundaries collected in BAS to tabulate data for various censuses and surveys including the decennial census, American Community Survey (ACS), and Population Estimates Program (PEP). It also uses the legal boundaries collected through BAS to support several other programs such as Congressional and State Legislative redistricting, the Economic Census, the Geographic Update Population Certification Program, and the Special Census program.

### B. Key Dates for BAS Respondents

- |                  |   |
|------------------|---|
| <b>January 1</b> | Boundary updates must be legally in effect on or before this date to be reported in the current survey year.                            |
| <b>March 1</b>   | First BAS deadline - Boundary updates returned by this date will be reflected in the ACS and PEP data and in next year’s BAS materials. |
| <b>May 31</b>    | Final BAS deadline - Boundary updates returned by this date will be reflected in next year’s BAS materials.                             |

### C. Adjacencies and Legal Disputes

The Census Bureau will not make any boundary change that affects adjacent legal governments without the appropriate documentation. Please review any changes that affect adjacent governments to determine if they are intentional legal changes.

If the Census Bureau discovers that an area of land is in dispute between two or more jurisdictions, the Census Bureau will not make any boundary corrections until the parties come to a written agreement, or there is a documented final court decision regarding the dispute.

To learn more, please contact the Census Bureau Legal Office at **1-301-763-2918**.

For disputes involving tribal areas, the Census Bureau must defer to the Office of the Solicitor at the Department of the Interior for a legal opinion. Often complicated land issues require an extended period for resolution, and in those cases, the Census Bureau will retain the current boundary in the database until a legal opinion is issued by the Solicitor's office.

## D. Contact Us

If assistance is required in preparing your BAS submission or if you are experiencing issues with the Geographic Update Partnership Software (GUPS), please contact the Census Bureau at [<geo.bas@census.gov>](mailto:geo.bas@census.gov) or **1-800-972-5651**.

When emailing [<geo.bas@census.gov>](mailto:geo.bas@census.gov), please include the following details:

- BAS ID and Government Name,
- Level of geography for which you are submitting,
- Contact information such as a phone number or email address,
- Version of GUPS you are using,
- Full text of the error message received as a screenshot or text (if applicable), and
- Screenshots of discrepancies (if applicable).

## E. Resources

Additional resources are available on our website. Technical documentation and helpful videos are also available to walk through the BAS submission process.

### Technical Documentation

For more technical information about Census Bureau geography, BAS submission information, change types, and shapefiles, see the BAS Technical Guide at [<www.census.gov/programs-surveys/bas/information/respondent-guides.html>](http://www.census.gov/programs-surveys/bas/information/respondent-guides.html).

For supplemental information on functions within GUPS that are specific to QGIS, a QGIS user's manual can be found at: [<http://docs.qgis.org/3.4/en/docs/user\\_manual/index.html>](http://docs.qgis.org/3.4/en/docs/user_manual/index.html).

GUPS Installation files: [<https://www2.census.gov/geo/pvs/gups/>](https://www2.census.gov/geo/pvs/gups/).

### Videos

The Census Bureau created training videos to give BAS participants detailed instructions and information on how to report and submit BAS changes. These videos are available on the BAS website at: [<www.census.gov/programs-surveys/bas/library/bas-videos.html>](http://www.census.gov/programs-surveys/bas/library/bas-videos.html).

# CHAPTER 1 GETTING STARTED WITH GUPS

The Geographic Update Partnership Software (GUPS) is a user-friendly geographic information system (GIS) that is customized for each of the Census Bureau’s geographic partnership programs. GUPS features a BAS and Tribal BAS module which offers tools specific to the BAS program and allows participants to create a standardized submission. This allows the Census Bureau to easily process returned BAS files. GUPS is designed to be a digital method to mimic paper map updates, allowing for more accurate digital submissions that are created with imagery and geospatial reference data in mind.

## 1.1 Downloading and Installing GUPS

GUPS is available for installation two ways: direct download from the BAS website or by request on CD/DVD. GUPS is available for download directly from the BAS website <[www.census.gov/programs-surveys/bas/technical-documentation/gups-instructions.html](http://www.census.gov/programs-surveys/bas/technical-documentation/gups-instructions.html)>. If a CD/DVD is requested through the Annual Response Form <[www.census.gov/geo/partnerships/bas](http://www.census.gov/geo/partnerships/bas)> a package will be shipped to the participant that includes a CD/DVD containing GUPS, this How-to Guide in portable document format (.pdf), a read me text (.txt) file, and a CD/DVD containing BAS shapefiles. See [Section 1.1.2](#) for step-by-step installation instructions.

Once GUPS is installed, BAS shapefiles can be imported from the BAS website directly to the GUPS application. If a participant requests GUPS software on CD/DVD, the shapefiles are included. Use the Annual Response Form to request a data CD/DVD.

### 1.1.1 System Requirements

Before beginning the installation, check that the computer has the capabilities needed to run GUPS. GUPS is based on QGIS, a free and open-source desktop GIS application. To learn more about QGIS, visit their website at <[www.qgis.org/en/site/](http://www.qgis.org/en/site/)>. The GUPS application was developed for use in a desktop PC or a network environment.

[Table 1](#) lists the hardware and software requirements to install and run GUPS.

**Table 1: System Requirements for GUPS**

Hardware	Operating System
<p><b>Disk Space Needed to Run GUPS:</b> 4 GB</p> <p><b>Disk Space Needed to Store Shapefiles:</b> Shapefile sizes vary. To view the size of the shapefiles, right-click, and choose <b>Properties</b> in the drop-down menu. The <b>Files Properties</b> box will open and display the folder size. Select multiple files/folders in the</p>	<p><b>Windows®:</b> To run GUPS, Windows users need one of the following operating systems:</p> <ul style="list-style-type: none"><li>• Windows 10®</li><li>• Windows 11®</li></ul> <p><b>Apple®:</b> Mac OS X® users must secure a license for Microsoft Windows and use a Windows bridge. The suggested bridge software is Boot Camp®, which comes pre-installed on all Mac computers.</p>

Hardware	Operating System
<p>list to view their properties via the same method.</p> <p><b>RAM:</b> 4 GB minimum, 8 GB or more recommended for optimal performance.</p>	<p>Locate instructions for using Boot Camp at: <a href="http://www.apple.com/support/bootcamp/getstarted/">www.apple.com/support/bootcamp/getstarted/</a>.</p> <p><b>IMPORTANT:</b> Since Boot Camp requires a restart of the computer to set up the bridge, be sure to print the instructions provided at the URL above before beginning installation.</p>

### 1.1.2 Installing GUPS

GUPS is available for download from the BAS website or from the CD/DVD requested through the Annual Response Form. This software should run automatically from the CD/DVD. If it does not, navigate to the CD/DVD drive and begin with Step 2.

1. Unzip the file "gups.zip" and extract all contents of the unzipped package to a folder on the computer.
2. Click the **Setup-x.x.x** batch file to start the installation.
3. When the installer opens, the **Welcome to the QGIS GUPS Setup Wizard** screen will appear. Follow the instructions on the Wizard and click the *Next* button.
4. The **License Agreement** screen will appear. Review the License Agreement and click the *I Agree* button to continue the install process.
5. The **Choose Install Location** screen will appear. Click the *Browse* button to choose the location where GUPS will be installed. It is recommended to install the application at the default location shown (C:\Program Files\QGIS GUPS). Click *Next* to continue the install process.
6. The **Choose Components** screen will appear. The Select Components to Install box will be grayed out as it is the default. Click *Install* to continue.
7. The software should take five to ten minutes to complete the install. When the install is complete, the **Completing the QGIS GUPS Setup Wizard** screen will appear. To complete the install, click the *Finish* button at the bottom of the screen.

---

Note: Many agencies/organizations require certain security privileges to download and install external software. Work with your local Information Technology (IT) staff person to acquire those privileges or ask they assist with GUPS installation. Please note that GUPS users with different security privileges than the IT staff person that installed the software will encounter problems accessing the directories and plugins needed to operate GUPS if the software is not installed under the user's profile. To correct this, have the IT staff person reinstall GUPS under the user's profile using the user's credentials. If installation problems remain, **Contact Us** for installation assistance.

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## CHAPTER 2 STARTING A BAS PROJECT

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### 2.1 Creating a Project

Once installed, open GUPS by clicking on the QGIS icon that appears after the installation is complete.



Figure 1. QGIS Icon

Once open, you can begin to set up your BAS project.

1. To set up your BAS project, you will use the **Map Management** tool. This tool should open automatically when you open QGIS, however if it does not, you can click on the icon that looks like a map with a north arrow.

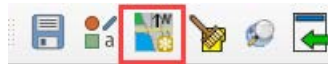


Figure 2. The Map Management tool on the Standard toolbar

- a. You will use the Map Management tool to set up your workspace and download the Census Bureau's shapefiles for review.

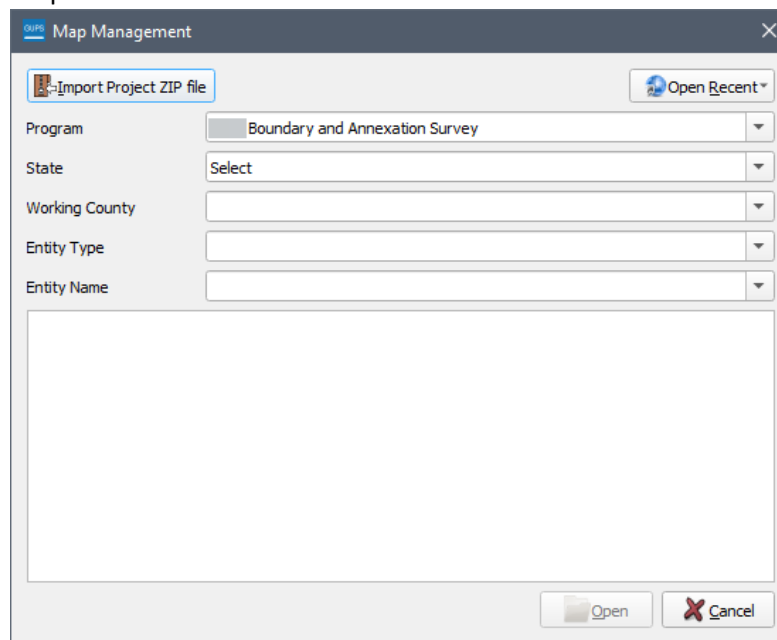


Figure 3. Map Management options for BAS.

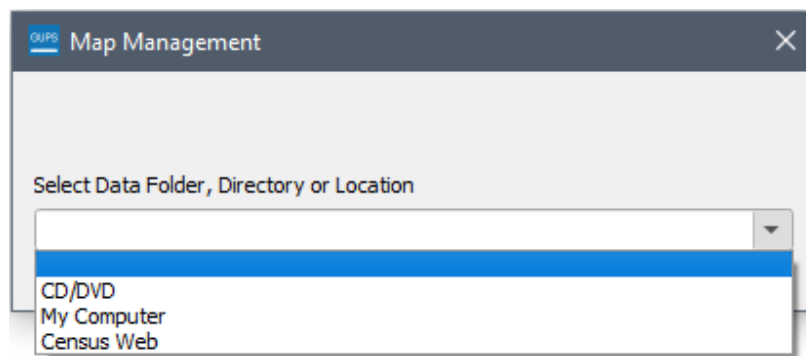
---

Note: If you open Map Management and the options are only for previous year's BAS or Tribal BAS, update your version of GUPS to the current version ([Section 1.1](#)).

---

- b. Within the Map Management window, select a Program:
  - i. If you are a non-tribal government, select 2023 Boundary and Annexation Survey and continue with [step c](#).

- ii. If you are a tribal government, select 2023 Tribal Boundary and Annexation Survey and continue with [step d](#).
- c. For BAS fill the following:
  - i. State: The working state your government is within.
  - ii. Working County: The working county is the county your government is within. If your government is in two or more counties, you will have to create a project for each county your government is in.
  - iii. A dialogue box will appear which will allow you to select the data resource for the working county. The options to import current BAS Partnership Shapefiles into the project include:
    - (1) Census Web: shapefiles directly from the Census Bureau website,
    - (2) CD/DVD: use a disc to import the shapefiles, or
    - (3) My Computer: select shapefiles from a location on your hard drive.See [Section 2.2](#) for more information on importing BAS Partnership Shapefiles into the GUPS project.

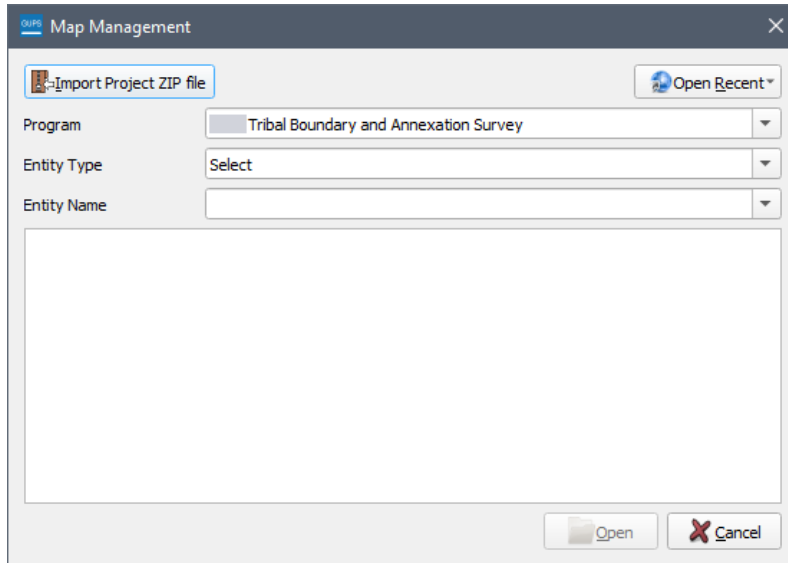


**Figure 4: Dialog box for choosing upload options for the Census Bureau Partnership Shapefiles**

- iv. Entity Type: the type of the government you are reporting for.
- v. Entity Name: the name of the government you are reporting for.
- vi. A list will appear below the chosen government name that contains the names of all the counties in the selected state. The names of the counties that are adjacent to the working county will show up at the top of the list highlighted in yellow. You have the option to check any counties, including the adjacent counties, that you may want to visualize on the map. If your government is in two or more counties, you will want to select the additional county or counties at this time. You will still only be able to make changes inside the working county.

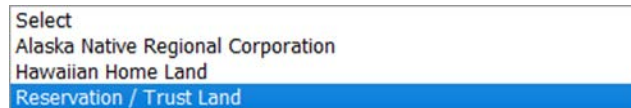


d. For Tribal BAS fill the following:



**Figure 5. Map Management options for Tribal BAS**

i. Entity Type: Alaska Native Regional Corporation, Hawaiian Home Land, or Reservation/Trust Land.

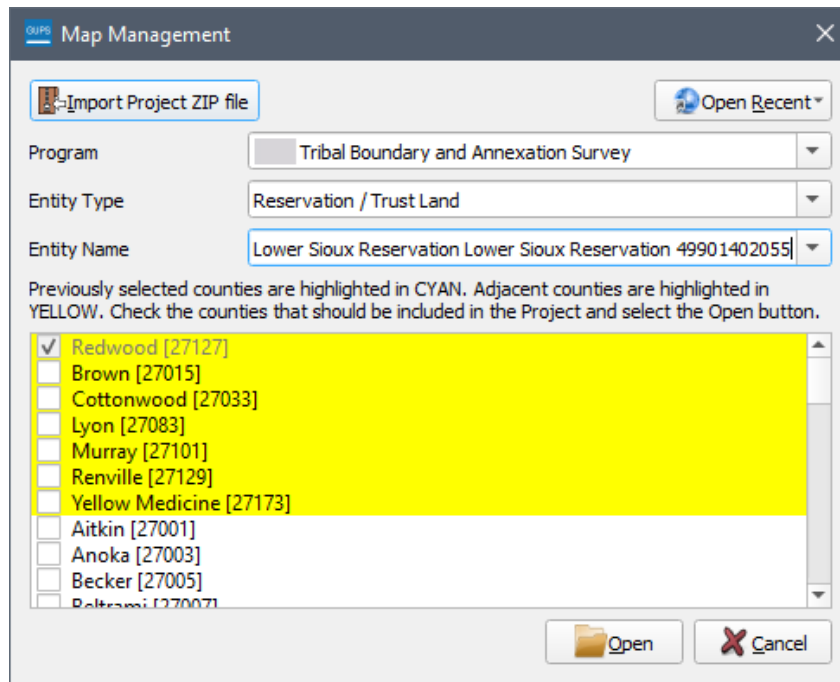


**Figure 6. Tribal BAS Entity Type drop down options**

- ii. Entity Name: Select the name of the area you are reporting changes for from the drop-down menu. This drop-down menu does not include the names of the tribe or tribal governments.
- iii. A dialogue box will appear which will allow you to select the data resource for the working entity. The options to import current BAS Partnership Shapefiles into the project include:
  - (1) Census Web: shapefiles directly from the Census Bureau website,
  - (2) CD/DVD: use a disc to import the shapefiles, or
  - (3) My Computer: select shapefiles from a location on your hard drive.

See [Section 2.2](#) for more information on importing BAS Partnership Shapefiles into the GUPS project.

iv. A list will appear below the government name that contains the names of all the counties in the selected tribal reservation or trust lands. The names of the counties that are adjacent to the working county will show up at the top of the list highlighted in yellow. You have the option to check any counties, including the adjacent counties, that you may want to visualize on the map.

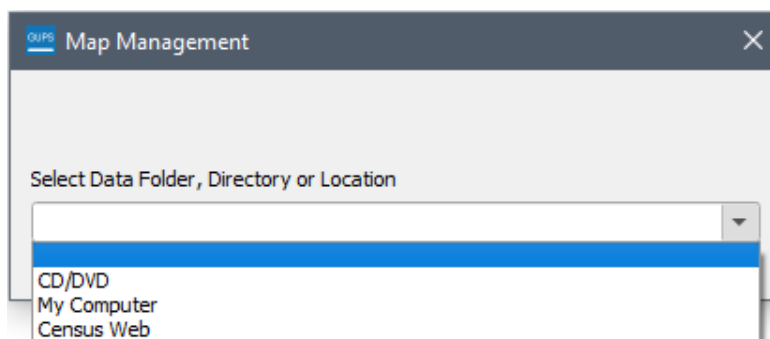


**Figure 7. A filled Map Management window with adjacent counties listed in yellow.**

2. Finally, select **Open** and the Census Bureau data for your government will appear in your map screen.

## 2.2 Accessing BAS Partnership Shapefiles

This section expands on the options to import current BAS Partnership Shapefiles into your project. The options will appear during Map Management setup after selecting the working county.



**Figure 8. Dialog box for choosing upload options for the Census Bureau Partnership Shapefiles**

### 2.2.1 Census Web (Recommended)

BAS Partnership Shapefiles can be pulled directly into the application from the BAS website when working in GUPS by choosing the Census Web option during project setup. Users can load the shapefiles as needed or load multiple county files at once. This is the preferred method for loading the BAS Partnership Shapefiles into GUPS as it ensures that required files are placed in the correct location for the application to access.

## 2.2.2 CD/DVD

The GUPS CD/DVD comes preloaded with the required Census Bureau partnership shapefiles. This option is great for limited or no internet access.

When the CD/DVD option is selected, the GUPS application unzips the files and places them into a pre-established folder created on the computer's home directory during the installation process (C:\GUPSGIS\gupsdata\BAS2023\shape). It then displays them in the application and manages the files. There is no need for the user to take any further action.

## 2.2.3 My Computer

When the My Computer option for loading files is selected, the user must first download the shapefiles from the BAS website. GUPS will then import them after the user selects the folder in which they are located. The Census Web option does this process automatically. To use the My Computer option:

1. Navigate to the BAS Partnership Shapefiles page at [www.census.gov/geographies/mapping-files/2023/geo/bas/2023-bas-shapefiles.html](http://www.census.gov/geographies/mapping-files/2023/geo/bas/2023-bas-shapefiles.html).
2. Under '2023 Partnership Shapefiles' in the 'Select a Geography' drop-down box, select the name of the state in which the government is located from the drop-down list.
3. Select the county(ies) or county equivalent(s) needed by clicking the box next to it. Up to five (5) counties may be selected at one time. Once the counties selection is complete, click the **Submit** button at the bottom left-hand side of the page. Tribal BAS participants should download any counties within their working area.

United States  
Census  
Bureau

You are here: [Census.gov](#) > [Geography](#) > [Partnerships](#) > Maryland Partnership Shapefile Batch Download

### Geography

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[American Indian and Alaska Native Programs](#)  
[Boundary and Annexation Survey](#)  
[Federal Register Notices](#)  
[School District Review Program](#)  
[Local Update of Census Addresses Operation](#)  
[2010 Participant Programs](#)  
[2000 Participant Programs](#)

#### Maryland Partnership Shapefile Batch Download

Please select up to 5 individual counties to download the shapefiles for those counties.

