

# Census 2020 Applied Practicum Report

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## **Abstract**

The role of the 2020 Decennial Census was to accurately count every person living in the United States on April 1, 2020, exactly once and in the correct location. The Census provides extremely important data that is used in all levels of government as well as private industries to make decisions. An accurate count plays a pivotal role in the decisions made during the following decade in the United States of America. The purpose of this study was to determine the effectiveness and issues that evolved around the data preparation phases that preceded the survey. This project tracked the methodology used by both City of Flagstaff, AZ and Coconino County, AZ in order to complete the Local Update of Census Addresses program (LUCA), the Participant and Statistical Areas Program (PSAP), and the Boundary and Annexation Survey (BAS). Methods were provided by the Census Bureau in the form of Respondent Guides for City and County users to make updates, add, and delete addresses and geometries which were recorded by the Census Bureau. Issues were documented as they arose and were solved. This paper discusses the in-depth processes of these three programs as well as the issues and how they were resolved. Issues such as lack of staff time, budgetary restraints and the onset of the Coronavirus Pandemic caused setbacks and delays in the programs' functionality. Recommendations for the next Decennial Census include more dedicated staff time and more preparation before the program begins.

## Table of Contents

### Chapters and Timeline

- I. Introduction
  - a. Practicum Purpose and Objectives
  - b. Project and Scope (July 2017 to May 2020)
  - c. Justification
- II. Literature Review
  - a. Background
  - b. LUCA
  - c. PSAP
  - d. BAS
- III. Methodology and Analysis
  - a. Issues
  - b. Detailed Documentation
    - i. LUCA
    - ii. PSAP
    - iii. BAS
- IV. Results and Discussion
  - a. LUCA
  - b. PSAP
  - c. BAS
- V. Summary and Recommendations
  - a. Issues
  - b. Recommendations
- VI. Appendices
  - a. Dictionary of Terms
  - b. Title 13
  - c. LUCA Info Guide
  - d. LUCA Quick Start Guide
  - e. LUCA Respondent Guide
  - f. PSAP Info Guide

- g. PSAP Quick Start Guide
- h. PSAP Respondent Guide
- i. PSAP Verification Phase Respondent Guide
- j. PSAP Verification Phase Summary
- k. Census PSAP Data Reviewer Guide
- l. BAS Respondent Guide: Digital
- m. Complete Count Committee Meetings Agendas

VII. References

## Figures and Tables

*Figure 1: Timeline of Census programs*

*Figure 2: Census geography hierarchy graphic*

*Figure 3: Standard Hierarchy of Census Geographic Entities*

*Table 1: PSAP changes*

*Figure 4: Doney Park CDP South – Proposed*

*Figure 5: Doney Park CDP North – Proposed*

*Figure 6: Doney Park CDP – Accepted*

*Figure 7: Mountain View Ranches CDP – Proposed*

*Figure 8: Mountain View Ranches – Accepted*

*Figure 9: Red Lake CDP – Proposed*

*Figure 10: Red Lake CDP - Accepted*

*Figure 11: Parcel 113-16-006C*

*Figure 12: City of Flagstaff AZ Census Boundaries*

*Figure 13: Coconino County AZ Census Boundaries*

## **Introduction**

Thomas Jefferson directed the first Census in 1790, and as required by the US Constitution, it has been taken every 10 years since (US Census Bureau, 2017). The goal of the Census is to count every person living in the United States in order to produce statistics about people and the economy. These statistics are used to draw political districts at the federal, state and local level (Bilingslea 2020). “The census population count determines how many representatives each state will have in Congress for the next 10 years and how much federal funding communities will receive for roads, schools, housing and social programs” (Guerrero, n.p., 2020).