<input type="checkbox"/> Allegany County (24001)	<input type="checkbox"/> Harford County (24025)
<input type="checkbox"/> Anne Arundel County (24003)	<input type="checkbox"/> Howard County (24027)
<input type="checkbox"/> Baltimore City (24510)	<input type="checkbox"/> Kent County (24029)
<input type="checkbox"/> Baltimore County (24005)	<input type="checkbox"/> Montgomery County (24031)
<input type="checkbox"/> Calvert County (24009)	<input type="checkbox"/> Prince George's County (24033)
<input type="checkbox"/> Caroline County (24011)	<input type="checkbox"/> Queen Anne's County (24035)
<input type="checkbox"/> Carroll County (24013)	<input type="checkbox"/> St. Mary's County (24037)
<input type="checkbox"/> Cecil County (24015)	<input type="checkbox"/> Somerset County (24039)
<input type="checkbox"/> Charles County (24017)	<input type="checkbox"/> Talbot County (24041)
<input type="checkbox"/> Dorchester County (24019)	<input type="checkbox"/> Washington County (24043)
<input type="checkbox"/> Frederick County (24021)	<input type="checkbox"/> Wicomico County (24045)
<input type="checkbox"/> Garrett County (24023)	<input type="checkbox"/> Worcester County (24047)

Submit Reset

Figure 9. The Partnership Shapefile Batch Download Page

4. A prompt to save the file(s) appears.

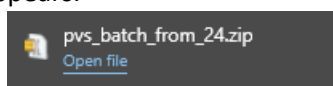
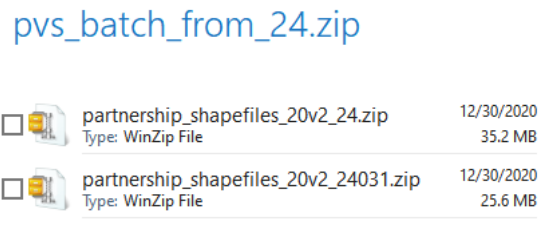


Figure 10. Example of the downloaded zip in Edge browser. This prompt will look different depending on which browser is used.

5. Click the down arrow next to Save and select 'Save As' in the drop-down list. The Save As dialog box appears, with the file appearing in the File Name field. If more than one county was selected, a single zip file containing the selected counties is saved.



**Figure 11. Zip files within zip files**

6. In the Save As dialog box, select a location in the home directory to save the files.
7. Click the **Save** button to save the files in the selected location.
8. To obtain shapefiles for additional counties, repeat the download process as needed.
9. Unzip all the zip files to your working folder.
10. When the geography is selected in GUPS, the application asks to specify the location. Select 'My Computer'. When a selection is made, GUPS asks to select a directory. Navigate to the location where the files were saved and select those to be uploaded. GUPS loads the files, then moves them to the pre-established folder in the home directory.

## 2.3 GUPS Overview

Once the project is loaded and open, review the current Census Geography in the map to find areas that need to be updated.

BAS participants can use the BAS Module in GUPS to:

- Add, delete, and modify legal governments (Counties [and equivalent areas], Minor Civil Divisions (MCDs), Incorporated Places, and Consolidated Cities).
- Add, delete, and modify CDPs.
- Add, delete, and modify linear features (roads, railroads, and hydrography).
- Add, delete, and modify area landmarks, hydrographic areas, and point landmarks.
- Provide address data for newly annexed areas.

Tribal BAS participants can use the Tribal BAS Module in GUPS to:

- Add, delete, and modify legal governments (Federally Recognized Reservation and Off-Reservation Trust lands, and Tribal Subdivisions).
- Add, delete, and modify CDPs.
- Add, delete, and modify linear features (roads, railroads, and hydrography).
- Add, delete, and modify area landmarks, hydrographic areas, and point landmarks.
- Provide address data for newly added areas.

### 2.3.1 Adding Local Data

To import your own imagery, geodatabase, shapefiles, web mapping service, or other data layers into GUPS use the **Add Data** toolbar.



**Figure 12. Add Data toolbar**

Although shown in a horizontal position in [Figure 12](#), the **Add Data toolbar** appears arranged vertically to the left of the Layers Panel in GUPS. Its tools are described in [Appendix A](#).

To add a vector layer, such as a shapefile or geodatabase layer from the local computer:

1. Click the **Add Vector Layer** tool on the **Add Data toolbar**. The **Add Vector Layer** dialog box opens.



**Figure 13. Add Vector Layer tool**

2. In the Encoding drop-down menu, the default value is 'system'.
3. Click the ellipses button and navigate to the folder where the shapefile or geodatabase is saved on the computer.
4. Left click the file to be uploaded, then click the **Add** button. The shapefile/geodatabase is added to the Layers Panel and to the Map View.

Users can also add data from Web Mapping Services (WMS), raster-based imagery, and other data types using the corresponding tools on the Add Data toolbar. Refer to the QGIS help page for instructions on these options.

### 2.3.2 Basic Map Tools

The **Standard toolbar** provides the navigation tools to interact with the map and layers' attribute tables. The location of the sub-toolbars can be moved by simply left-clicking the parallel lines preceding the sub-toolbar and while holding down the mouse, dragging the sub-toolbar to the desired location. Most of the sub-toolbar tools are straight-forward. Those related to features, however, require further explanation. These tools are used to identify and select/deselect features on the map and to view feature attributes. They are also used to make measurements and create spatial bookmarks.



**Figure 14. Standard toolbar**

The **BAS toolbar** provides the BAS-specific functions needed to complete a participant's review and update activities, as well as to import and export zipped shapefiles. The **BAS toolbar** has additional options for toggling imagery. An explanation of the tools on each toolbar and an overview of their functions can be found in [Appendix A](#).



**Figure 15. BAS toolbar**

## CHAPTER 3 GEOGRAPHIC REVIEW AND UPDATE

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At this point, users may want to take a cursory review of their boundary as it is, noting where adjustments are required, or linear features need to be added or removed. Common changes include annexations, or additions of land to a government, deannexations, or deletion of land from a government, and boundary corrections. When reporting or creating legal changes such as annexation or deannexation polygons, you will need to have available the following information:

- The change type,
- authorization type,
- effective date,
- documentation numbers, and
- area in acres, if available.

Refer to [Section 3.2](#) for more information on legal change updates.

---

Note: Boundary corrections do not require any legal documentation (see [Section 3.3](#) for more information).

---

### 3.1 Creating Change Files

The first two tools to get comfortable with are the **Add Linear Feature** tool and the **Modify Area Feature** tool. The **Modify Area Feature** tool works by selecting faces, polygons bounded by linear features such as road and water features, as well as nonphysical boundaries such as parcel lines, cadastral features, etc. If the area you wish to add or remove is not already bounded by features, you will need to do two steps:

1. Create the sides of the polygon using the **Add Linear Feature** tool on the **BAS toolbar** ([Section 3.4](#)).
2. Add or remove the area using the **Modify Area Feature** tool ([Section 3.3](#)).

Use steps 1 and 2 to create the changes necessary to update the boundary. This will create a change file to review and submit to the Census Bureau.

### 3.2 Legal Changes

The primary goal of BAS is to document legal boundary changes. Legal boundary change submissions from incorporated places, MCDs, and counties must provide an authorization number, such as a resolution or ordinance number, authorization type, and effective date.

#### 3.2.1 Documentation for Legal Tribal Changes

The Census Bureau is responsible for depicting reservation and off-reservation trust land boundaries, but because the Census Bureau is not the authority on the boundaries, documentation is required to update reservation and off-reservation trust land boundaries.

The following changes require documentation:

- New off-reservation trust land.
- New reservation land.
- Changes from off-reservation trust land to reservation land and changes from reservation land to off-reservation trust land.
- Large changes to existing off-reservation trust land.
- Large changes to existing reservation land.
- Boundary corrections to off-reservation trust land or reservation land that do not follow the general shape of the boundary.

For off-reservation trust land, the most common documentation is a trust deed or a letter from the Bureau of Indian Affairs (BIA). Documents should state that the land is “in trust” for the tribe.

For reservation land, documentation examples include (but are not limited to) federal register notice, Act of Congress, Executive Order, or a new legal opinion issued by the BIA. When submitting large boundary corrections to an existing reservation, please submit the reservation document.

If no documentation is available, please contact the tribe’s regional BIA office to obtain documentation. The Census Bureau will treat legal opinions issued in writing from the BIA as documentation since the BIA is the authority on reservation and off-reservation trust land boundaries. If the Census Bureau cannot interpret a document, such as a treaty, the Census Bureau will contact the BIA for assistance.

For questions about documentation, please contact us. To contact the BIA, please reach out to the nearest regional office, see <[www.bia.gov/regional-offices](http://www.bia.gov/regional-offices)>.

### 3.2.2 Creating Legal Changes

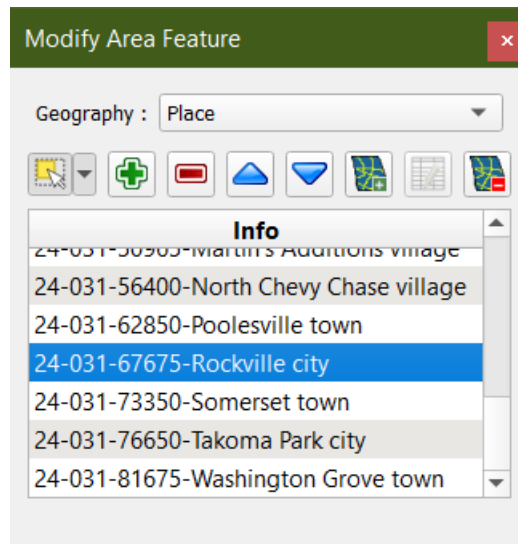
Once you know the faces you want to add or remove from the government, use GUPS to create and submit legal boundary changes by:

1. Select the **Modify Area Feature** tool on the **BAS toolbar** to activate the tool.



Figure 16. Modify Area Feature tool on the BAS toolbar

2. Select the **Geography** type from the drop-down menu.
3. Select the entity to modify in the **Info** box.



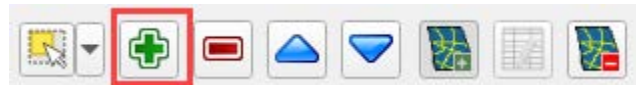
**Figure 17. Modify Area Feature window**

4. Click the **Select Features** tool in the **Modify Area Feature** window to activate the select tool, the yellow square and cursor icon.

### 3.2.3 Adding Area Through Legal Change

To add an annexation or addition to a government as a legal change:

1. Select the faces to modify.
2. Click the **Add Area** tool to add the faces to the selected entity.



**Figure 18. Add Area tool in the Modify Area Feature window**

3. Select **Legal Change** as the change type in the dialog box and click **OK**.
4. Fill out the required fields for the **Create Change Polygons** dialog box.

**Figure 19. Create Change Polygons window for legal changes**



- a. **EFF\_DATE**: Add the effective date for the legal change. Click on the calendar icon next to the EFF\_DATE field and, when the calendar opens, click on the effective date. The date selected populates the EFF\_DATE field.
  - b. **AUTHTYPE**: Add the authorization type using the drop-down menu.
  - c. **DOCU**: Either type in the ordinance or other legal documentation number authorizing the new entity in the DOCU field, or upload documentation for the change. For BAS use the document number, the document is not required. For Tribal BAS, upload the document or the reference to the law etc. To upload documentation, click the folder icon next to the DOCU field.
  - d. **CHNGE\_TYPE**: Choose the change type in the drop down.
5. Click **OK**. This will create a change in the changes file for the geography selected.
  6. Clicking **Cancel** will save the change as a boundary correction.

### 3.2.4 Removing Area Through Legal Change

To remove an area from a government as a deannexation, or deletion through a legal change:

1. Select the faces to be marked for removal.
2. Click the **Remove Area** tool to mark the faces to be removed from the selected government.



**Figure 20. Remove Area tool in the Modify Area Feature window**

3. Select **Legal Change** as the change type in the dialog box and click **OK**.
4. Fill out the required fields for the **Create Change Polygon** dialog box.
  - a. **EFF\_DATE**: Add the effective date for the legal change. Click on the calendar icon next to the EFF\_DATE field and, when the calendar opens, click on the effective date. The date selected populates the EFF\_DATE field.
  - b. **AUTHTYPE**: Add the authorization type using the drop-down menu.
  - c. **DOCU**: Either type in the ordinance or other legal documentation number authorizing the removal in the DOCU field, or upload documentation for the change. For BAS use the document number, the document is not required. For Tribal BAS, upload the document or the reference to the law etc. To upload documentation, click the folder icon next to the DOCU field.
  - d. **CHNGE\_TYPE**: Choose the change type in the drop down.
5. Click **OK**. This will create a change in the changes file for the geography selected.
6. Clicking **Cancel** will save the change as a boundary correction.

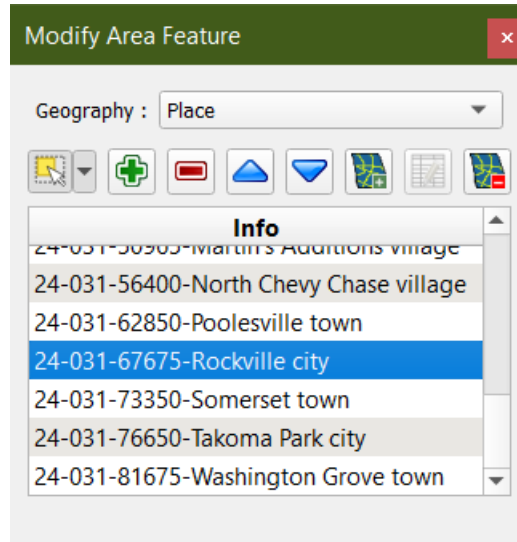
### 3.3 Boundary Corrections

A boundary correction is the adjustment of a boundary to correct an error in how the Census Bureau depicts an existing boundary. Boundary corrections should follow the general shape of the existing boundary. For both BAS and Tribal BAS, legal documentation is not required when submitting a boundary correction to the Census Bureau.

To create boundary corrections using GUPS:

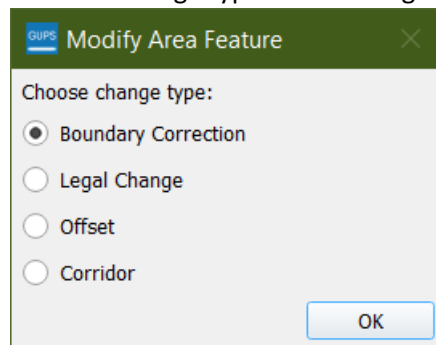
1. Select the **Modify Area Feature** tool on the **BAS toolbar**.
2. Select the **Geography** type from the drop-down menu.

3. Select the entity to modify in the **Info** box.



**Figure 21. The Modify Area Feature window with the geography type and government selected**

4. Click the **Select Features** tool in the **Modify Area Feature** window to activate the select tool.
5. Click on the **Add Area** tool to add the faces to the selected geography or the **Remove Area** tool to remove the faces from the selected geography.
6. Select **Boundary Correction** as the change type in the dialog box and click **OK**.



**Figure 22. Modify Area Feature change type dialog box**

### 3.4 Linear Features

It is important that Census Bureau data reflects the most recent linear features to ensure that new or previously missed housing units located along these features are identified and located. Linear features include visible features such as roads, railways, water features like rivers, creeks, and coastlines, but also non-visible features such as property lines and survey lines.

When reviewing linear features (edges layer) on the BAS shapefiles, first determine whether any features are missing or need to be deleted. Pay particular attention to areas that have experienced recent population growth or construction activities, as these are the most likely to possess new or altered linear features (e.g., new subdivisions, traffic circles converted to straight ways, or privately maintained roads that serve as public streets, but exclude private driveways). Attribute updates (e.g., name, class code, and address ranges) may also be added for selected features.

You will use the Linear Feature tools on the **BAS toolbar** to add, remove, or modify linear features in the project.

### 3.4.1 Adding Linear Features

1. Select the **Add Linear Feature** tool on the **BAS toolbar**.
2. To digitize the linear feature, left-click the mouse at the starting point of the line and continue to left-click the mouse at each vertex of the line. When the new line is completed, right-click the mouse. The right-click tells GUPS to finish drawing and the **Add Linear Feature** dialog box will open.

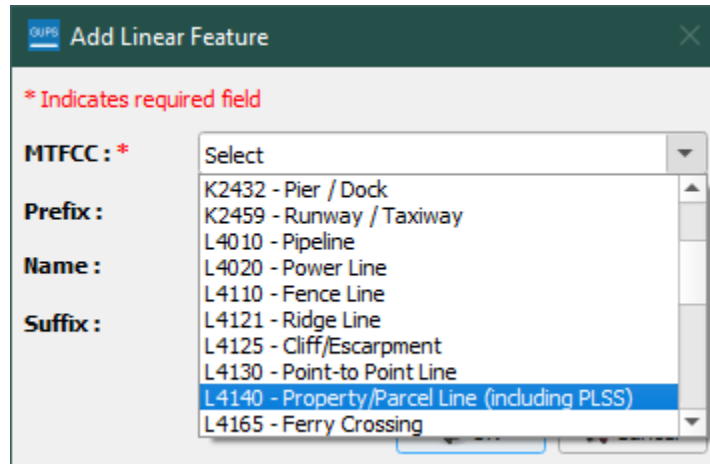


Figure 23. Add Linear Feature Dialog Box

3. Select the MTFCC that corresponds to the type of linear feature being added.
  - a. If you are creating the sides of a polygon to add or remove area from an entity, use MTFCC P0001 – Nonvisible Legal/Statistical Boundary.

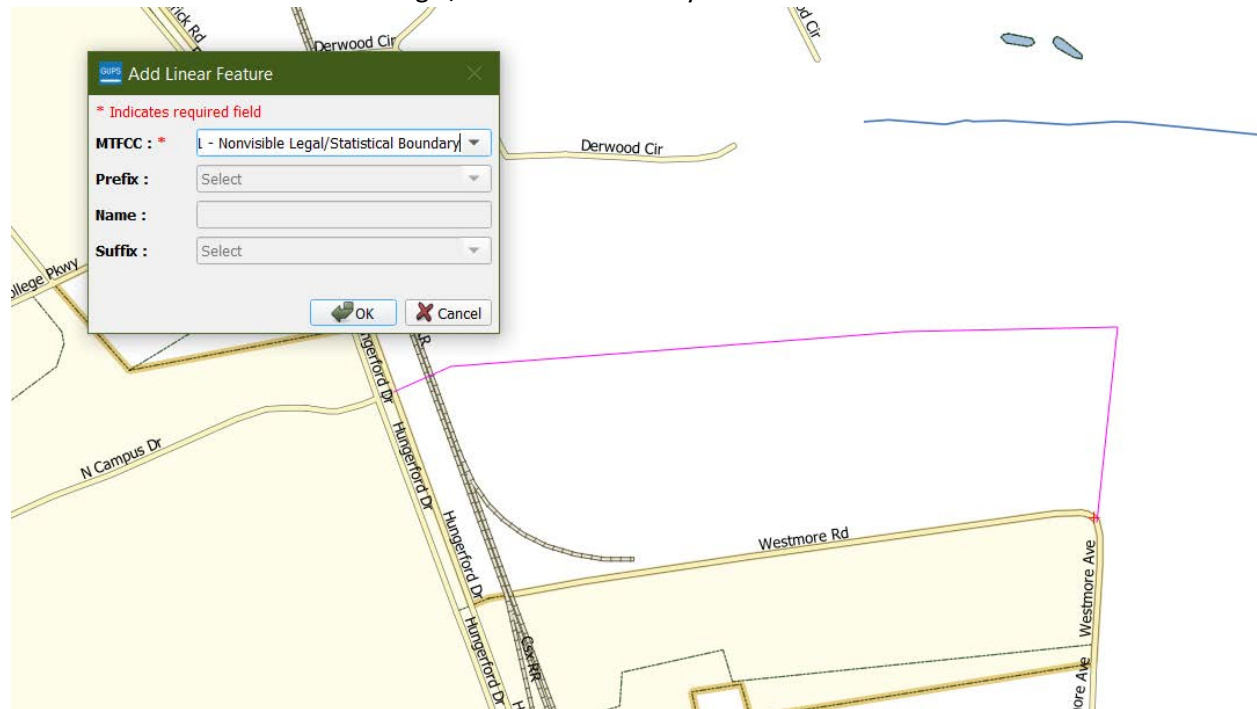


Figure 24. Adding a boundary line in GUPS as a Nonvisible Legal/Statistical Boundary line

4. Fill out the Prefix, Name, and Suffix fields as applicable. Name is a required field for primary and secondary roads.
5. Click **OK** to complete the transaction. The newly digitized linear feature will appear with its corresponding symbology.

### 3.4.2 Deleting and Restoring Linear Features

To mark a feature for deletion:

1. Click the **Delete/Restore Linear Feature** tool on the **BAS toolbar** to activate the tool.



Figure 25. Delete/Restore Linear Feature tool on the BAS toolbar

2. Click the linear feature to mark for deletion. A **Delete/Restore Linear Feature** dialog box will open.
3. Confirm the action by clicking **OK**.
4. The linear feature will appear with an “X’d out” symbology to show it has been marked for deletion.