There are several programs that occur before the Decennial Census in order to help the Bureau prepare to administer the Census. These programs are the focus of this project. The first program occurs a couple of years before Census Day, on April 1<sup>st</sup>, 2020, and is called the Local Update of Census Addresses or the LUCA Program. LUCA is a program which allows local governments to review the list of addresses from the Census Bureau and add/delete addresses that do not match what is in the local database. The Participant and Statistical Areas Program (PSAP) occurs about a year later. This program gives local governments an opportunity to review several Census geographies including Block Groups, Tracts, Census Designated Places, and Census County Divisions. The last program is called the Boundary and Annexation Survey (BAS), which occurs every year. The BAS program records changes in the boundaries of municipalities and counties. All three programs help the Census Bureau maintain accuracy for the decennial count.

City and County GIS teams are the main point of contact for the technical work involved in making updates according to each program’s guidelines. Each agency also had a designated Census Liaison that coordinated efforts with the Census Bureau. This contact was Kim Musselman at Coconino County and Sara Dechter at City of Flagstaff. During the LUCA and PSAP Programs, other departments and agencies were also contacted per their expertise. This included the Community Development and Planning Departments at the City and County, as well as other local agencies including the Cities of Williams, Page, and Fredonia.

### *Practicum Purpose and Objectives*

The purpose of this practicum is to document specific census processes and identify issues with the local government preparation for the 2020 Census, in order to be better prepared for the 2030 Census. Documentation provides a starting point for future process discussions and important institutional

knowledge. Identifying and acknowledging issues that arose in the preparation is an important part of the documentation process as are the solutions that were put in place. Additionally, this practicum will provide suggestions for improving the processes in the future.

Specific objectives of the practicum include:

- 1.Documenting the process City of Flagstaff GIS used to obtain 2018 LUCA results and identifying issues within the process.
- 2.Documenting and analyzing the process Coconino County GIS and Community Development used to produce results for the 2019 PSAP and 2020 BAS, identifying issues that arose in these processes and solutions used.
- 3.Suggesting changes to processes to facilitate better and more accurate preparation for the 2030 Census.

### *Project Sites and Scope*

The study is situated in Coconino County, specifically the LUCA, PSAP and BAS process that took place within the GIS Department of the City of Flagstaff (COF) and the GIS Department of Coconino County. The practicum covers the working processes of these three items, both technical work and meetings. The timeframe is from July 2017 to May 2020.



*Figure 1: Timeline of Census programs*

### *Justification*

The Census is an important count of all residing in the US. An accurate count is essential for long range planning, representation in Congress, and receipt of federal funding. Processes that prepare for the

Census, therefore, need to be accurate and documented in order to be implemented every ten years.

Issues in producing an accurate count should be recorded along with solutions so that as each Census occurs there is appropriate documentation. Documentation provided to both COF and Coconino County allows for future employees to complete Census related programs with a guide for troubleshooting and recordkeeping.

## Background Literature Review

The Census was mandated in the US Constitution in 1790 (Citro 2020) and directed by Thomas Jefferson (US Census Bureau). The assistant marshals conducting the first US Census asked the name of each head of household and the number of free White males under 16 and the number over 16, as well as the number of free White females, number of other free persons, and number of slaves (Gauthier, 2022). As the Census expanded and continued, more questions were added to the questionnaire. In 1902, the Census Office was created to compensate for this added complexity. The Census Office was moved to the Department of Commerce and Labor in 1903 (Factfinder for the Nation: History and Organization 2000). Each decade the Census adds complexity, whether in the questionnaire or in other aspects such as security. This decade, 2020, there was an introduction of new privacy protection techniques for important data products (Citro 2020). This new privacy protection is called “differential privacy”, which adds extra noise to the data and balances between data accuracy and data privacy.

“Geography is central to the work of the Census Bureau...” (Bureau, U. C. [2017, August 25]). Geography runs the Census Bureau. The geography program of the Census bureau does everything from defining geographic areas, to working with partners to keep up to date information and maintaining that information in databases (Bureau, U. C. [2017, August 25]). The Census Bureau maintains the geographies and files in the Master Address File and the TIGER line system. These files are used during the decennial Census to count every person in the correct location.