Figure 26. X'd out symbology of a linear feature marked for deletion

To restore a linear feature marked for deletion:

1. Select the **Delete/Restore Linear Feature** tool on the **BAS toolbar** to activate the tool.
2. Select the linear feature to restore. A **Delete/Restore Linear Feature** dialog box will open.
3. Confirm the action by clicking **OK**.
4. The “X’d” out symbology will be removed from the linear feature.

### 3.4.3 Modifying Linear Feature Attributes

1. Select the **Modify Linear Feature Attributes** tool on the **BAS toolbar** to activate the tool.



Figure 27. Modify Linear Feature Attributes tool on the BAS toolbar

2. Select the linear feature to modify. A **Modify Linear Feature Attributes** dialog box will open.
3. Update the MTFCC, NAME, and/or Address Ranges in the dialog box.
4. Confirm the action by clicking **Save**.

\* Indicates required field

TLID : 194772920

MTFCC : \* S1400 - Local Neighborhood Road, Rural Road, City Street

FULLNAME : 39th Ave

LFROMADD : 79936 RFROMADD : 79937

LTOADD : 79998 RTOADD : 79999

Save Cancel

Figure 28. Modify Linear Feature Attributes dialog box

### 3.5 New Incorporations and Disincorporations

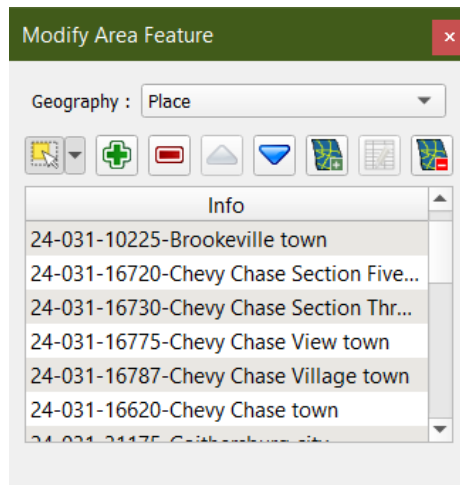
In the BAS module in GUPS, you can add a new government and disincorporate an existing government using the **Modify Area Feature** tool. Tribal BAS does not have this functionality for certain geography. If you are a tribal participant wanting to completely remove reservation or trust land, Contact Us. The **Add Entity** tool and **Remove Entity** tool are available for the following geographies:

- New reservation and off reservation trust lands,
- Tribal Subdivisions,
- Incorporated Places,
- MCDs,
- CDPs, and
- Area Landmarks.

#### 3.5.1 New Incorporations

To add a new government in GUPS:

1. Open in Map View the county where you want to add a new government.
2. Select the **Modify Area Feature** tool on the **BAS toolbar**.
3. The **Modify Area Feature** dialog box opens.
4. Select the drop-down arrow next to the **Geography** field and select the government type to add from the drop-down menu. In this example a newly incorporated city is added, so 'Place' is selected. The place appears in the Geography field and a list of all incorporated places in the county appears in the **Info** list.



**Figure 29. Modify Area Feature tool**

5. Zoom to the location where the new government is located. To select the faces for the government, left click once on the **Select Features** tool on the dialog box toolbar.
6. Click on the map to select the face or faces.
  - a. If the government includes only a single face, simply click once on the face to select it. If the government includes several contiguous faces, after clicking on the first face, depress the CTRL key and while holding it down, left click on each additional face to be added. The selected faces turn cyan.
  - b. Because all geographic areas consist of faces, you may need to split a face to accurately reflect a government's boundary. To split a face, digitize a new line that represents the boundary's location (see [Section 3.4](#) for instructions to add a linear feature) and assign it the appropriate MTFCC. This splits the original face into two faces. Now select the face to add to the new entity.
7. To record the new entity, click the **Add Entity** tool on the dialog box toolbar.



**Figure 30. The Add Entity tool on the dialog box toolbar**

8. The **Modify Area Feature** dialog box opens.

**Figure 31. Modify Area Feature tool example for new incorporation, "New Place"**

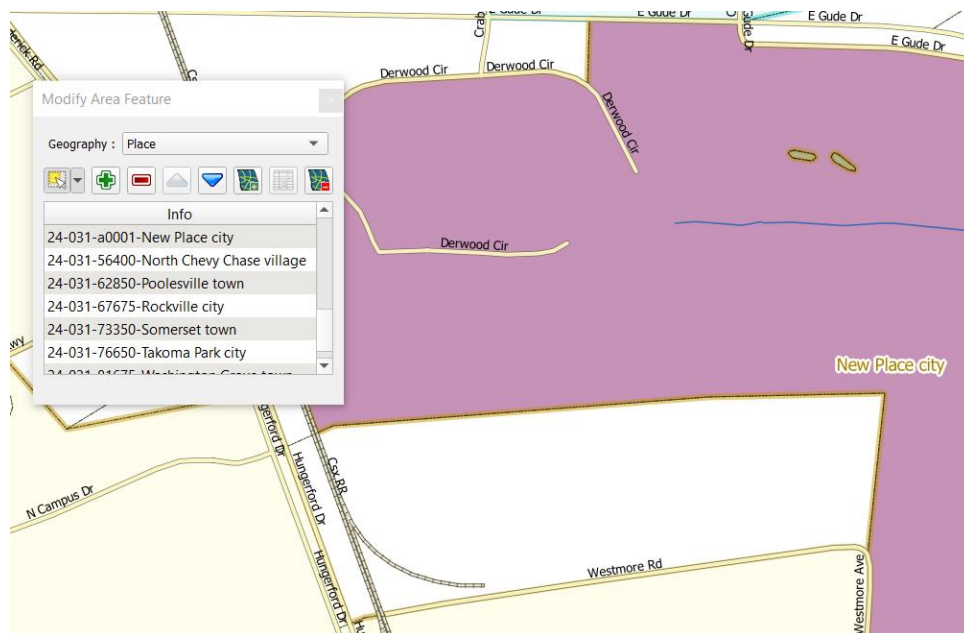
9. In the dialog box, fill out the following fields:
  - a. **NAME:** Type the new legal government name in the Name field.
  - b. **LSAD:** The Legal/Statistical Area Description. See the BAS Technical Guide at [www.census.gov/programs-surveys/bas/information/respondent-guides.html](http://www.census.gov/programs-surveys/bas/information/respondent-guides.html) for more information.
  - c. **EFF\_DATE:** Add the effective date for the legal change. Click on the calendar icon next to the EFF\_DATE field and select a date on the calendar. The date selected populates the EFF\_DATE field.
  - d. **AUTHTYPE:** Add the authorization type using the drop-down menu.
  - e. **DOCU:** Upload documentation for the new incorporation. To upload documentation, click the folder icon next to the DOCU field

---

Note: Red asterisks indicate required fields. Required fields must be completed to move forward. If one or more required fields are not completed and the OK button is clicked, GUPS will prompt the user to complete the fields. Any required field not completed will highlight in red.

---

10. Click **OK**. The faces for the new entity turn purple on the map (colors may vary) and the name of the new entity appears in the list of incorporated places in the **Modify Area Feature** dialog box.



**Figure 32. An example for a new government "New Place" symbology and placeholder Federal Information Processing Standards (FIPS) code**

Once the Census Bureau verifies the new government, an official FIPS code will be assigned.

The code preceding the new government name in the list is not a FIPS code and should not be used for any official purpose. It is only a placeholder until the official FIPS code can be assigned.

To make additional changes to the map, simply make a new selection in the **Geography** field of the **Modify Area Feature** dialog box and continue work. Save the project frequently.

---

---

Note: If the new government crosses a county boundary, it must be added in both counties separately. After making the change in the working county, return to Map Management, select the other county as the working county, and proceed to add the new government in this county as well. If the added government crosses more than one county boundary, complete the addition in each county affected.

---

---

### 3.5.2 Disincorporations

The **Delete Area** feature is available for the following geographies:

- Incorporated Places,
- CDPs, and
- Area Landmarks.

To mark a government for disincorporation or deletion:

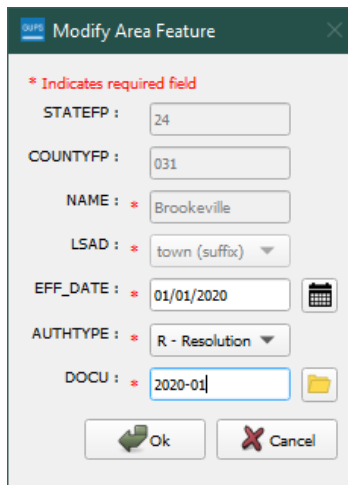
1. Open in **Map View** the county that contains the government to delete. Be sure that all layers needed are checked in the Layers Panel.
2. Click the **Modify Area Feature** tool on the **BAS toolbar**.
3. The **Modify Area Feature** dialog box opens.
4. Click the drop-down arrow next to the **Geography** field and select 'Place' in the drop-down menu.
5. Place appears in the **Geography** field and a list of all incorporated places in the county appears in the Info list.
6. Click the government in the list you want to mark for the disincorporation. The map zooms to the selected government.
7. Click the **Delete Area Feature** tool on the toolbar inside the **Modify Area Feature** dialog box.



**Figure 33. The Delete Area Feature tool in the dialog box toolbar**

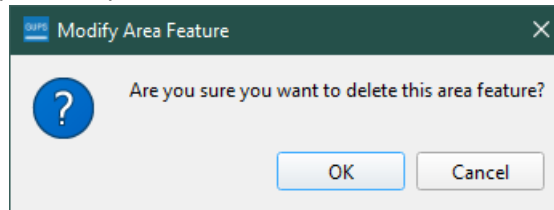
8. A **Modify Area Feature** dialog box will box up. Fill out the following fields:
  - a. **EFF\_DATE**: Add the effective date for the legal change. Click on the calendar icon next to the EFF\_DATE field and select a date from the calendar. The date selected populates the EFF\_DATE field.
  - b. **AUTHTYPE**: add the authorization type using the drop-down menu.
  - c. **DOCU**: Upload documentation for the disincorporation. To upload documentation, click the folder icon next to the DOCU field.





**Figure 34. The Modify Area Feature box for Delete Area Feature tool**

9. A pop-up asks, 'Are you sure you want to delete this area feature?'



**Figure 35. Confirmation of area feature deletion**

10. Click **OK**. The disincorporated government turns gray on the map (color may vary), and it is removed from the list of incorporated places in the county.

To make additional changes to the map, simply make a new selection in the Modify Area Feature dialog box Geography field and continue work.

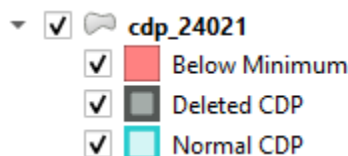
---

Note: If the deleted government crosses a county boundary, it must be deleted in both counties separately. After making the change in the working county, return to Map Management, select the other county as the working county, and proceed to delete the government in this county as well. If the deleted government crosses more than one county boundary, complete the deletion in each county affected.

---

### 3.6 Census Designated Places (CDPs)

GUPS will now allow updates to CDPs in the BAS module. CDPs will appear in the map symbolized by estimated population and housing unit criteria. Blue areas meet the minimum criteria, red areas do not meet the minimum criteria, and gray areas show CDPs marked for deletion.



**Figure 36. Symbolization of CDPs on the map**

### 3.6.1 Creating CDP Changes

1. Click the **Modify Area Feature** tool on the **BAS toolbar** to activate the tool.
2. Select the **Geography** type from the drop-down menu as **Census Designated Place (CDP)**.

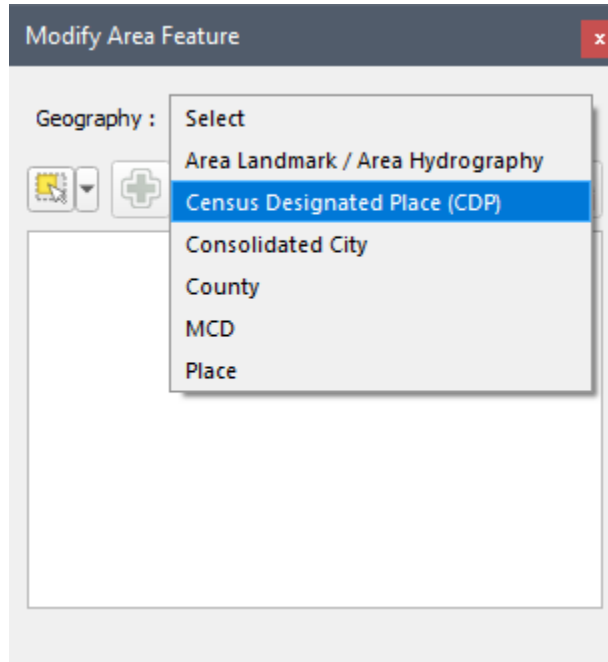


Figure 37. Modify Area Feature tool, select Geography as Census Designated Place (CDP).

### 3.6.2 Adding Area To a CDP

1. Select the entity to modify in the **Info** box.
2. Select the **Add Area** tool to add the faces to the selected entity.
3. Select the **Select Features** tool in the **Modify Area Feature** window to activate the select tool, the yellow square and cursor icon.
4. Select the faces to add.
5. Select the **Add Area** tool to add the faces to the selected entity.

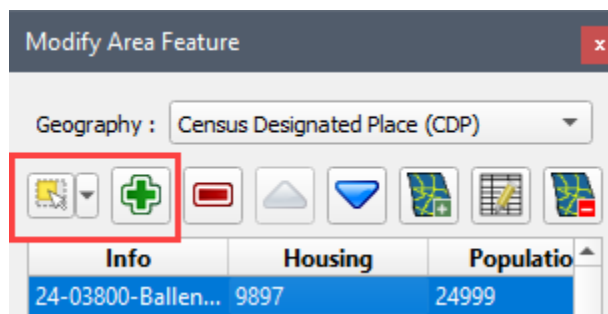


Figure 38. The Add Area tool is a green plus sign

### 3.6.3 Removing Area From a CDP

1. Select the entity to modify in the **Info** box.
2. Select the **Select Features** tool in the **Modify Area Feature** window to activate the select tool, the yellow square and cursor icon.
3. Select the faces to remove.

4. Select the **Remove Area** tool to add the faces to the selected entity.

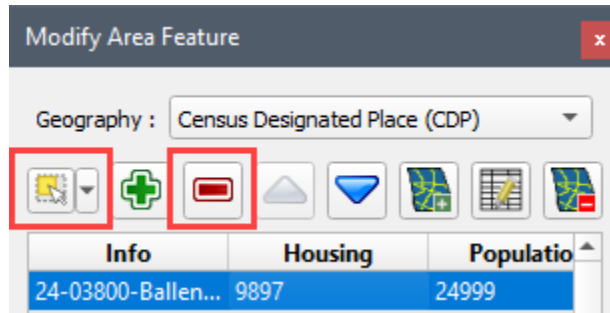


Figure 39. The Remove Area tool is a red minus sign

### 3.6.4 Creating a new CDP

1. Click the **Select Features** tool in the **Modify Area Feature** window to activate the select tool, the yellow square and cursor icon.
2. Select faces on the map to create the area of the new CDP.
3. Click the **Add Entity** tool in the Modify Area Features window.

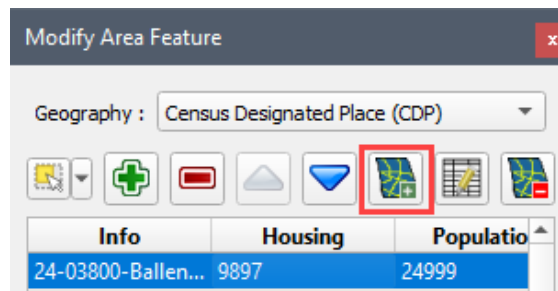


Figure 40. Select the Add Entity tool to create a new CDP

4. A pop-up will show if the area selected does not meet minimum requirements for a CDP. If this occurs, you can continue to create the CDP by selecting “Yes” or cancel the action by selecting “No”.

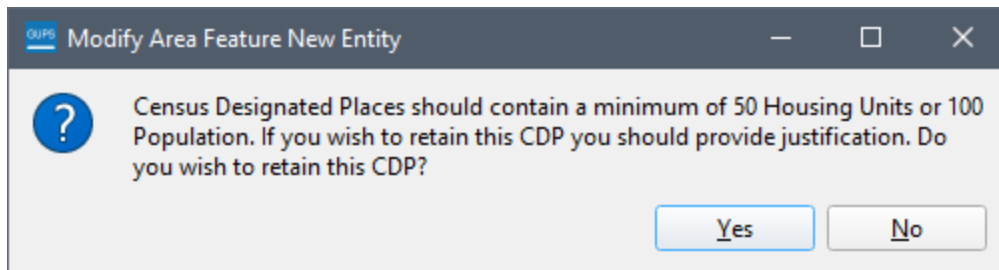


Figure 41. The pop-up shows if an area does not meet minimum requirements for a CDP.

5. If you select Yes to continue, or do not receive the popup, a new **Modify Area Feature** window will appear. Fill out the following fields:
  - a. **NAME:** Name of the Census Designated Place,
  - b. **LSAD:** The Legal/Statistical Area Description for CDPs will always be CDP, and
  - c. **JUSTIFY:** Select from the drop down a justification for a CDP that may not meet minimum population or housing unit criteria.

**\* Indicates required field**

STATEFP : 24

PLACEFP : \* a0008

NAME : \*

LSAD : \* CDP (suffix)

JUSTIFY : Select

Ok Cancel

**Figure 42. Modify Area Feature window for a new CDP.**

6. Add or remove faces as needed to create the new CDP. The new CDP will appear in the **Info** box in the **Modify Area Feature** window.
7. Save the project.
8. Run the **BAS Criteria Review Tool**.



**Figure 43. The BAS Criteria Review tool icon in the BAS toolbar.**

9. The **BAS Criteria Review** window will appear if there are any CDPs that may not meet the minimum criteria.

**BAS Criteria Review**

Key:

Errors - must be fixed before export

Warnings - must be fixed or justified before export

Information Only

Geography: All Errors: All

Criteria Fail	Fix	Justify
Point of Rocks CDP: has non-contiguous entities.	Fix	

Refresh Save Justifications

BAS Criteria Review Layers

**Figure 44. The BAS Criteria review tool shows where a CDP may not meet minimum criteria.**

10. Click **Fix** to address the issue in the map or select a **Justification** for an exception. The errors in red must be addressed before the export, the errors in orange must be fixed or justified before

export, and the blue errors are informational only and do not need to be addressed before export

11. Once the issues have been addressed, or if no issues were found, the BAS Criteria Review Tool will pop up a confirmation window.

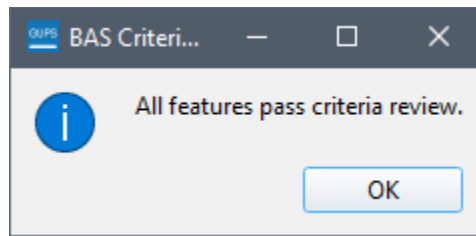


Figure 45. Confirmation window for CDP Criteria.

### 3.6.5 Deleting an existing CDP

1. Select the CDP to delete in the **Info** box.
2. Click the **Delete Area Feature** tool.

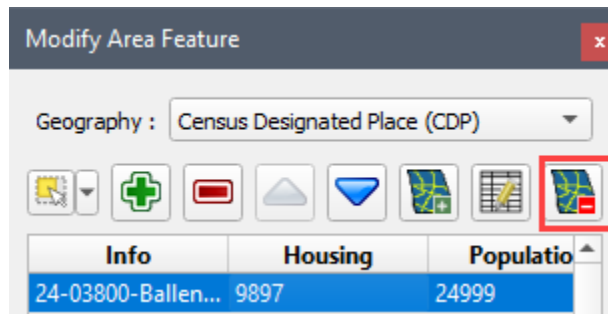


Figure 46. Delete Area Feature tool

3. A confirmation window will appear.

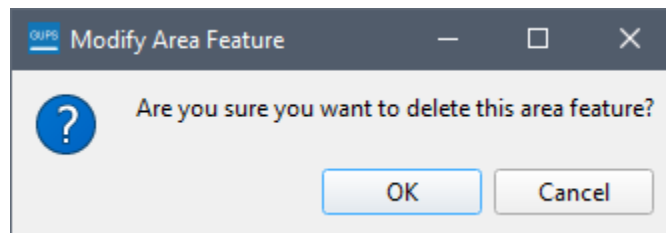


Figure 47. Deletion confirmation window

Upon deletion, the CDP will appear gray in the map.

### 3.7 Point Landmarks

GUPS has the option to add, delete, and modify point landmarks. These include traffic circles, airports, cul-de-sacs, etc.



Figure 48. The Add, Modify, and Delete Point Landmarks tools

### 3.7.1 Adding a Point Landmark

1. Open the project in Map View. Be sure the 'Point Landmark' layer is checked in the **Layers Panel**.
2. Click the green **Add Point Landmark** tool on the **BAS toolbar**.
3. Click on the map where you would like to add the new point landmark.
4. Type in the name for the new point landmark in the **FULLNAME** field. Then click the down arrow next to the **MTFCC** field to open the drop-down menu.

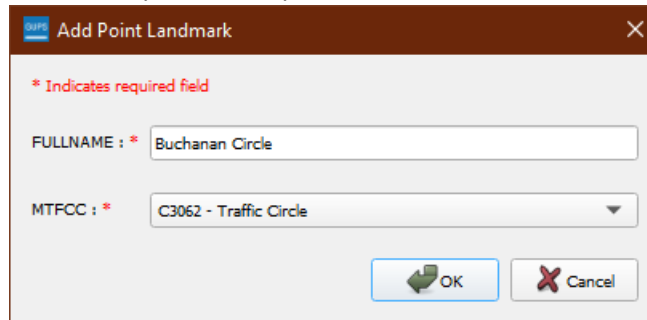


Figure 49. The Add Point Landmark dialog box

5. Select the MTFCC, then click the **OK** at the bottom of the box.
6. The map updates to show the added point landmark. In this case, a traffic circle was added and named Buchanan Circle.

### 3.7.2 Deleting a Point Landmark

1. Zoom to the area on the map where a point landmark will be deleted.
2. Click the **Delete Point Landmark** tool the **BAS toolbar**.



Figure 50. The Delete Point Landmark tool

3. On the map, click on the point landmark to delete. The **Delete Point Landmark** dialog box opens and asks to confirm the deletion of the point landmark.

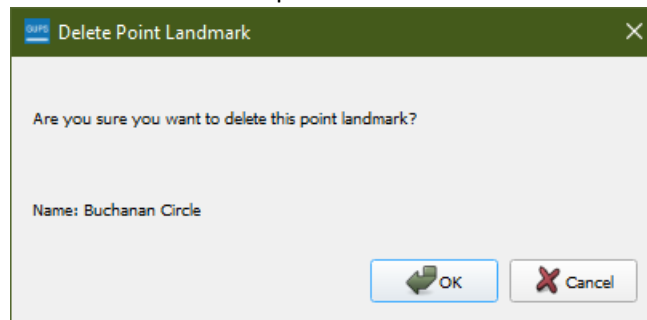
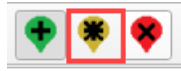


Figure 51. Delete Point Landmark window

4. Click **OK**. The point landmark shows a red x over it and marked in the attribute table.

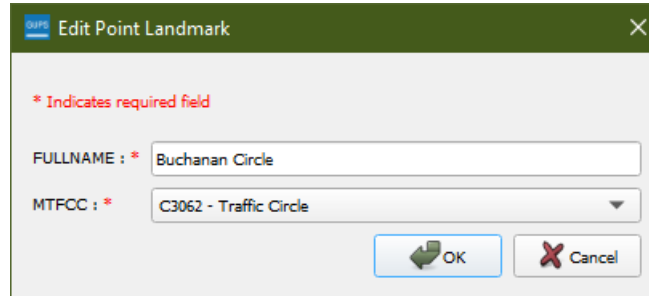
### 3.7.3 Modifying Point Landmark Attributes

1. Zoom to the area on the map where the point landmark is located.
2. Click on the yellow **Edit Point Landmark** tool on the **BAS toolbar**.



**Figure 52. The Edit Point Landmark tool**

3. On the map, click on the point landmark to edit. The **Edit Point Landmark** dialog box opens.



**Figure 53. The Edit Point Landmark dialog box**

4. To change the name, backspace over the name that appears in the **FULLNAME** field, then type in the new name.
5. Click **OK**. The new name of the point landmark appears on the map.

### 3.8 Quality Checks

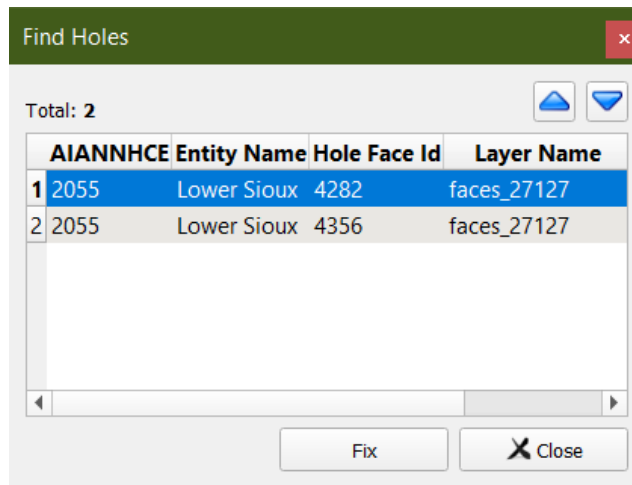
GUPS features two built in quality control checks that must be run before exporting the file, the **Small Area Check** tool, and the **Find Holes** tool. An error will appear if you try to export the file without running these checks.

1. Save the project.
2. Click on the **Review Change Polygons** tool on the **BAS toolbar**.



**Figure 54. The Review Change Polygons tool on the BAS toolbar**

3. The **Review Change Polygon** tool will appear in a popup box.
4. Click the Small Area Check.
  - a. The Small Area Check tool finds small changes that may not meet the 30-foot minimum guideline.
  - b. Click on the results record and zoom to the identified issue. Correct the issue by using the tools on the **BAS toolbar**. You can either remove, modify, or accept the change.
5. Click the **Find Holes** check.
  - a. The Find Holes tool finds faces that may have been missed when adding or modifying an area feature.
  - b. Click on the results record and zoom to the identified issue. Correct the issue by filling the hole using the **Fix** button.



**Figure 55. An example of the Find Holes tool in the Tribal BAS module**

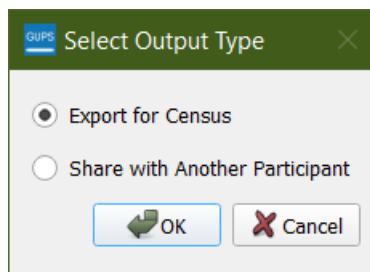
6. If there are no issues found during the quality checks, you are ready to export your files.

### 3.9 Exporting Changes to ZIP

Once you've created and reviewed any changes, you have two options to export the changes—exporting the file to share with another participant or exporting the file for submission to the Census Bureau. In either case, GUPS automatically names the output zip file. It packages all the files required by the Census Bureau (including any documentation uploaded) into the zip file and saves it in a preset location created on the computer during the installation process.

#### Create Return ZIP Files

1. Select the **Export to ZIP** icon on the **BAS toolbar**.
2. A dialog box will appear with the last time the **Review Change Polygons** tool ran in the project. If you have not performed the quality checks with the **Review Change Polygons** tool, an error box will appear. Click **OK** and run the quality checks (Section 2.6) before exporting your file.
3. From the **Select Output Type** dialog box, select the **Export for Census** radial button to create a file to return to the Census Bureau. Click the **Share with Another Participant** radial button if preferred.



**Figure 56. Select Output Type Dialog Box**

4. When Exporting for Census, a pop-up will appear with a BAS Contact Information form. Fill out the GUPS User Contact Information form.



**Boundary and Annexation Survey (BAS) Contact Information**

First Name: \*  MI:  Last Name: \*

Dept. Name: \*

Position: \*

Address: \*

City: \*  State: \* Select  Zip: \* ####-####

Phone: \* (###) ###-####  Ext: ####  FAX: (###) ###-####

E-mail: \*

I am the primary BAS Contact.

**Figure 57. GUPS User Contact Information Form**

5. Click **OK**.
6. A window opens showing the location of the output file on the local system. This is the file you will return to the Census Bureau through SWIM in the next section.

## CHAPTER 4 SUBMIT CHANGES TO THE CENSUS BUREAU

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All participants must use the Secure Web Incoming Module (SWIM) to submit their changes to the Census Bureau. Due to security requirements, the Census Bureau cannot accept submissions via File Transfer Protocol, email, or any protocol other than the SWIM site.

To upload and transmit update files to the Census Bureau, participants must access their accounts for the SWIM.

1. Open a web browser window and enter the SWIM URL: <<https://respond.census.gov/swim/>>. SWIM runs on the two most recent versions of each of these major browsers:
2. Participants who already have a SWIM account should proceed to Step 4 to log in.
3. Participants who do not have a SWIM account click 'Register Account':
  - a. Enter the 12-digit token provided by the Census Bureau.
  - b. Create a password following the five criteria below:
    - i. Username and password are case sensitive.
    - ii. It must be at least eight characters in length.
    - iii. It must have at least one upper case character.
    - iv. It must have at least one lower case character.
    - v. It must have at least one number.
    - vi. It must have at least one special character (valid characters are: #, !, \$, &, ?, ~).
  - c. Complete the registration information form.
4. Log in to SWIM using your email address and password.
5. Upload a BAS submission:
  - a. Select **Start New Upload**.
  - b. Select the **BAS** radio button.
  - c. Select the **Entity** type (State, Place, County, MCD, Tribal Area, or Consolidated City).
  - d. Select the State and County.
  - e. Click the **+ Add File** button.
  - f. Select the **.zip file** to upload.
  - g. Double-click on the **.zip file** to upload. Add additional files in the same manner.
  - h. Add any additional information to the Comments field.
6. Click **Next**. A **Thank You** screen will appear.
7. Logout of SWIM.

### 4.1 Troubleshooting SWIM

If you are having trouble accessing your SWIM account, here are some tips for using SWIM:

- SWIM email addresses and passwords are case sensitive.
- If you forgot your password, participants may reset their password using the "Forgot your password?" link on the login page. Follow the prompts to enter the case-sensitive email address and provide the security answer. If the security answer is correct, the SWIM system sends a password reset link to the email account for use in resetting the password. Once logged into SWIM, users can modify their password and security answer by selecting the 'Change Security' link at the top, right-hand side of the page.

# Secure Web Incoming Module

## Please Login

Welcome to the Census Bureau's Secure Web Incoming Module (SWIM). The SWIM is the official web portal for uploading partnership materials to the Census Bureau.

Please note: sessions will expire after 15 minutes of inactivity.

**Email:**

**Password:**

[Forgot your password?](#)

- If you cannot recover your password through the “Forgot your Password?” menu, please email [<geo.bas@census.gov>](mailto:geo.bas@census.gov) with the subject line “SWIM Account Assistance” with a brief description of the issue.
- SWIM accounts are specific to users, not to your government so we do not advise sharing an account. You may always request another account for a new BAS Contact.
- If you already created an account through another program such as PSAP, LUCA, or GSS, you do not need another account. You may use the same previously established login information.

## APPENDICES














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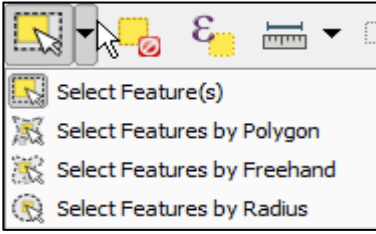

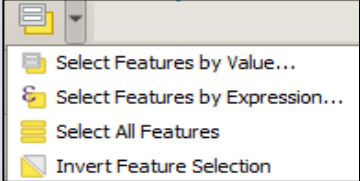



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## APPENDIX A GUPS MAPPING TOOLS

### A1 Standard Toolbar
















Table 2: Standard Toolbar Tool Names and Descriptions

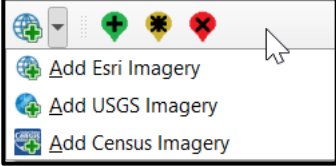



Tool	Name	Description
	<b>Save</b>	Saves the current GUPS project, including any user changes to layer properties, projection, last viewed extent, and layers added.
	<b>Style Manager</b>	Allows customization of map symbology.
	<b>Map Management</b>	Chooses a geographic participant program in GUPS and access the automatically loaded default map display layers based on the program chosen.
	<b>GUPS Data Settings</b>	<b>Warning! This tool deletes files and folders permanently!</b> Change GUPSGIS data working directory and clean GUPS project data.
	<b>Search</b>	Searches the map by place, landmark, or street name and zoom automatically to the feature.
	<b>Pan Map</b>	Shifts the map in <b>Map View</b> without changing the map scale. Click the button, then click a location on the map to re-center the map to the clicked location.
	<b>Pan Map to Selection</b>	Shifts the map in <b>Map View</b> to the rows selected in the attribute table for a selected feature. After selecting a feature(s), click the button to re-center the map based on the selected feature(s).
	<b>Zoom In</b>	Displays the map in <b>Map View</b> at a larger scale. Click the button, then click on the map at the location to be zoomed to.
	<b>Zoom Out</b>	Displays the map in <b>Map View</b> at a smaller scale.
	<b>Zoom Full</b>	Displays the map in <b>Map View</b> at a smaller scale and zooms the map view to the full extent of the county.
	<b>Zoom to Selection</b>	Zooms the <b>Map View</b> to the rows selected by query in the attribute table for a feature(s). After selecting a feature(s) on the map, click the button to view the feature(s) at a larger map scale.
	<b>Zoom to Layer</b>	Zooms the <b>Map View</b> to the layer selected in the <b>Layers Panel</b> . After selecting the layer, click the button to zoom to the layer's extent.
	<b>Zoom Last</b>	Zooms the <b>Map View</b> to the previous map extent.

Tool	Name	Description
	<b>Zoom Next</b>	Zooms the <b>Map View</b> forward to the next map extent (only if a previous extent is available).
	<b>New Bookmark</b>	Creates and names a spatial bookmark of the current map view.
	<b>Show Bookmarks</b>	Displays all bookmarks created by the user.
	<b>Refresh</b>	Displays <b>Map View</b> to initial full display.
	<b>Identify Features</b>	Identifies geographic features. Click the button, then click on a feature on the map to identify the feature at the location.
	<b>Select Features by Area or Single Click</b>	<p>Allows the user to select layer features in the map window with a single click, by dragging the cursor, or by drawing graphics on the screen.</p> 
	<b>Select Features by Value</b>	<p>Allows selection of features by value or expression.</p> 
	<b>Deselect Features from All Layers</b>	Deselects selected features from all layers.
	<b>Processing Toolbox</b>	Displays list of processing tools available.
	<b>Measure</b>	Provides options to measure linear distance, area, and angles on the map.

## A2 BAS Toolbar









**Table 3: BAS Toolbar Tool Names and Descriptions**

Tool	Name	Description
	<b>Add Linear Feature</b>	Add a new linear feature.
	<b>Delete/Restore Linear Feature</b>	Delete an existing linear feature.
	<b>Split Linear Feature</b>	Split a linear feature. One may need to split a linear feature to accurately reflect an entity's location. This feature "splits" the original into two.
	<b>Display All Names</b>	Displays all names for a street with multiple names assigned in the Master Address File/Topologically Integrated Geographic Encoding and Referencing (MAF/TIGER) System.
	<b>User Address List</b>	Import an address list (.csv, .txt, etc.) into GUPS.
	<b>Modify Linear Feature Attributes</b>	Edit attributes of a selected linear feature.
	<b>Modify Area Feature</b>	Make updates to legal area (annexations, deannexations, boundary corrections, etc.).
	<b>Show/Hide Legend</b>	Shows or hides the Layers tab.
	<b>Geography Review Tool</b>	Review the attribute table for a layer.
	<b>Review Change Polygons</b>	Review change polygons in a layer and make corrections (reviews change polygons for holes and minimum size).
	<b>Import County ZIP</b>	Import zipped GUPS project shared by another GUPS user.
	<b>Export to ZIP</b>	Create the ZIP file containing all required data and shapefiles to be submitted to the Census Bureau or to share with another GUPS user.
	<b>Print Map to File</b>	Export a printable map in *.pdf, *.png, *.tif, or *.jpeg format.
	<b>Internet Map Service</b>	Displays the chosen map location in an internet mapping service, such as Google or Bing Maps
	<b>Add Esri Imagery</b>	Displays satellite imagery overlaid on the QGIS map



Tool	Name	Description
		
	<b>Add Point Landmark</b>	Add a new point landmark.
	<b>Edit Point Landmark</b>	Edit point landmark attributes.
	<b>Delete Point Landmark</b>	Delete an existing point landmark.

### A3 Add Data Toolbar

**Table 4: Add Data Toolbar Tool Names and Descriptions**

Tool	Name	Description
	<b>Add Vector Layer</b>	Add vector-based shapefile and geodatabase files.
	<b>Add Raster Layer</b>	Add raster-based shapefile and geodatabase files.
	<b>Add SpatialLite Layer</b>	Add data from a SpatialLite database.
	<b>Add/Edit Virtual Layer</b>	Add or Edit Virtual Layers.
	<b>Add PostGIS Layer</b>	Add PostGIS layer.
	<b>Add WMS/WMTS Layer</b>	Add Web Mapping Services (WMS) and Web Mapping Tile Services (WMTS). Publicly accessible and secured WMS services are supported.
	<b>Add WCS Layer</b>	Add Web Coverage Services (WCS), which provide access to raster data useful for client-side map rendering.
	<b>Add WFS Layer</b>	Add Web Feature Services (WFS).

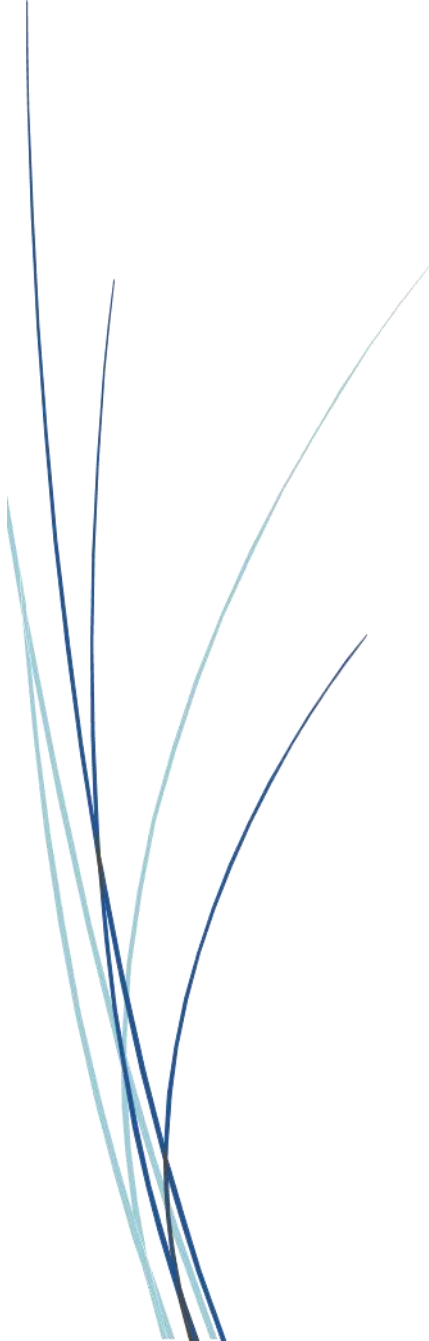


Tool	Name	Description
	<b>New Shapefile Layer</b>	<p>Add a new shapefile layer or new temporary scratch layer.</p> 

# Boundary and Annexation Survey Paper How-to Guide

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*Instructions for Participating in the Boundary and Annexation Survey Using Paper Maps*



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## INTRODUCTION

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### A. The Boundary and Annexation Survey

The Boundary and Annexation Survey (BAS) provides tribal, state, and local governments an opportunity to review the Census Bureau’s legal boundary data to ensure the Census Bureau has the correct boundary, name, and status information. BAS also allows participants to review and provide updates to Census Designated Places (CDPs). Maintaining correct boundaries helps ensure that the Census Bureau assigns the appropriate housing and population counts to each government.

BAS fulfills the agency’s responsibility as part of the National Spatial Data Infrastructure, for which the Office of Management and Budget (OMB) Circular A–16 designates the Census Bureau as the lead federal agency for maintaining national data about legal government boundaries, as well as statistical and administrative boundaries. BAS supports the spatial data steward responsibilities of the OMB E-Gov, Data.gov, the National Map, the Geographic Names Information System (GNIS), the Federal Geographic Data Committee, and the Geospatial One-Stop. Title 13, Section 6, United States Code authorizes this survey.

The Census Bureau uses the boundaries collected in BAS to tabulate data for various censuses and surveys including the decennial census, American Community Survey (ACS), and Population Estimates Program (PEP). It also uses the legal boundaries collected through BAS to support several other programs such as Congressional and State Legislative redistricting, the Economic Census, the Geographic Update Population Certification Program, and the Special Census program.

### B. Key Dates for Respondents

- |                  |   |
|------------------|---|
| <b>January 1</b> | Boundary updates must be legally in effect on or before this date to be reported in the current survey year.  |
| <b>March 1</b>   | First BAS deadline - Boundary updates returned or postmarked by this date will be reflected in the ACS and PEP data and in next year’s BAS materials. |
| <b>May 31</b>    | Final BAS deadline - Boundary updates returned or postmarked by this date will be reflected in next year’s BAS materials.                             |

### C. Adjacencies and Legal Disputes

The Census Bureau will not make any boundary change that affects adjacent legal governments without the appropriate documentation. Please review any changes that affect adjacent governments to determine if they are intentional legal changes.



If the Census Bureau discovers that an area of land is in dispute between two or more jurisdictions, the Census Bureau will not make any boundary corrections until the parties come to a written agreement or there is a documented final court decision regarding the dispute.

To learn more, please contact the Census Bureau Legal Office at **1-301-763-2918**.