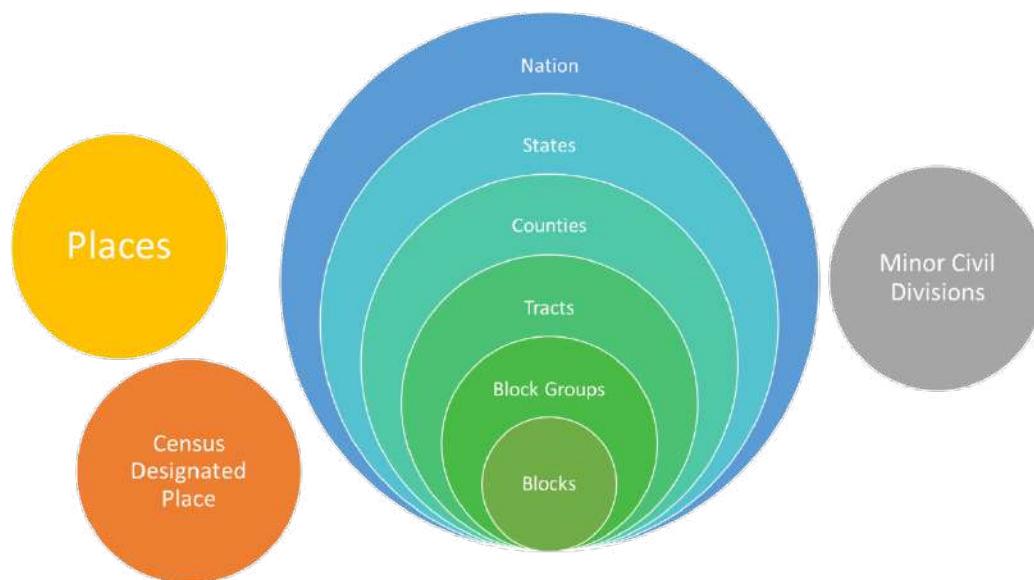


Figure 2: Census geography hierarchy

## Standard Hierarchy of Census Geographic Entities

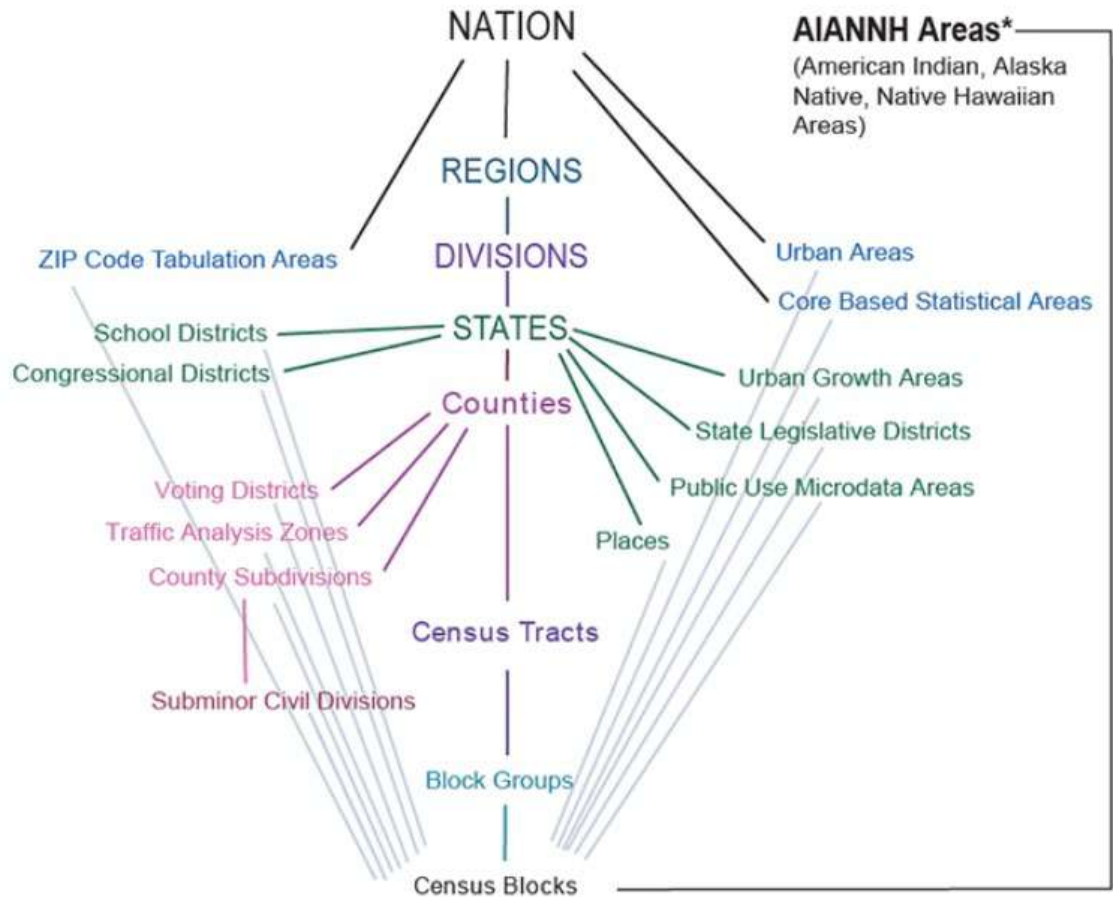


Figure 3: Standard Hierarchy of Census Geographic Entities (US Census Bureau. "Standard Hierarchy of Census Geographic Entities.")

Census data is used for a variety of purposes by many different entities. The Constitution also describes that Census data should be used for apportionment of representatives for the House of Representatives (Pierce, n.d.). The most commonly known uses of Census data is that the federal government uses Census information to allocate billions of dollars of federal funds to states and local governments (Citro 2020). Businesses and local governments use Census data to make decisions concerning the location of new businesses, projecting product demand, and supporting "social and economic statistics such as the unemployment rate, poverty rate, and consumer price index." (Citro 2020). Census data also supports social security planning as well as health and wellness programs (Pierce, n.d.). Academics use Census

data to find trends on family structure, living arrangements, movement, and demographics on the population (Citro 2020). There are almost an infinite number of uses for Census data from allocating funds to grant writing to research and more.

There are several programs leading up to the Decennial Census that prepare the data already in the Census database. Annually, the Census Bureau conducts the Boundary and Annexation Survey (BAS), which works with municipalities and local governments to determine correct boundaries for these entities. Legal boundaries can change through annexations, incorporations, or other events (*Plan to Plan for 2020: Preparation Guide for Census Partners*). The second program the Census Bureau conducts is a decennial program called the Local Update of Census Addresses (LUCA). This is a program that sends a list of addresses to localities in order to compare and update the Census' list of addresses (Bureau U.C. 2020). It is important to note that participation in this program is covered by Census confidentiality guidelines (*Plan to Plan for 2020: Preparation Guide for Census Partners*). The final program that the Census Bureau conducts is called the Participant and Statistical Areas Program (PSAP). This program allows local governments to redraw and adjust tract and block group boundaries according to Census standards. These lines are adjusted first by the Census Bureau and then reviewed by the local government and adjusted further. These programs prepare the Census Bureau for the administration of the Decennial Census.

### *LUCA*

LUCA was established in 1994 by the Census Address List Improvement Act of 1994 (Public Law 103-430) which authorizes the LUCA operation (Census Bureau, 2022). This law changed the way development procedures ran by expanding the methods the Census Bureau could use to share information with agencies (Tribal, State, and Local governments) to support its goal of improving the residential address list (Bureau, U. S. C. 2021, October 8). The ultimate initiative of this law was to improve the accuracy of the residential address list used for Decennial Censuses and other programs. Four areas were determined for the success of this act. First, address standards and structure were established for tribal, state and local governments. Second, rules governing access to the addressing information for the purpose of verifying accuracy were created. Third, an appeals process was created. And finally, a partnership with the postal service was created. Confidentiality is one of the main concerns of LUCA and therefore security and privacy are considered when the Census Bureau releases data to other agencies. The 2000 Census was the first year that actual residential address lists were shared with governments

(Bureau, U. S. C. 2021, October 8). Title 13 is the US Code that bounds the Census Bureau (Gauthier, 2022). The laws provide for confidentiality, not only of addresses, but of people's privacy as well.