For disputes involving tribal areas, the Census Bureau must defer to the Office of the Solicitor at the Department of the Interior for a legal opinion. Often complicated land issues require an extended period for resolution, and in those cases, the Census Bureau will retain the current boundary in the database until a legal opinion is issued by the Solicitor's office.

## **D. Contact Us**

If assistance is required in preparing your BAS submission, please contact the Census Bureau at [<geo.bas@census.gov>](mailto:geo.bas@census.gov) or **1-800-972-5651**.

## **E. Resources**

Additional resources are available on our website. Technical documentation and helpful videos are also available to walk through the BAS submission process.

### **Technical Documentation**

For more detailed information about Census Bureau Geography, BAS Submission information, change types, and shapefiles, see the BAS Technical Guide at [<www.census.gov/programs-surveys/bas/information/respondent-guides.html>](http://www.census.gov/programs-surveys/bas/information/respondent-guides.html).

### **Videos**

The Census Bureau created training videos to give BAS participants detailed instructions and information on how to report and submit BAS changes. These videos are available on the BAS website at: [<www.census.gov/programs-surveys/bas/library/bas-videos.html>](http://www.census.gov/programs-surveys/bas/library/bas-videos.html).

# CHAPTER 1 COMPLETING A PAPER BAS SUBMISSION

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Welcome to the BAS Paper How-to Guide. Use the steps and help references from this section to start your BAS submission.

## 1.1 Step 1: Check materials included in the paper package.

The Paper BAS package contains: an index map, larger scale mapsheet(s), BAS insert, and colored pencils.

Start by reviewing the BAS insert for information regarding your BAS submission.

## 1.2 Step 2: Update the maps with boundary and feature updates.

Compare the BAS maps to a local source for the government (e.g., a local plat map, or a county assessor's dataset). Update the map(s) if the boundaries shown do not correctly depict the boundaries in effect as of January 1 of the current survey year.

**Chapter 2** and **Chapter 3** of this guide give detailed instructions on how to mark up the map using the pencils provided.

### 1.2.1 How to read the maps

**Appendix A** of this guide describes how to interpret the paper maps provided.

Viewing a digital map of the boundaries on TIGERweb before annotating the paper maps can be helpful. TIGERweb <[https://tigerweb.geo.census.gov/tigerwebmain/TIGERweb\\_main.html](https://tigerweb.geo.census.gov/tigerwebmain/TIGERweb_main.html)> is the Census Bureau's online map viewer that can be used to see a more detailed version of boundaries alongside imagery. Instructions for using TIGERweb for BAS can be found on the BAS website at <<https://www2.census.gov/geo/pdfs/partnerships/bas/TIGERwebforBAS.pdf>>.

## 1.3 Step 3: Mail back your completed submission.

Return all updated maps using the provided envelope and return label from the Paper BAS package you received, or mail the updated maps to the Census Bureau at the address listed below:

U.S. Census Bureau  
National Processing Center  
ATTN: BAS Returns, Bldg 63E  
1201 East 10th Street  
Jeffersonville, IN 47132

## CHAPTER 2 MARKING UPDATES ON THE MAP: BOUNDARIES

Note: Census Designated Place (CDP) updates are being accepted through digital submissions only. Please refer to the BAS website <[www.census.gov/programs-surveys/bas.html](http://www.census.gov/programs-surveys/bas.html)> for more information.

### 2.1 Legal Changes

All legal changes (annexations and deannexations) must have supporting documentation. AIA legal boundary changes must have AIA legal documentation (e.g., statute, federal court decision, trust deed) submitted with each requested change. Legal changes from incorporated places, MCDs, and counties must have an authorization number, such as a resolution or ordinance number, authorization type, and the effective date noted on the map.

#### 2.1.1 How to Draw Legal Boundary Changes

Figure 1 and Figure 2 illustrate the correct way to draw legal boundary changes on BAS maps.

1. Using the red pencil provided, cross out the portion of the boundary that is no longer current with a string of "Xs".
2. Draw the new boundary line(s) ensuring the boundary is closed.
3. Add the ordinance number or other legal identifier of the action authorizing the change, along with the effective date of each annexation or deannexation that is drawn on the map.

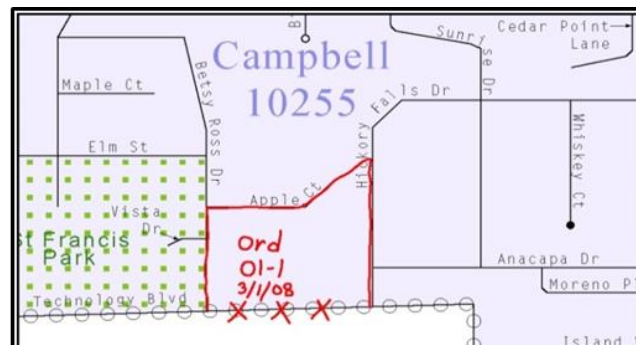
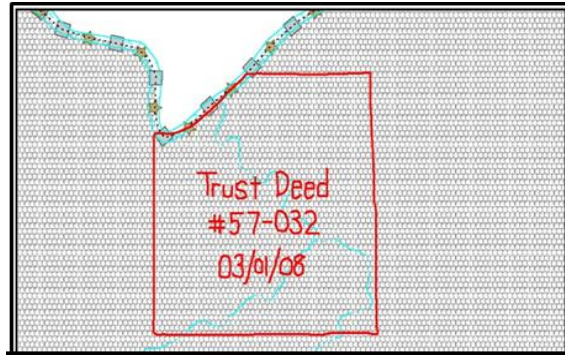


Figure 1. Correctly Annotating a Legal Boundary Change

Draw "Xs" with the red pencil and record the required documentation information on the map.



**Figure 2. Correctly Annotating an AIA Trust Land**

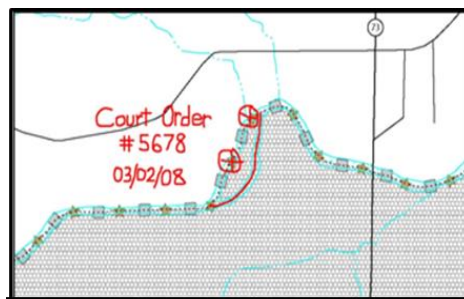
Correctly annotate an AIA trust land and record the required documentation information on the map. The original reservation is not deleted and therefore does not require a string of “Xs”.

### 2.1.2 Boundary Changes Involving Coincident Features

**Figure 3** and **Figure 4** illustrate how to adjust a boundary that is currently coincident with (i.e., follows exactly) a feature, such as a river or street, however, while the feature location is correct, the boundary location is incorrect.

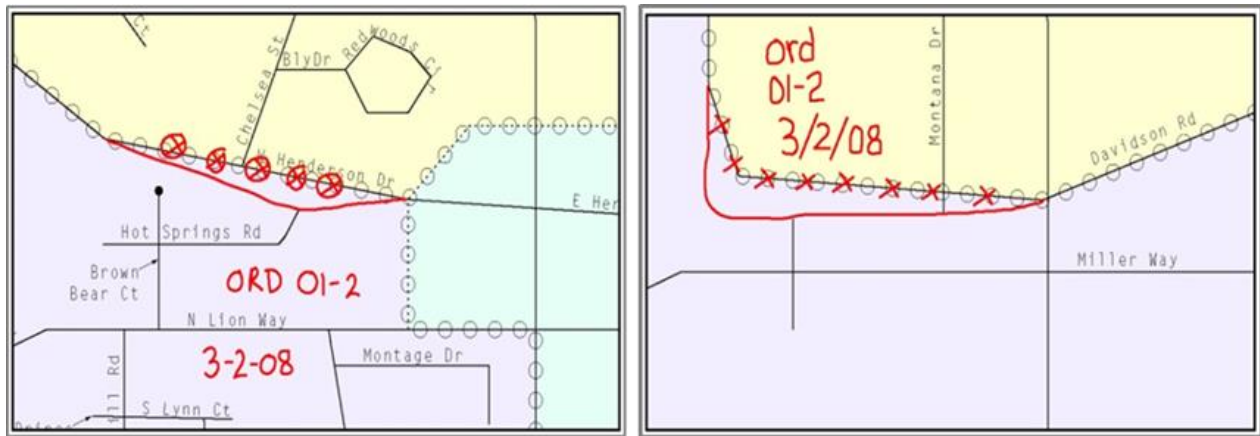
1. Using the red pencil, cross out the portion of the boundary that is no longer current using a string of “Xs” inside circles.
2. Draw the updated boundary.
3. Add the authorization number or other identifier of the action authorizing the change along with the effective date of each addition or deletion next to the area being changed.

If both the boundary and feature need to be moved, cross out the incorrect boundary with red “Xs” and then draw a red line representing the new location of the boundary and road.



**Figure 3. Annotating a Legal Boundary Change**

Annotating a legal boundary change coincident with a river feature, where the river location does not change, but the boundary does.



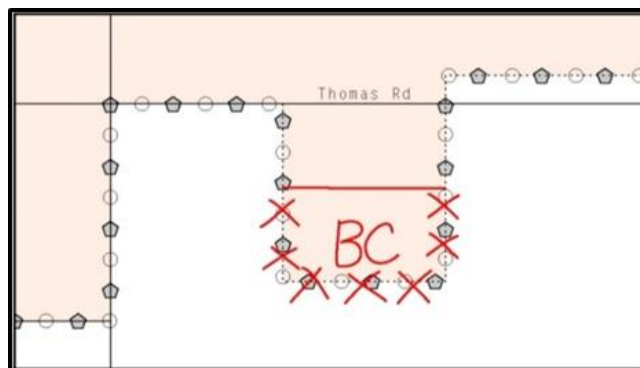
**Figure 4. Annotating a Legal Change to an Incorporated Place**

Annotating a legal change to an incorporated place boundary coincident with a road feature. Left: Only the boundary moves to the new location. The street feature location is correct, but the boundary location is incorrect. Right: Both the boundary and the street feature move to a new location. Both the boundary and the street feature location are incorrect.

## 2.2 Boundary Corrections

A boundary correction is the adjustment of a boundary to correct an error in the Census Bureau’s version of the boundary, and it is not the result of a legal change. Boundary corrections should follow the general shape of the existing boundary. Legal documentation is not required when submitting a boundary correction to the Census Bureau. [Figure 5](#) illustrates how to complete a boundary correction.

1. Using the red pencil, cross out the incorrect boundary with a string of “Xs”.
2. Add a line showing the correct boundary.
3. Print the letters BC inside the change to identify the update as a boundary correction rather than a legal change.



**Figure 5. Annotating a Boundary Correction to an Incorporated Place Boundary**

## 2.3 Corridors and Offsets

### 2.3.1 Geographic Corridors

The Census Bureau does not require places and AIAs to report right-of-ways; geographic corridors are not essential to the mission of the Census Bureau and the right-of-way should only be included if it is crucial to the place or AIA, or if state or local laws require it.

To indicate a geographic corridor on the map, use the red pencil to draw a line on each side of the road. Mark the beginning and end of each line with perpendicular hatch (//) marks. Write the letters “GC” beside each line (Figure 6). To remove a geographic corridor or offset, use the red pencil to mark the beginning and end of the corridor or offset with perpendicular hatch (||) marks and write “remove GC.”

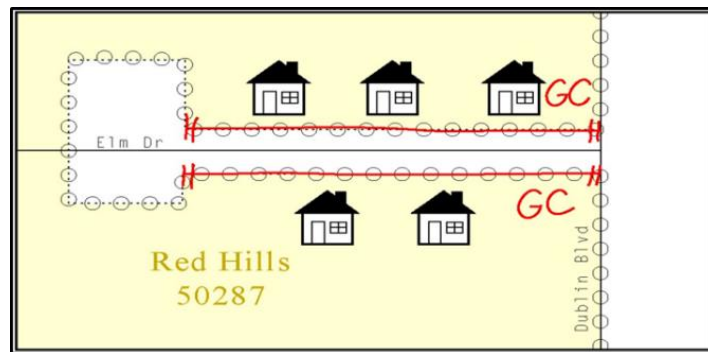


Figure 6. Indicating a Geographic Corridor

### 2.3.2 Geographic Offsets

To indicate a geographic offset on the map, use the red pencil to draw a line parallel to the road, along which the offset will be created. Mark the beginning and end of the line with perpendicular hatch (||) marks. Write the letters “OFF” on the side of the road where the geographic offset exists (Figure 7).

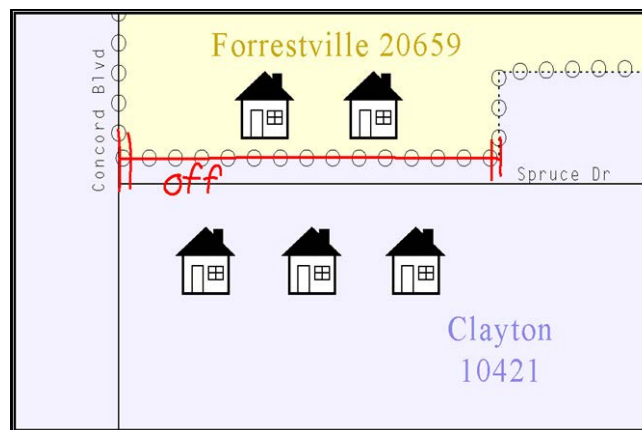


Figure 7. Depicting a Geographic Offset

## 2.4 Tribal Subdivisions

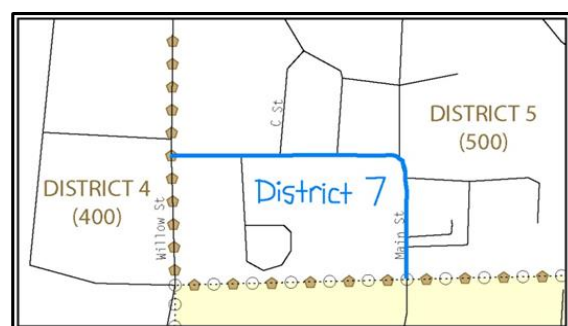
The Census Bureau considers any type of unit of self-government or administration in tribal areas as a tribal subdivision. A tribe may submit only one type of subdivision, even if it has more than one type of distinct administrative area that could qualify as a tribal subdivision (e.g., tribal election districts, tribal water districts, or health service areas with different boundaries). The Census Bureau recognizes two types of tribal subdivisions - active (A) or inactive (I):

- Active subdivisions are defined as having a functioning government, with elected officials, that provides programs and services.
- Inactive subdivisions have no functioning government or elected officials and receive services solely from the tribe.

### 2.4.1 Tribal Subdivision Program Procedures

If this is the first time that tribal subdivisions are being provided to the Census Bureau do the following (**Figure 8**):

1. Using the blue pencil, please add the boundaries on the BAS map(s).
2. Please note: each tribal subdivision must be labeled on each map sheet with its name (e.g., “District 3,” “Arlee District,” “White Rock Chapter,” “Parmelee Community”).
3. Record the name, type, and status of each subdivision on the map.
4. If a tribal subdivision boundary follows a visible feature such as a stream, road, or fence line, please be sure to indicate that on the BAS map. Add the visible feature the boundary follows if it is not already shown on the map.



**Figure 8. Recording New Tribal Subdivision Information**

Depicting a new tribal subdivision.

### 2.4.2 Updating Existing Tribal Subdivisions

If tribal subdivisions were delineated during a prior survey, they are symbolized on the enclosed BAS maps by a dashed pentagon-shaped gold line. Before adding or revising tribal subdivision boundaries on the enclosed map(s):

1. Using the red pencil, please note any changes to the boundary of the land base on the map(s).

2. Using the blue pencil, please add and/or revise the boundaries of the tribal subdivisions on the enclosed BAS map(s).

### **2.4.3 Tribal Subdivision Documentation**

New tribal subdivisions and name changes to existing tribal subdivisions require documentation, regardless of whether they are being delineated for the first time or being added to those previously reported. This documentation should be in the form of a tribal resolution or a tribal constitution. Include a copy of this documentation with the BAS maps when returning these materials to the Census Bureau.

Corrections to the Census Bureau's depiction of tribal subdivision boundaries or names do not require documentation.

## **2.5 New Incorporations and Disincorporations**

### **2.5.1 New Incorporations**

Newly incorporated places should provide the Census Bureau with:

1. A copy of the official new incorporation papers, including date of incorporation.
2. A map indicating the boundaries of the new incorporation.
3. Contact information for the Highest Elected Official and a contact for BAS.

### **2.5.2 Disincorporations**

Disincorporated governments should provide the Census Bureau with a copy of the official papers of disincorporation, including the effective date.



## CHAPTER 3 MARKING UPDATES ON THE MAP: FEATURES

The primary purpose of BAS is to collect legal boundary information. However, please also submit feature (e.g., streets, rivers) updates and modifications occurring near or coincident with a legal boundary through BAS. Feature modifications that are internal to the boundary of an incorporated place, county or MCD will be accepted, but are not required as part of BAS.

### 3.1 Linear Features

#### 3.1.1 Modifying Locations of Streets

Only correct streets that incorrectly located, mislabeled, or distorted. The following figure illustrates how to correct the location of a street feature:

1. Using the purple pencil, please cross out the incorrect feature location with “Xs”.
2. Please draw the feature in the correct location.
3. Please print the name of the feature along the length of the feature as shown in [Figure 9](#).

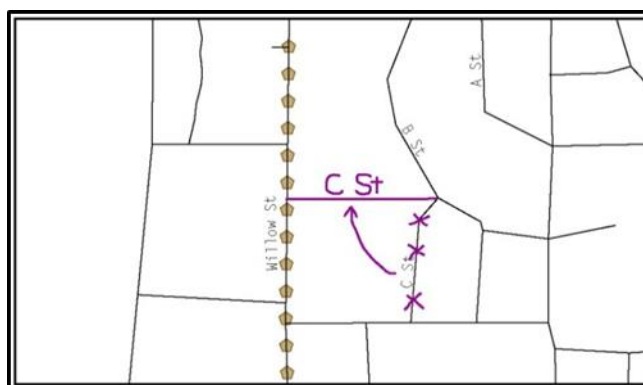
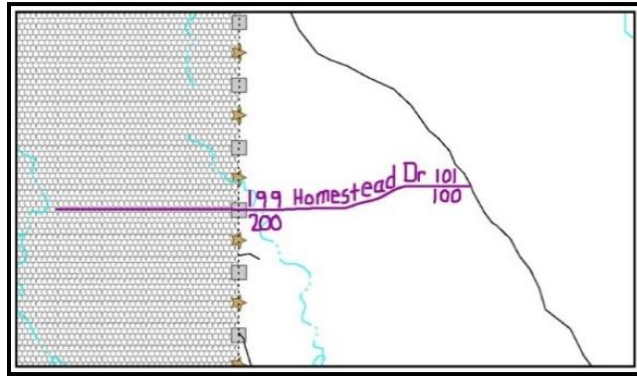


Figure 9. Modifying a Street Feature Location

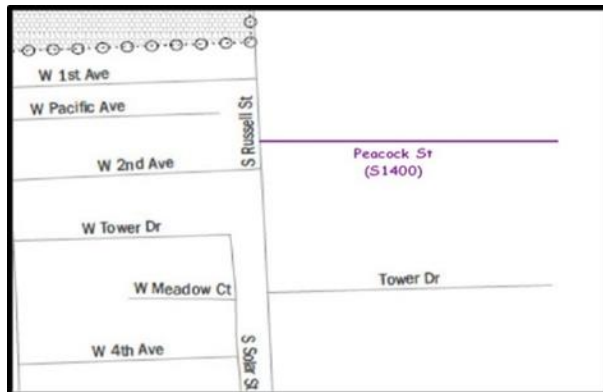
#### 3.1.2 Adding Streets

1. Using the purple pencil, draw the feature and its name on the map. Where possible, provide the address range for any new streets, only if one of the following circumstances exists:
  - A road where house numbers, street names, and/or addresses were added or deleted.
  - A street was added that crosses a boundary.
2. Using the purple pencil, please add in the address ranges, providing the lowest and/or highest possible addresses where the road intersects a boundary.



**Figure 10. Adding Street Features/Annotating with Name and Address Breaks**

3. Provide the Master Address File/Topologically Integrated Geographic Encoding and Referencing (MAF/TIGER) System Feature Class Code (MTFCC) for all new streets (Figure 11). The MTFCC will be S1400 for most residential streets. A full list of MTFCC codes and descriptions can be found at [www.census.gov/library/reference/code-lists/mt-feature-class-codes.html](http://www.census.gov/library/reference/code-lists/mt-feature-class-codes.html).
4. Alternate street names may be written in parentheses below the primary street name. Due to the difficulty of showing multiple names for a street, only the primary street name is shown on BAS maps.



**Figure 11. Adding an MTFCC Code when Adding a New Street**

### 3.1.3 Adding Street Names in a Congested Area

1. If an area of the map is too congested to add all feature names, using the purple pencil, please number each feature and list this number and the corresponding feature name in the map margin or in an uncongested spot close to the feature's actual location (Figure 12).
2. Do not repeat numbers on a map sheet.

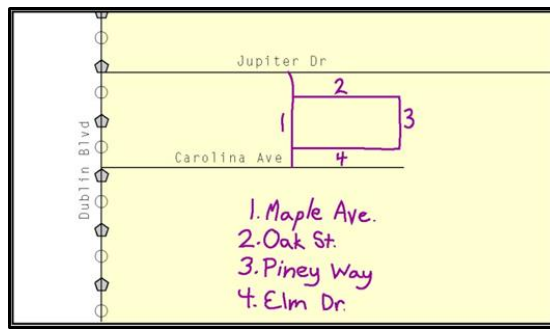


Figure 12. Adding Street Name Features in a Congested Area when Adding Streets

### 3.1.4 Correcting Street Names

1. Using the purple pencil, please draw a line through the incorrect street name.
2. Please print the correct street name along the feature.

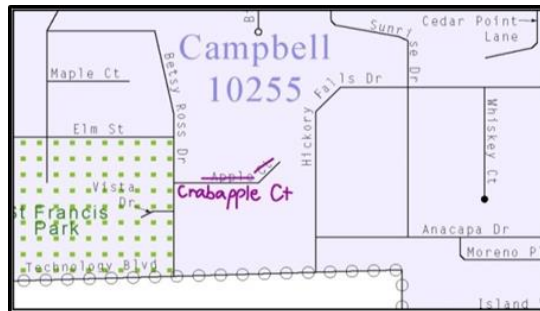


Figure 13. Correcting a Street Name

### 3.1.5 Deleting Streets

1. Delete street features only if they are nonexistent, or impassable. Do not delete a street because the local jurisdiction is not responsible for maintaining it.
2. Using the purple pencil, please mark the beginning and end of the base feature to be deleted with hatch (//) marks perpendicular to the feature as shown below.
3. Cross-out the nonexistent street feature using a string of "Xs".

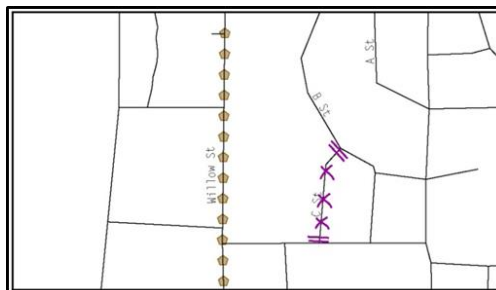
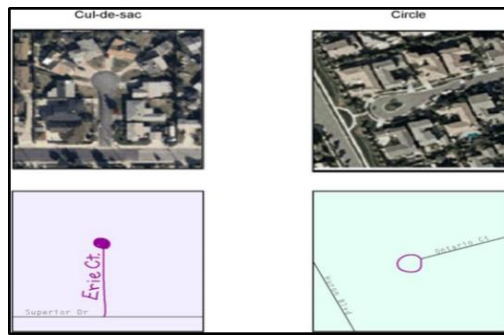


Figure 14. Deleting a Street Feature

### 3.1.6 Adding Cul-De-Sacs or Circles

1. Using the purple pencil, please draw the feature as follows:
2. Cul-de-sacs are entirely paved and should be drawn as a solid dot.
3. Circles have an area of unpaved ground within them and should be drawn as an unfilled circle.
4. Print the name of the associated street leading to the cul-de-sac or circle.



**Figure 15. Adding Cul-de-sac and Circle Features**

### 3.2 Point Landmarks

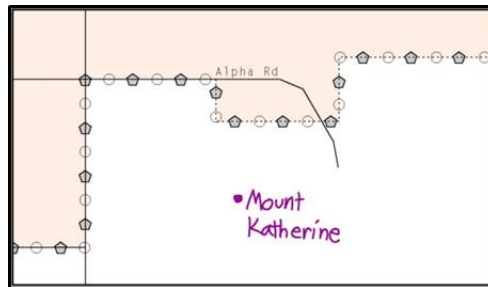
BAS maps display a select number of point landmarks (e.g., mountain peaks). Point landmarks can be updated through BAS but are not required.

Acceptable point landmark feature updates include mountain peaks or summits, libraries, city halls, community centers and police stations. Airports, parks, schools, golf courses, museums, and cemeteries may be submitted as either point landmarks or area landmarks.

The BAS maps also include select point landmarks taken from United States Geological Survey (USGS) topography maps and the USGS GNIS.

When adding a point landmark:

1. Using the purple pencil, place a solid dot at the location of the point landmark.
2. Print the name of the landmark next to the dot.



**Figure 16. Adding a Point Landmark**

### 3.3 Area Landmarks

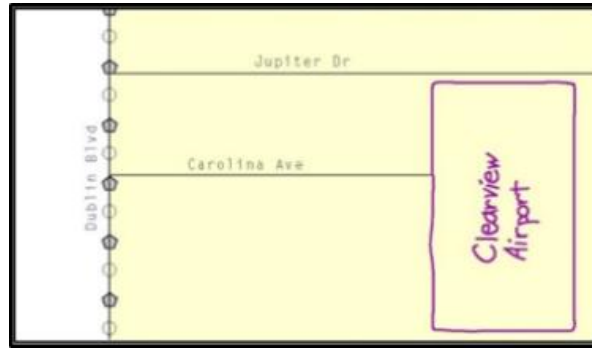
BAS maps display a select number of area landmarks (e.g., lakes). Like point landmarks, area landmarks can be updated through BAS, but are not required.

Acceptable area landmark updates include water bodies, swamps, quarries, national parks, and forests. Airports, parks, schools, golf courses, museums, and cemeteries may be submitted as either area landmarks or point landmarks.

When adding an area landmark:

1. Using the purple pencil, draw the area landmark boundary in the correct location.

2. Print the name of the landmark inside or next to the feature.



**Figure 17. Adding an Area Landmark**

## APPENDICES

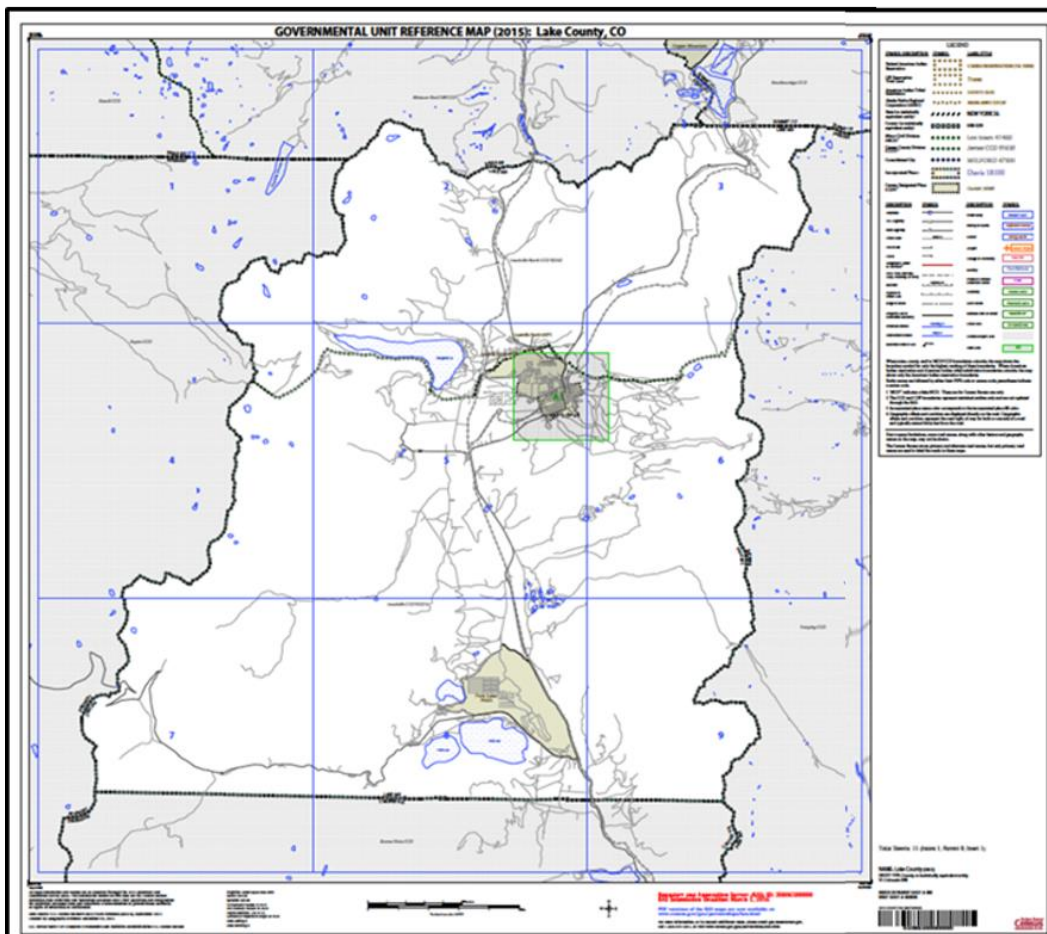
---

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# APPENDIX A READING A MAP

## A1 Index Maps

When deciding which map to use for a BAS submission, it is necessary to view the government as a whole and choose the correct parent map sheet based on its location within the government. Do this by referring to the index map (Figure 18), a relatively small-scale map that shows the entire government, and the location and number of all parent map sheets within that government. Each parent map sheet has a numerical locator, which differentiates it from the other parent map sheets associated with that government. The numbering begins with the northern and western-most parent map sheets and continues left-to-right. By referring to the index map, determine which parent map sheet(s) to use for the BAS submission, and then access it based on its number on the index map. The index map is not appropriate for BAS submissions. Its purpose is as a reference or index of parent maps, and it will not be accepted as a BAS submission.

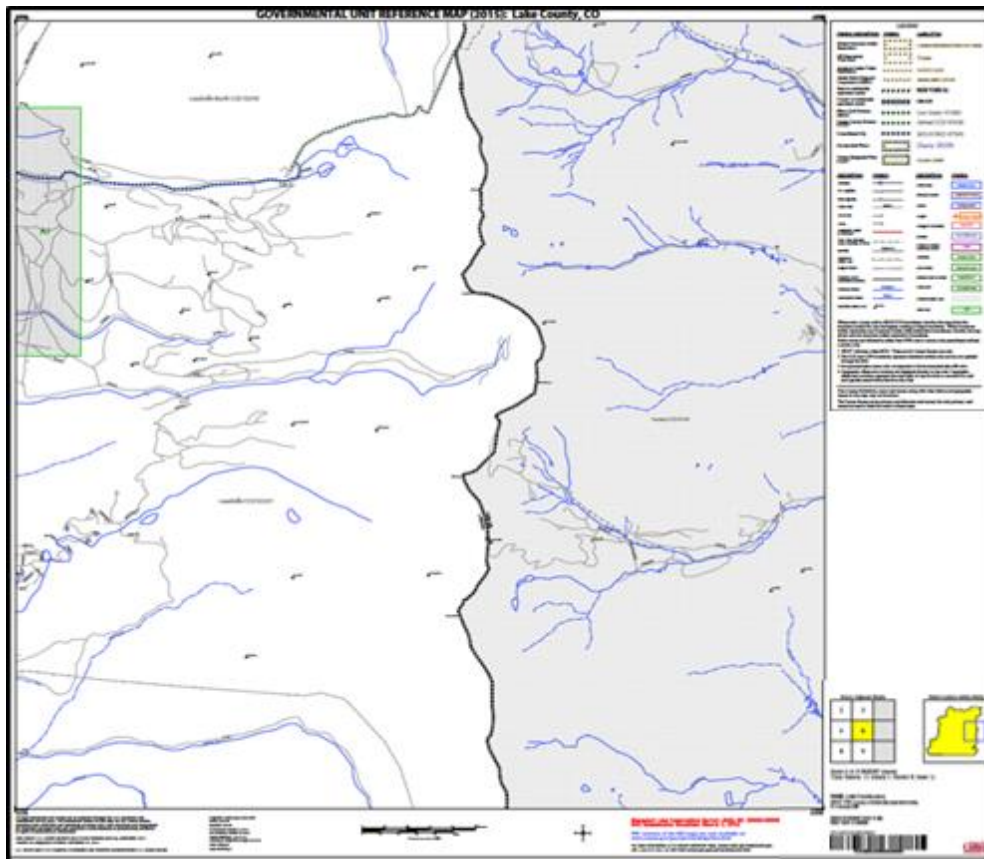


**Figure 18. Index Map**

The Index Map sheet shows the location of all parent map sheets and inset map sheets within a government.

## A2 Parent Maps

Many governments are too large to be shown on a single map. For this reason, it is necessary to separate the government into sections, each of which has its own map, called the parent map sheet (**Figure 19**). A single government is often represented with numerous map sheets, with each parent map sheet showing a small section of the government. Each parent map is assigned a number, beginning with the number one and increasing progressively for each additional parent map sheet (i.e., 1, 2, 3, 4, etc.). This makes viewing and editing map sheets more manageable, and it becomes possible to depict an area with the level of detail necessary to make changes or challenges. In most instances, the parent map is the one that should be used for BAS submissions.



**Figure 19. The Parent Map**

The parent map sheet shows a section of a government at a relatively large scale.

In the bottom right-hand corner of the parent map sheet, there is a key to the parent map sheet's location in relation to adjacent map sheets as shown in **Figure 19** above. A larger example of this key is shown in **Figure 20**. This key helps the user quickly determine which adjacent map sheet to use.

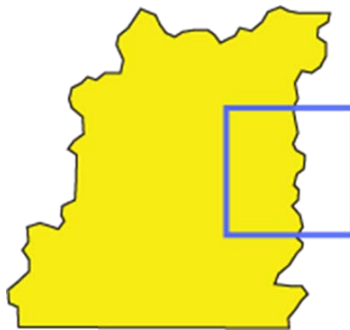


2	3	
5	6	
8	9	

**Figure 20. The Key to Adjacent Sheets**

The key to adjacent sheets shows where the parent map sheet lies in relation to adjacent sheets.

Next to the key to adjacent sheets, there is a small outline of the entire government (the inside of which is colored yellow), and a blue outline of the parent map sheet. This key displays the location of the map sheet in relation to the government as a whole (**Figure 21**).



**Figure 21. The Sheet Location within Government key**

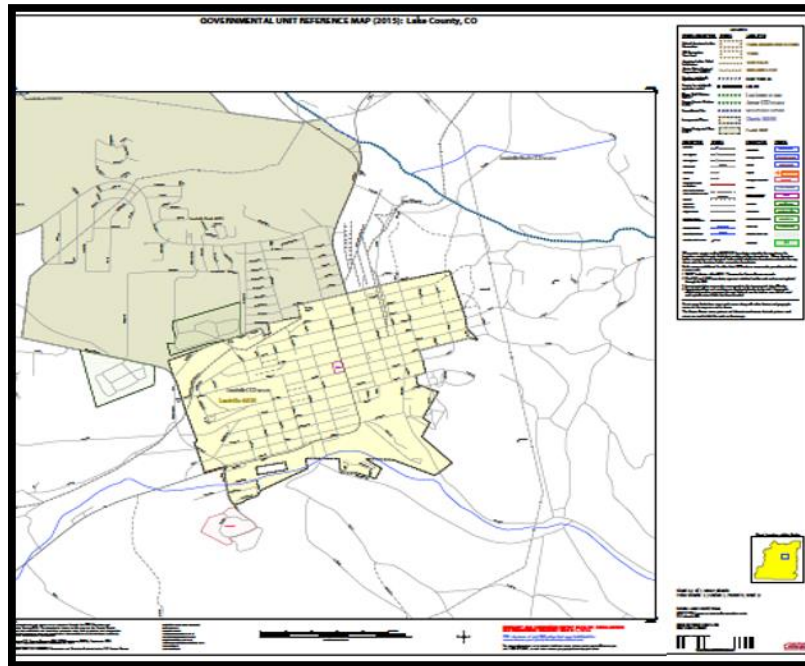
The sheet location within government key shows where the parent map sheet is located within the government to which it belongs.

### A3 Inset Maps

In some instances, in highly congested areas, even a parent map sheet provides insufficient detail for BAS purposes. In such cases, rather than using a parent map, the area is depicted within an inset map (**Figure 22**). This refers to a map with a very large scale, so that it displays a smaller area than the parent map sheet, but with greater detail. On the index map, an inset map is represented by a green outline, and is assigned a number preceded by a letter (i.e., A1, A2, B1, etc.), as shown in **Figure 23**. Inset maps are only found in areas with a large number of features, and as such are used less often than parent maps.



**Figure 22. An Inset Map as it is Displayed on the Index Map**

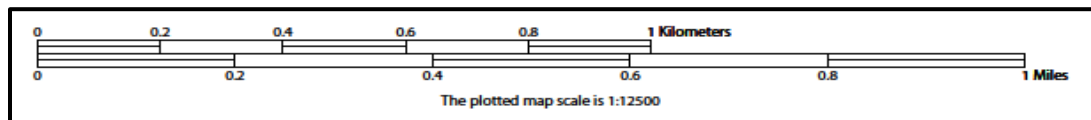


**Figure 23. Inset Maps**

Inset maps show areas of relative congestion at a large scale, allowing a greater amount of detail.

## A4 Scales

Naturally, the map is always smaller than the area it represents, so nearly all maps are equipped with a scale that depicts the ratio of distance on the map to the actual distance on land. The scale can be designed any number of ways, but two of the most common scales are ratio scales, which describe a ratio between the map and the real world (e.g., 1: 24,000), and bar scales, which depict that relationship graphically by displaying how much a certain distance on the map represents in the real world (Figure 24). In other words, if a map has a ratio scale of 1: 24,000, it means that one inch on the map represents 24,000 inches on the ground. This works with any unit of measurement, so long as the unit being used on the map is the same as – or properly converted from – the unit being depicted on the ground. Often a map will have both types of scale.



**Figure 24. Bar Scale**

The map from which this scale was taken has a ratio scale of 1:12,500. The bar scale shows distances in kilometers and miles.

A bar scale will often be a set length (e.g., one inch), and/or represent a set distance (e.g., one mile). The bar scale is used to determine distance on the map by using a ruler. Simply place the

ruler on the map to determine the distance on the map; then place the ruler along the bar scale, which will show how much that distance represents on the ground.

## A5 Compass Rose

All maps should have some sort of diagram depicting at least one – but sometimes all – of the cardinal directions (north, south, east, and west) that the map reader can use to orient the map. This diagram is called a compass rose (Figure 25). It is important to check the compass rose when beginning to read a map to determine the direction in which the map is oriented (i.e., which direction is at the top of the map).



Figure 25. Compass Rose

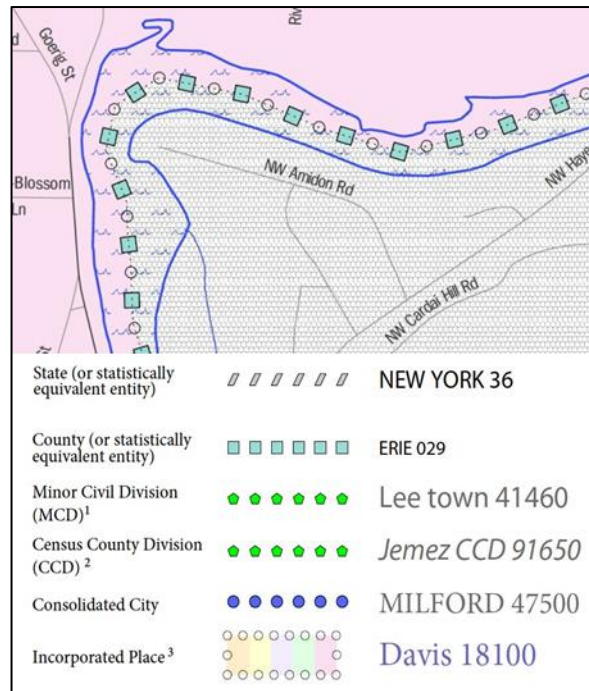
## A6 Legend

Because a map is a graphic representation of a real-world area, it is necessary, and convenient, to symbolize real world features with representative symbols. In order to describe what each symbol means, most maps have a legend (Figure 26). Typically, the legend will have a small example of each symbol (e.g., a line, or a picture of a tent), and next to the symbol, in text, a brief description of what is being depicted (e.g., “road”, or “campground”).

<u>DESCRIPTION</u>	<u>SYMBOL</u>	<u>DESCRIPTION</u>	<u>SYMBOL</u>
Interstate		Water Body	
U.S. Highway		Swamp or Marsh	
State Highway		Glacier	
Other Road		Airport	
Cul-de-sac		College or University	
Circle		Military	
Geographic Offset or Corridor <sup>4</sup>			
4WD Trail, Stairway,			

Figure 26. Legend Describing What Each Symbol Means

Sometimes a map needs to depict multiple features concurrently. This is because some lines are the boundaries of multiple geographies at the same time (i.e., a county boundary can also be a city boundary, a voting district boundary, and even a highway or river). Such instances can be depicted in various ways, but Census Bureau maps depict coincident lines by alternating the symbols for each type of line as shown in Figure 27. In other words, if a line is both a county boundary (symbolized by a series of squares) and a city boundary (a series of circles), that boundary will be depicted as a series of alternating squares and circles for the length of the concurrency.



**Figure 27. Map Depicting Multiple Features Concurrently**

In this case, the city and the county boundaries are coincident, and run through the middle of the river.

In situations where higher-level geographies (e.g., national, state, county, or county subdivisions) coincide, the Census Bureau’s maps display only the symbol of the highest-ranking of these boundaries. In other words, if a particular boundary is shared by both a state and county, only the symbol representing the state boundary will be displayed.

## Boundary and Annexation Survey State Certification State Certifying Official Appointment Form

The contact information for the individual currently responding to the Boundary and Annexation Survey (BAS) State Certification program in your state is provided in the space below:

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Department: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_

Zip Code: \_\_\_\_\_

Telephone: \_\_\_\_\_

Email: \_\_\_\_\_

State Certification materials will be emailed to the individual you appoint as the State Certifying Official (SCO). You may either confirm the current SCO above or appoint another individual to this position. Please provide the contact information for the appointed SCO if different from above:

I confirm the contact person listed  
above as the SCO.

OR

I appoint the following individual as  
the new SCO:

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Department: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

Email: \_\_\_\_\_

Please sign below to indicate that you approve the information provided on this form.

Governor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Please email this completed form to [geo.bas@census.gov](mailto:geo.bas@census.gov)

A list of annexations received through the BAS program from 2000-2022 is available online at:  
<<https://www.census.gov/geographies/reference-files/time-series/geo/bas/annex.html>>.

We estimate that participating in the Boundary and Annexation Survey State Certification Program will take 7.5 hours on average. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, using Paperwork Reduction Project 0607-0151 as the subject, to <[geo.bas@census.gov](mailto:geo.bas@census.gov)>. This collection has been approved by the Office of Management and Budget (OMB). The eight-digit OMB approval number that appears at the upper right of the form confirms this approval. If this number were not displayed, we could not conduct this survey. The Census Bureau conducts this program under the legal authority of the Title 13 United States Code, Section 6.

**E-mail: BASSC 1L <overprinting> and Text**

**Subject: 2022 Boundary and Annexation Survey (BAS) State Certification - <ST\_ABBR>**

<DATE>

Dear Governor <LAST\_NAME>:

The U.S. Census Bureau conducts the Boundary and Annexation Survey (BAS) every year to update legal boundaries, names, and statuses of all governments. The Census Bureau uses this boundary information for data collection, tabulation, and dissemination for the decennial census, American Community Survey, Population Estimates Program, and many other censuses and surveys. Following each BAS cycle, the Census Bureau conducts the BAS State Certification Program to review and certify updates sent through BAS.

As part of the BAS State Certification Program, we compile listings of boundary changes reported to the previous BAS cycle by governments within your state and distribute them to the governor-appointed State Certifying Official (SCO). If state law requires local governments to report boundary updates to the state, the SCO is responsible for reviewing the listings and certifying that the information is correct. This program ensures that the Census Bureau's inventory of local governments is accurate and that the boundary changes reported to BAS comply with your state laws.

Please provide the name and contact information of the person you wish to appoint as the SCO for <STATE> on the attached BAS State Certification SCO Appointment Form and email the completed form to <[geo.bas@census.gov](mailto:geo.bas@census.gov)> by Friday November 4, 2022. If you do not respond by this date, we will distribute materials to the previous SCO listed on the attached form. We plan to distribute the BAS State Certification materials for review to the SCO in December 2022.

Thank you for your participation in the BAS State Certification Program.

#### **CONTACT INFORMATION**

Email: <[geo.bas@census.gov](mailto:geo.bas@census.gov)>

Phone: 1-800-972-5651

BAS State Certification Program Website: <[www.census.gov/programs-surveys/bas/information/state-certification-program.html](http://www.census.gov/programs-surveys/bas/information/state-certification-program.html)>

General BAS Information: <[www.census.gov/programs-surveys/bas.html](http://www.census.gov/programs-surveys/bas.html)>

Attachments: 2022 BAS State Certification SCO Appointment Form

**E-mail: BASSC 2L – CCD States <overprinting> and Text**

**Subject: <<YYYY>> Boundary and Annexation Survey (BAS) State Certification - <ST\_ABBR>**

<DATE>

Dear <CONTACT\_SALUTATION> <LAST\_NAME>:

The Governor's office notified the U.S. Census Bureau that you are serving as the State Certifying Official (SCO) for <STATE\_NAME> for the 2022 Boundary and Annexation Survey (BAS) State Certification Program. Through this program, the Census Bureau asks you to verify the accuracy of the information received during the 2022 BAS. This program ensures that the Census Bureau's inventory of local governments is accurate and that the boundary changes reported to BAS comply with your state laws.

All information and materials for review, including the BAS State Certification listings and the *BAS State Certification How-to Guide*, are located on the [BAS State Certification website](#). Select your state's name in the 'Download BAS State Certification Materials' section to download the materials. We are providing you with the following information from the 2022 BAS:

- List 1 - governments that have disincorporated, become inactive, or otherwise ceased to exist,
- List 2 - legal boundary changes reported to the 2022 BAS, and
- List 3 - names and functional statuses of incorporated places.

A summary of the state laws for reporting legal boundary changes in <STATE\_NAME> are attached for your reference. Please notify the Census Bureau if there are errors in the state law summary or if there are any records in the provided data files that are in violation of state or county law. Return the certified listings to the Census Bureau on or before Friday March 10, 2023. Refer to the *BAS State Certification How-to Guide* for further information.

Thank you for your participation in the BAS State Certification Program.

#### **CONTACT INFORMATION**

Email: <[geo.bas@census.gov](mailto:geo.bas@census.gov)>

Phone: 1-800-972-5651

BAS State Certification Program Website: <[www.census.gov/programs-surveys/bas/information/state-certification-program.html](http://www.census.gov/programs-surveys/bas/information/state-certification-program.html)>

General BAS Information: <[www.census.gov/programs-surveys/bas.html](http://www.census.gov/programs-surveys/bas.html)>

Attachment: State Law Summary



**E-mail: BASSC 2L – MCD States <overprinting> and Text**

**Subject: 2022 Boundary and Annexation Survey (BAS) State Certification - <ST\_ABBR>**

<DATE>

Dear <CONTACT\_SALUTATION> <LAST\_NAME>:

The Governor's office notified the U.S. Census Bureau that you are serving as the State Certifying Official (SCO) for <STATE\_NAME> for the 2022 Boundary and Annexation Survey (BAS) State Certification Program. Through this program, the Census Bureau asks you to verify the accuracy of the information received during the 2022 BAS. This program ensures that the Census Bureau's inventory of local governments is accurate and that the boundary changes reported to BAS comply with your state laws.

All information and materials for review, including the BAS State Certification listings and the *BAS State Certification How-to Guide*, are located on the [BAS State Certification website](#). Select your state's name in the 'Download BAS State Certification Materials' section to download the materials. We are providing you with the following information from the 2022 BAS:

- List 1 - governments that have disincorporated, become inactive, or otherwise ceased to exist,
- List 2 - legal boundary changes reported to the 2022 BAS,
- List 3 - names and functional statuses of incorporated places, and
- List 4 - names and functional statuses of minor civil divisions.

A summary of the state laws for reporting legal boundary changes in <STATE\_NAME> are attached for your reference. Please notify the Census Bureau if there are errors in the state law summary or if there are any records in the provided data files that are in violation of state or county law. Return the certified listings to the Census Bureau on or before Friday March 10, 2023. Refer to the *BAS State Certification How-to Guide* for further information.

Thank you for your participation in the BAS State Certification Program.

#### **CONTACT INFORMATION**

Email: <[geo.bas@census.gov](mailto:geo.bas@census.gov)>

Phone: 1-800-972-5651

BAS State Certification Program Website: <[www.census.gov/programs-surveys/bas/information/state-certification-program.html](http://www.census.gov/programs-surveys/bas/information/state-certification-program.html)>

General BAS Information: <[www.census.gov/programs-surveys/bas.html](http://www.census.gov/programs-surveys/bas.html)>

Attachment: State Law Summary



**E-mail: BASSC 3L <overprinting> and Text**

**Subject: 2022 Boundary and Annexation Survey (BAS) – Missing Legal Boundary Change Submission**

<DATE>

Dear <BAS\_FIRST\_NAME> <BAS\_LAST\_NAME>:

The U.S. Census Bureau conducts the Boundary and Annexation Survey (BAS) every year to update legal boundaries, names, and the status of all governments. Following each BAS cycle, the Census Bureau conducts the BAS State Certification Program to review and certify updates sent through BAS. A governor-appointed State Certifying Official (SCO) verifies that the legal boundary, name, and status received through the previous BAS cycle were reported in accordance with state laws and that no legal changes are missing from the Census Bureau's data.

During the 2022 BAS State Certification Program, your state's SCO notified the Census Bureau that one or more boundary changes for your government were not reported to the 2022 BAS. The missing changes are listed on the attached form.

To ensure the changes are included in the Census Bureau's database, please complete the following action steps:

1. Review the missing changes listed on the attached BAS State Certification Discrepancy Form.
2. Submit the missing changes that are legally in effect along with appropriate documentation (e.g., ordinance document, resolution document, etc.) to the current BAS cycle by May 31.
3. If a change is not valid or you have questions about a change listed on the form, please contact the Census Bureau.
4. If you have already submitted the change to this year's BAS, no further action is required.

Thank you for your participation in BAS.

#### **CONTACT INFORMATION**

Email: <[geo.bas@census.gov](mailto:geo.bas@census.gov)>

Phone: 1-800-972-5651

BAS State Certification Program Website: <[www.census.gov/programs-surveys/bas/information/state-certification-program.html](http://www.census.gov/programs-surveys/bas/information/state-certification-program.html)>

General BAS Information: <[www.census.gov/programs-surveys/bas.html](http://www.census.gov/programs-surveys/bas.html)>

Attachment: BASSC Discrepancy form (BASSC-3L)

**E-mail: BASSC 4L <overprinting> and Text**

**Subject: 2022 Boundary and Annexation Survey (BAS) – Boundary Change Marked for Removal from Census Bureau Records**

<DATE>

Dear <BAS\_FIRST\_NAME> <BAS\_LAST\_NAME>:

The U.S. Census Bureau conducts the Boundary and Annexation Survey (BAS) every year to update legal boundaries, names, and the status of all governments. Following each BAS cycle, the Census Bureau conducts the BAS State Certification Program to review and certify updates sent through BAS. A governor-appointed State Certifying Official (SCO) verifies that the legal boundary, legal name, and status received through the previous BAS cycle were reported in accordance with state laws and that no legal changes are missing from the Census Bureau's data.

During the 2022 BAS State Certification Program, your state's SCO notified the Census Bureau that one or more boundary changes reported to the 2022 BAS were not reported to the appropriate state agency. The changes are listed on the attached form.

To ensure the changes are included in the Census Bureau's database, please complete the following action steps:

1. Review the missing changes listed on the attached BAS State Certification Discrepancy Form.
2. If a change is legally in effect, ensure the required documentation is filed with the appropriate state or county level agency.
3. Once the change is reported to the appropriate state or county level agency, resubmit the boundary change and supporting documentation to the current BAS cycle by May 31.
4. If a change is not valid or you have questions about a change listed on the form, please contact the Census Bureau.

Thank you for your participation in BAS.

#### **CONTACT INFORMATION**

Email: <[geo.bas@census.gov](mailto:geo.bas@census.gov)>

Phone: 1-800-972-5651

BAS State Certification Program Website: <[www.census.gov/programs-surveys/bas/information/state-certification-program.html](http://www.census.gov/programs-surveys/bas/information/state-certification-program.html)>

General BAS Information: <[www.census.gov/programs-surveys/bas.html](http://www.census.gov/programs-surveys/bas.html)>

Attachment: BAS State Certification Discrepancy Form (BASSC-4L)

**Email: BAS-E-NRFU1 <overprinting> and Text – BAS Non-Response Follow Up (True Non-Response)**

**Subject: YYYY Boundary and Annexation Survey (BAS)-March 1, YYYY Deadline – BAS ID: <BAS\_ID>**

The U.S. Census Bureau is sending this email to alert you that your government has not yet responded to the Boundary and Annexation Survey (BAS). You should have received an email and letter requesting your government's participation. You still have time to participate in the survey.

If you already responded online or mailed your response, you can disregard this email.

**Action Step:**

- **Review your government's boundary and respond to BAS** using our interactive BAS Annual Response Form. Additional details and instructions are found on the form.

[Click here to go to the Annual Response Form](#)

**TRAINING OPPORTUNITIES**

The Census Bureau is offering training webinars for BAS. The webinar schedule and registration instructions are on the [BAS Webinars webpage](#).

**KEY DATES**

- |                  |  |
|------------------|--|
| <b>January 1</b> | Boundary updates must be legally in effect on or before this date to be reported in the current survey year.   |
| <b>March 1</b>   | First BAS deadline - Boundary updates returned by this date will be reflected in the American Community Survey and Population Estimates Program data and in next year's BAS materials. |
| <b>May 31</b>    | Final BAS deadline - Boundary updates returned by this date will be reflected in next year's BAS materials.  |

**CONTACT INFORMATION**

Email: <[geo.bas@census.gov](mailto:geo.bas@census.gov)>

Phone: 1-800-972-5651

Website: <[www.census.gov/programs-surveys/bas.html](http://www.census.gov/programs-surveys/bas.html)>

Thank you for your participation in BAS.

**BAS Email: BAS-E-NRFU2 - BAS- Yes Change, No Return - Email Template**

**Subject: YYYY Boundary and Annexation Survey (BAS)--March 1, YYYY Deadline – BAS ID: <BAS\_ID>**

Thank you for your recent response to the Boundary and Annexation Survey (BAS). Your government indicated there are boundary changes to report, but we have not received these changes. You still have time to submit updates for BAS.

If you already submitted updates through the Secure Web Incoming Module or mailed your response, you can disregard this email.

**Action Step:**

- **Prepare and submit boundary updates.** On the BAS website, you will find resources and detailed instructions for submitting updates to BAS digitally or using paper maps.

Please respond to the BAS with a “No Changes” response if, after reviewing your government’s boundaries, you determine there are no boundary changes to report. If you do not respond, we will contact your government to confirm your boundary change status.

[Click here to go to the Annual Response Form](#)

**TRAINING OPPORTUNITIES**

The Census Bureau is offering training webinars for BAS. The webinar schedule and registration instructions are on the [BAS Webinars webpage](#).

**KEY DATES**

- |                  |  |
|------------------|--|
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| <b>May 31</b>    | Final BAS deadline - Boundary updates returned by this date will be reflected in next year’s BAS materials.  |

**CONTACT INFORMATION**

Email: <[geo.bas@census.gov](mailto:geo.bas@census.gov)>

Phone: 1-800-972-5651

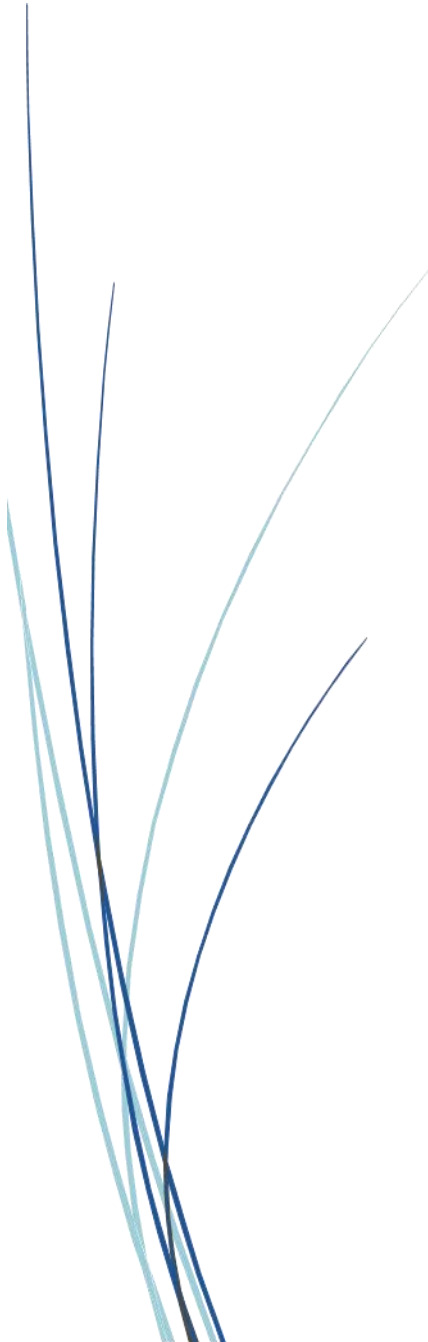
Website: <[www.census.gov/programs-surveys/bas.html](http://www.census.gov/programs-surveys/bas.html)>

Thank you for your participation in BAS.

# Boundary and Annexation Survey State Certification How-to Guide

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*Instructions for Participating in the Boundary and Annexation Survey State Certification Program*



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## INTRODUCTION

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### A. The Boundary and Annexation Survey (BAS)

The U.S. Census Bureau conducts the Boundary and Annexation Survey (BAS) every year to update legal boundaries, names, and the status of all governments. The Census Bureau uses this boundary information for data collection, tabulation, and dissemination for the decennial census, American Community Survey, Population Estimates Program, and many other censuses and surveys.

### B. The BAS State Certification Program

Following each BAS cycle, the Census Bureau conducts the BAS State Certification Program to review and certify updates sent through BAS.

As part of the BAS State Certification Program, the Census Bureau compiles listings of all local governments in each state that reported updates during the previous BAS cycle and distributes them to a governor-appointed State Certifying Official (SCO). If an individual state's law requires local governments to report boundary updates to the state, the SCO is responsible for reviewing the listings and certifying that the information is correct. This program ensures that the Census Bureau's inventory of local governments is accurate and that the boundary changes reported to BAS comply with state laws.

### C. Contact Us

If assistance is required in preparing a BAS State Certification Program submission, please contact the Census Bureau at <[geo.bas@census.gov](mailto:geo.bas@census.gov)> or **1-800-972-5651**.

### D. Resources

BAS State Certification Program materials and additional resources are available on the BAS State Certification website <[www.census.gov/programs-surveys/bas/information/state-certification-program.html](http://www.census.gov/programs-surveys/bas/information/state-certification-program.html)>.

## CHAPTER 1 STATE LAWS

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The SCO is responsible for understanding the laws in their state that pertain to legal boundary changes, new incorporations, and disincorporations since this will determine the extent to which the Census Bureau will accept changes to the BAS State Certification listings. Some states require local governments to report any legal actions causing changes to their legal boundaries to a designated state agency. If such laws are in effect, the SCO should have access to a complete boundary change file through the state government, which they may use to compare with the Census Bureau listings.

In states that have laws requiring local boundary changes to be reported to a state agency, the SCO may pursue any of the actions described in [Table 1](#).

In states that do not require boundary changes to be reported to a state agency, the SCO does not need to submit the edited listings to the Census Bureau. However, if the SCO does have access to a state-level boundary change file, they may use it to certify or add missing records to the BAS State Certification listings.

In most cases, the Census Bureau will accept edits to legal boundary changes. However, the Census Bureau will not add or remove legal changes until the changes are confirmed by the local government affected by the change.

A list of state annexation reporting laws can be found here:

<http://www2.census.gov/geo/pdfs/partnerships/bas/StateLawSummaries.pdf>.

## CHAPTER 2 BAS STATE CERTIFICATION MATERIALS

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All BAS State Certification materials, including the listings for review and this how-to guide can be found on the BAS State Certification website <[www.census.gov/programs-surveys/bas/information/state-certification-program.html](http://www.census.gov/programs-surveys/bas/information/state-certification-program.html)>.

### 2.1 Accessing materials

1. On the BAS State Certification website, go to the section of the page that reads, “Download BAS State Certification Materials.”
2. In the “Select a Geography” drop-down box under “Choose a State to View,” select the state the SCO is responsible for reviewing.
3. Upon selection of the state name, the website directs to a File Transfer Protocol (FTP) site. Download the contents of the folder. These are the listings that the SCO will review for the BAS State Certification Program.

### 2.2 State Certification Listings

Depending on the state, the SCO will be responsible for reviewing up to four listing files:

- List 1 – Governments reported to the Census Bureau that have disincorporated, become inactive, or otherwise ceased to exist. This listing is only available if a deleted government was reported to the Census Bureau during the 2022 BAS.
- List 2 – Reported legal boundary changes (annexations, deannexations/detachments, etc.) to active incorporated places within the state as reported through the 2022 BAS.
- List 3 – All governmentally active and inactive incorporated places in the state, according to the Census Bureau’s records as reported through the 2022 BAS.
- List 4 – All governmentally active and inactive MCDs in the state, according to Census Bureau’s records as reported through the 2022 BAS.

## CHAPTER 3 REVIEWING THE LISTINGS

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This section describes each type of listing file and explains how to review each listing file within the program materials.

### 3.1 Action Codes

For each record in a listing file, the SCO will input an action code into the 'Cert.' column. All action codes are defined in the table below:

**Table 1: Action Codes and Descriptions**

Action Code	Description
<b>C</b>	Certify - The SCO certifies that the information for the record is complete, accurate, and conforms to applicable state laws.
<b>A</b>	Add - The SCO adds a record from the state's file that is missing from the listing.
<b>R</b>	Reverse - The SCO requests to remove an invalid record from the listing.
<b>E</b>	Edit - The SCO edits the attribute information for an existing record in the listing.
<b>X</b>	Duplicate Entry - The SCO indicates that the record is a duplicate of another record in the listing.
<b>&lt;blank&gt;</b>	Leaving a blank field means there are no actions for the record. The Census Bureau will continue to maintain the record and its current attribute information.

### 3.2 List 1: Governments that Disincorporated, Became Inactive, or Ceased to Exist

The List 1 data file ([Figure 1](#)) contains the names of all governments in the state that have disincorporated, became inactive (no longer have officers, collect revenue, or conduct governmental activities), or otherwise ceased to exist as reported through the 2022 BAS. [Table 2](#) provides an explanation of the fields in the data file.

	A	B	C	D	E	F
1	<b>ENTITIES THAT DISINCORPORATED, BECAME INACTIVE, OR CEASED TO EXIST AS SEPARATE ENTITIES</b>					
2	NOTE: PLACE ALL EDITS IN THE BLANK COLUMN TO THE RIGHT OF THE COLUMN YOU WISH TO UPDATE.					
3						
4	<b>Place Name and LSAD*</b>	<b>County</b>	<b>Effective Date</b>	<b>Effective Date Update</b>	<b>Cert.</b>	<b>Memo</b>
5	Edna Bay city	Prince of Wales-Hyder Census Area	10/02/2014			
6	Petersburg Borough	Petersburg Borough	1/3/2013			
7						
8						
9	*LSAD=expanded legal/statistical description					
10	Certification: I certify to the best of my knowledge, that the attached list of boundary changes is complete and correct as of January 1, 2016 for all places shown and that the effective date is correct for each change, except as specified by the added notes.					
11						

**Figure 1. List 1**

**Table 2: List 1 Data File Field Descriptions**

Column	Field Name	Description
A	Place Name and LSAD	Government's name and expanded legal/statistical area description.
B	County	County or counties in which the government is located.
C	Effective Date	The date on file for when the government disincorporated, became inactive, or otherwise ceased to exist.
D	Effective Date Update	Will be initially blank so the SCO can provide edits to the data in the Effective Date field without overriding original data.
E	Cert.	Will be initially blank so the SCO may certify the records as correct and complete.
F	Memo	Will be initially blank so the SCO may include any notes regarding a certain record.

### 3.2.1 Instructions

Please review the List 1 data file to ensure that it provides a complete and correct inventory of all governments that have disincorporated, become inactive, or otherwise ceased to exist as reported through the 2022 BAS.

- For all records that are correct, complete, and conform to applicable state laws, enter a 'C' in the Cert. field.
- If there is a government that disincorporated, became inactive, or otherwise ceased to exist and is missing from the data file:
  - In a new row at the bottom of the data file, enter the missing government's name and the entity type (such as town, township, city, etc.) under the Place Name and Legal/Statistical Area Description (LSAD) field.
  - Enter the date the government disincorporated, became inactive, or otherwise ceased to exist into the Effective Date Update field.

- Provide an explanation in the Memo field.
- Enter an 'A' in the Cert. field. This will inform the Census Bureau that an additional government should be added to the list of deleted governments.
- If any government is listed in error:
  - Enter an 'R' in the Cert. field to notify the Census Bureau that this government should be removed from the list of deleted governments.
  - In the Memo field, provide an explanation why the government should be removed.
- If the Effective Date of the government is incorrect:
  - Enter the correct date the government ceased to exist in the Effective Date Update field.
  - Enter an 'E' in the Cert. field to notify the Census Bureau that the Effective Date must be edited in the list of deleted governments.
- If any government is duplicated:
  - Enter an 'X' in the Cert. field to inform the Census Bureau that this government is a duplicate of another government.
  - In the Memo field, indicate the duplicate ID.
- Upon completion of review of the List 1 data file, the SCO certifies the statement at the bottom of the file by typing their full name, title, and the date of concurrence below the provided statement.

### 3.3 List 2: Boundary Changes

The List 2 data file ([Figure 2](#)) provides an inventory of legal boundary changes to active incorporated places within the state that were reported to BAS. [Table 3](#) provides an explanation of the fields in the data file.

D	E	F	G	H	I	J	K	L
<b>BOUNDARY ACTIVITY FOR ACTIVE INCORPORATED PLACES</b>								
NOTE: PLACE ALL EDITS IN THE BLANK COLUMN TO THE RIGHT OF THE COLUMN YOU WISH TO UPDATE.								
Action Update	Authorization Type	Authorization Type Update	Local Number	Local Number Update	Local Effective Date	Local Effective Date Update	Acreage	Acreage Update
	Ordinance		LBC_AKUTAN		06-04-2012			
	Ordinance		LBC_AKUTAN		06-04-2012			
	Ordinance		2015-006247-		03-25-2015			
	Ordinance		2015-006247-		03-25-2015			
	Ordinance		LBC_DILLINGH		04-12-2012			
	Ordinance		2010-011453-		06-30-2010			
	Ordinance		2010-011453-		06-30-2010			
	Ordinance		LBC_GUSTAVUS		03-08-2012			
	Ordinance		2015-018823-		09-03-2015			
	Ordinance		LBC_KACHEMAK		02-09-2012			
	Ordinance		LBC_PALMER		07-05-2012			
*LSAD=expanded legal/statistical description								
The attached list of boundary changes is complete and correct as of January 1, 2016 for all places shown and that the effective date is correct for								

Figure 2. List 2



**Table 3: List 2 Data File Field Descriptions**

Column	Field Name	Description
A	Place Name and LSAD	Government's name and expanded legal/statistical area description.
B	FIPS Place Code	Federal Information Processing Standards (FIPS) code for the place.
C	Action	Lists whether the boundary change is an annexation, detachment, or other type of action.
D	Action Update	Will be blank so the SCO may provide edits to the data in the Action field without overwriting original data.
E	Authorization Type	Lists the type of legal authorization that effected the change.
F	Authorization Type Update	Will be blank so the SCO may provide edits to the data in the Authorization Type field without overwriting original data.
G	Local Number	The identification number of the legal document that recorded the authorization effecting the change to the boundary.
H	Local Number Update	Will be blank so the SCO may provide edits to the data in the Local Number field without overwriting original data.
I	Local Effective Date	Lists the effective date of each action. (Please note that there may be a difference between the effective date of actions on this list and the effective date in the state's records because the Census Bureau's records contain a locally reported date.)
J	Local Effective Date Update	Will be blank so the SCO may provide edits to the data in the Local Effective Date field without overwriting original data.
K	Secondary Effective Number	The state legal action number identifying the legal document that recorded the authorization effecting the change to the boundary (if applicable).
L	Secondary Effective Number Update	Will be blank so the SCO may provide edits to the data in the Secondary Effective Number field without overwriting original data (if applicable).
M	Secondary Effective Date	Lists the effective date of each state legal action.
N	Secondary Effective Date Update	Will be blank so the SCO may provide edits to the data in the Secondary Effective Date field without overwriting original data.
O	Acreage	Lists the reported acreage of the affected territory.
P	Acreage Update	Will be blank so the SCO may provide edits to the data in the Acreage field without overwriting original data.
Q	Keying Date	Lists the date that the record was entered into the Census Bureau's Master Address File/Topologically Integrated Geographic Encoding Referencing (MAF/TIGER) System. The keying date may be used to research boundary changes on the Census Bureau's maps.

Column	Field Name	Description
R	Cert.	Will be initially blank so the SCO may certify the records as correct and complete. (See Table 1.)
S	GCATOID	Field used internally to identify the change to the government.
T	<Blank>	Will be blank so the SCO may provide additional information about the record if necessary.

### 3.3.1 Instructions

Please review the List 2 data file ([Figure 2](#)) to verify that:

- Each legal boundary change was submitted in accordance with applicable state law.
- The place name, action, authorization type, local number, local effective date, acreage, and if applicable, secondary effective number and secondary effective date, shown for each record is correct.
- The Census Bureau’s list is complete as reported through the 2022 BAS.

When reviewing the List 2 data file, the SCO may determine that a record(s) in the Census Bureau’s data file does not match the state’s records. If this occurs, please research if specific attributes of the change are incorrect or if the boundary update was not completed in accordance with state law(s).

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**Note:** Some places provide the Census Bureau with the legal documentation along with maps of boundary changes. To view the legal documentation for a change, contact the Census Bureau. In the email, please specify the government that the change affected, and the attribute information associated with the change in List 2. The Census Bureau will research to determine if there is supplemental information for this change.

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- If a boundary change was accomplished in accordance with state law and the attribute data is correct and complete, enter a ‘C’ in the Cert. field.
- If a boundary update is missing from the Census Bureau’s records:
  - Then in a blank row at the bottom of the spreadsheet enter the following information:
    - Enter the name and type of the government where the change occurred in the Place Name and LSAD field, respectively.
    - Enter “annexation” or “deannexation” into the Action Update field.
    - Enter “ordinance,” “resolution,” “local law,” “state-level action,” or “other” into the Authorization Type Update field.
    - Enter the legal document number into the Local Number Update field.
    - Enter the effective date into the Local Effective Date Update field.
    - Enter the acreage into the Acreage Update field (if available).
    - Type the state legal action number into the Secondary Number Update field and enter the effective date of the state legal action into the Secondary Effective Date Update field (if applicable).
    - Enter an ‘A’ in the Cert. field to inform the Census Bureau that an additional boundary change should be added to the Census Bureau’s database.

- If a boundary change was not accomplished in accordance with applicable state law, the SCO may complete one of the two actions below:
  - Leave the Cert. field blank, which will indicate that the state government does not certify the change, but the SCO does not wish to reverse the change at this time.
  - Enter an 'R' in the Cert. field. In the blank cell to the right of the Cert. field, please note the reason as well as any additional information about the reversal.
- If a portion or all the attribute data for the boundary change is incorrect:
  - Type the correct data in the field to the right of the incorrect data. For example, if the information in the Action field is incorrect, type the correct information in the Action Update field to the right of the Action field. If the date in which the change is effective is incorrect, enter the correct date in the Local/Secondary Effective Date Update field. Blank update fields are also provided if the SCO needs to change the Authorization Type, Number, and Acreage information.
  - Enter an 'E' in the Cert. field to notify the Census Bureau that a portion or all the attributes for this record must be edited.
- If a boundary update is a duplicate of an already existing boundary change:
  - Enter an 'X' in the Cert. field.
- Upon completion of review of the List 2 data file, the SCO certifies the statement at the bottom of the file by typing their full name, title, and the date of concurrence below the provided statement.

### 3.4 List 3: Incorporated Places

The List 3 data file ([Figure 3](#)) shows the names of all active and inactive incorporated places in the state according to the Census Bureau's records. An active incorporated place is one that has officials (elected or appointed) and has the legal capacity to raise revenues and conduct general governmental activities. [Table 4](#) provides an explanation of each of the fields in the data file.

	A	B	C	D	E	F	G
1	<b>INCORPORATED PLACES</b>						
2	<b>NOTE: PLACE ALL EDITS IN THE BLANK COLUMN TO THE RIGHT OF THE COLUMN YOU WISH TO UPDATE.</b>						
3	<b>County Name</b>	<b>Place Name and LSAD*</b>	<b>Part Flag</b>	<b>FS**</b>	<b>FS Update</b>	<b>Cert.</b>	<b>Memo</b>
4							
5	Autauga County	Autaugaville town		Active			
6	Autauga County	Billingsley town		Active			
7	Autauga County	Millbrook city	P	Active			
8	Autauga County	Prattville city	P	Active			
9	Baldwin County	Bay Minette city		Active			
10	Baldwin County	Daphne city		Active			
11	Baldwin County	Elberta town		Active			

Figure 3. List 3

**Table 4: List 3 Data File Field Descriptions**

Column	Field Name	Description
A	County Name	The county or county equivalent where each incorporated place is located.
B	Place Name and LSAD	Lists the places in alphabetical order within a county. If a place exists in multiple counties, it will be listed under each county in which it is located. The LSAD is the expanded legal/statistical area description, such as city, town, village, etc.
C	Part Flag	If the government is located within multiple counties, this field will be populated by the letter “P” otherwise this field will be blank.
D	FS	Lists the functional status (FS) of the government. (See Appendix B for definitions.)
E	FS Update	Will be initially blank so the SCO may provide edits to the information in the FS field without overwriting original data.
F	Cert.	Will be initially blank so the SCO may certify the records as correct and complete.
G	Memo	Will be initially blank so the SCO may include notes.

### 3.4.1 Instructions

Please review the List 3 data file (**Figure 3**) to ensure that it provides a complete and correct inventory of all incorporated places that were governmentally active or inactive.

If a place is in multiple counties in the state’s records, please review the file to ensure that it is listed under each applicable county. Places that occur in multiple counties in the Master Address File/Topologically Integrated Geographic Encoding and Referencing (MAF/TIGER) System will have “P” entered in column C (Part Flag) of the data file.

- For all records that are deemed to be correct and complete enter a 'C' in the Cert. field to certify the record.
- If a place is missing from the data file:
  - In a blank row at the bottom of the data file, enter the following information:
    - Enter the place’s county name in the County Name field.
    - Enter the place’s name and entity type in the Place Name and LSAD field.
    - Enter “active” or “inactive” in the FS field.
    - Enter the effective date when the place legally incorporated in the Memo field.
  - Enter an ‘A’ in the Cert. field to inform the Census Bureau that this place should be added to the MAF/TIGER System.

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**Note:** If the place exists in two or more counties, type all the county names, separated by commas, into the County Name field.

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- If a place is no longer incorporated:
  - Provide the effective date of the status change in the Memo field.
  - Enter an 'R' in the Cert. field to notify the Census Bureau that the place should be removed from the MAF/TIGER System.
- If the functional status of a place has changed:
  - Enter the correct functional status in the FS Update field.
  - Enter the effective date of the status change in the Memo field.
  - Enter an 'E' in the Cert. field to notify the Census Bureau that the functional status must be edited in the MAF/TIGER System.
- Upon completion of review of the List 3 data file, the SCO certifies the statement at the bottom of the file by typing their full name, title, and the date of concurrence below the provided statement.

### 3.5 List 4: Minor Civil Divisions

The List 4 data file (**Figure 4**) shows the names of all active and inactive MCDs in the state according to the Census Bureau's records. An active MCD operates as a governmental unit, has elected or appointed officials, and has the legal capacity to raise revenues and conduct general governmental activities. States that do not have MCDs will not receive the List 4 data file. See the BAS State Certification website <[www.census.gov/programs-surveys/bas/information/state-certification-program.html](http://www.census.gov/programs-surveys/bas/information/state-certification-program.html)> for a list of states that have MCDs. **Table 5** provides an explanation of the fields in the data file.

	A	B	C	D	E	F
1	<b>MINOR CIVIL DIVISIONS</b>					
2	<b>NOTE: PLACE ALL EDITS IN THE BLANK COLUMN TO THE RIGHT OF THE COLUMN YOU WISH TO</b>					
3						
4	<b>County Name</b>	<b>MCD Name and LSAD*</b>	<b>FS**</b>	<b>FS Update</b>	<b>Certified</b>	<b>Memo</b>
5	Fairfield County	Bethel town				
6	Fairfield County	Bridgeport town				
7	Fairfield County	Brookfield town				

**Figure 4. List 4**

**Table 5: List 4 Data File Field Descriptions**

Column	Field Name	Description
A	County Name	The county where each government is located.
B	MCD Name and LSAD	Lists MCDs in alphabetical order within the state. The LSAD is the expanded legal/statistical area description, such as town or township.
C	FS	Lists the functional status (FS) of the government. (See Appendix B for definitions.)

Column	Field Name	Description
D	FS Update	Will be initially blank so the SCO may provide an updated functional status without overwriting original data in the FS field.
E	Cert.	Will be initially blank so the SCO may certify the records as correct and complete.
F	Memo	Will be initially blank so the SCO may include any notes regarding the record.

### 3.5.1 Instructions

Please review the List 4 data file ([Figure 4](#)) to ensure that it provides a complete and correct inventory of all MCDs that were governmentally active or inactive.

- For all records that the SCO deems to be correct and complete enter a ‘C’ in the Cert. field to certify the record.
- If a government is missing from the data file:
  - In a blank row at the bottom of the data file, enter the following:
    - Enter the MCD’s county’s name in the County Name field.
    - Enter the MCD’s name followed by its legal area description (such as town or township) in the MCD Name and LSAD field.
    - Enter “active” or “inactive” in the FS Update field.
    - Enter the effective date when the MCD organized in the Memo field.
  - Enter an ‘A’ in the Cert. field to inform the Census Bureau that this MCD should be added to the MAF/TIGER System.
- If an MCD is no longer organized:
  - Provide the effective date when the MCD ceased to exist in the Memo field.
  - Enter an ‘R’ in the Cert. field to notify the Census Bureau that the MCD should be removed from the MAF/TIGER System.
- If the functional status of an MCD has changed:
  - Enter the correct functional status in the FS Update field.
  - Enter the effective date of the status change in the Memo field.
  - Enter an ‘E’ in the Cert. field to notify the Census Bureau that the functional status must be edited in the MAF/TIGER System.
- Upon completion of review of the List 4 data file, the SCO certifies the statement at the bottom of the file by typing their full name, title, and the date of concurrence below the provided statement.

## CHAPTER 4 SUBMIT UPDATES TO THE CENSUS BUREAU

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All participants must use the Secure Web Incoming Module (SWIM) to submit their changes to the Census Bureau. Due to security requirements, the Census Bureau cannot accept submissions via File Transfer Protocol (FTP), email, or any protocol other than the SWIM site.

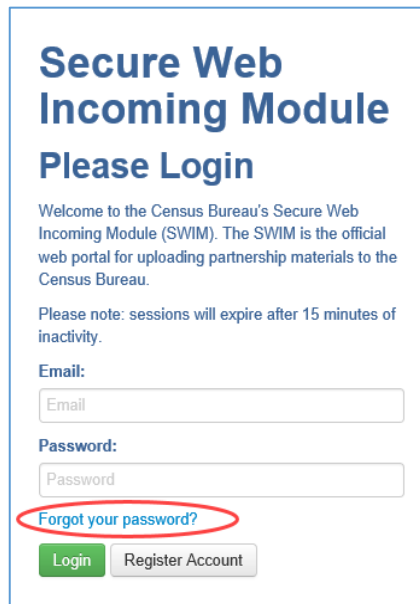
To upload and transmit update files to the Census Bureau, participants must access their accounts for SWIM.

1. Open a web browser window and enter the SWIM URL: <<https://respond.census.gov/swim/>>. SWIM runs on the two most recent versions of each of these major browsers:
  - Microsoft Edge®
  - Google Chrome®
  - Mozilla Firefox®
  - Apple Safari®
2. Participants who already have a SWIM account should proceed to Step 4 to log in.
3. Participants who do not have a SWIM account click 'Register Account':
  - **Enter the 12-digit token provided by the Census Bureau.**
  - **Create a password following the five criteria below:**
    - a. Username and password are case sensitive.
    - b. It must be at least eight characters in length.
    - c. It must have at least one upper case character.
    - d. It must have at least one lower case character.
    - e. It must have at least one number.
    - f. It must have at least one special character (valid characters are: #, !, \$, &, ?, ~).
  - Complete the registration information form.
4. Log in to SWIM using your email address and password.
5. Upload a BAS submission:
  - a. Select the **Start New Upload** button.
  - b. Select the **BAS** radio button.
  - c. Select the **State** radio button for **Entity** type.
  - d. Select the State.
  - e. Click the **+ Add File** button.
  - f. Select the **.zip file** to upload.
  - g. Double-click on the **.zip file** to upload. Add additional files in the same manner.
  - h. Add any additional information to the Comments field.
6. Click **Next**. A **Thank You** screen will appear.
7. Logout of SWIM.

## 4.1 Troubleshooting SWIM

If you are having trouble accessing your SWIM account here are some tips for using SWIM:

- SWIM email addresses and passwords are case sensitive.
- If you forgot your password, participants may reset their password using the “Forgot your password?” link on the login page. Follow the prompts to enter the case-sensitive email address and provide the security answer. If the security answer is correct, the SWIM system sends a password reset link to the email account for use in resetting the password. Once logged into SWIM, users can modify their password and security answer by selecting the ‘Change Security’ link at the top, right-hand side of the page.



**Secure Web Incoming Module**  
**Please Login**

Welcome to the Census Bureau's Secure Web Incoming Module (SWIM). The SWIM is the official web portal for uploading partnership materials to the Census Bureau.

Please note: sessions will expire after 15 minutes of inactivity.

**Email:**

**Password:**

[Forgot your password?](#)

**Figure 5: SWIM Login Page**

- If you cannot recover your password through the “Forgot your Password?” menus, please email [geo.bas@census.gov](mailto:geo.bas@census.gov) with the subject line “SWIM Account Assistance” with a brief description of the issue.
- SWIM accounts are specific to users, not to your government so we do not advise sharing an account. You may always request another account for a new BAS Contact.
- If you already created an account through another decennial program such as PSAP, LUCA, or GSS, you do not need another account. You may use the same previously established login information.