#### *PSAP*

The Census Bureau uses small geographic areas called Tract, Block Groups, and Blocks which cover the entire country. However, that was not always the case. "In 1905, Dr. Walter Laidlaw originated the concept of permanent, small geographic areas as a framework for studying change from one decennial census to another in neighborhoods within New York City. (*2020 Census Participant Statistical Areas Program (PSAP) Standard Respondent Guide*)". In 1910, eight cities used tracts for the first time. Interest in the use of tracts was spurred by Howard Whipple Green, who was a statistician in Cleveland, Ohio, in 1930. Committees were created by local citizens to delineate tracts. These committees were called Census Tract Committees, and later called Census Statistical Areas Committees. After the 1930 Census, the bureau saw fit to create standards to review and update the tracts. The underlying basics of tracts are to compare geographies of similar population and bound using geographic features that rarely change. In 1940, block data was established for all cities greater than 50,000. All counties did not have tracts defined until the 2000 Census. Block Groups were not used until the 1970 Census when they only existed in urbanized areas. These initial Block Groups were about the same size in area and contained about 1,000 people. In 2010 the Census Bureau added a range of housing units as well as minimum and maximum populations. They also created special use block groups for areas that have low or no population. Census Designated Places (CDPs) were a response to the need of place-level data. It has changed and adapted since 1950. CDPs are also known as unincorporated places, are helpful to data users in a variety of ways and depends on the location and type of community. Population thresholds for CDPs have fluctuated over the decades.

#### *BAS*

The Boundary and Annexation Survey is a government's opportunity to update their legal boundaries. "In the BAS, governments report official name changes, (dis)incorporations, and (de)annexations. Governments can also update boundaries, features, and landmarks for:

- Cities, towns, boroughs, and villages (incorporated places)
- Townships and towns (minor civil divisions)
- Counties (or county equivalents)

- Consolidated cities
- Roads and other applicable linear features (*Boundary and Annexation Survey (BAS)* )”.

The goal of the BAS is to “assess, analyze, and improve the spatial quality of legal and administrative boundaries within the U.S. Census Bureau’s Master Address File/Topologically Integrated Geographic Encoding and Referencing (MAF/TIGER) System. Ensuring quality boundaries is a critical component of the geographic preparations for decennial censuses and the Census Bureau’s ongoing geographic partnership programs. In addition, the improvement of boundary quality is an essential element of the Census Bureau’s commitment as the responsible agency for legal boundaries under the Office of Management and Budget (OMB) Circular A--16. (Bureau, *Boundary Quality Project 2021*)”.

The Census Bureau began working to prepare for the 2020 Census over a decade before it began (Bureau, U. C. [2021, August 25]). Not only were practice tests run, but research was also conducted to see how people would react to the questionnaire. People were invited and reminded to fill out the Census seven times and were given three options to fill it out. In previous years there were only two options for filling out the form, by mail or by phone. However, the 2020 Census offered an option to fill out the questionnaire online. Thirteen languages were available for the questionnaire and offered help in 59 languages through Language Guides (Bureau, U. C. [2021, August 25]).

Counting every person living in the US is no easy feat. Every decade, new problems arise which make the administration of the Census more difficult. Budget is always an issue for large scale projects such as this. The budget for each decennial Census is based on the previous decade. This funding is often at a shortfall which prevents innovation (Citro 2020). For the 2020 Census, one of the most unique issues that was presented is the distrust of the federal government and the push to include a citizenship question (Citro 2020). Security involves another large portion of the Census Bureau’s budget. Computing systems have vulnerabilities, and the Census Bureau is responsible for protecting our data. Another issue predicted for the 2020 Census is the introduction of differential policy, which was mentioned above. Differential policy balances between data accuracy and privacy protection (Pierce, n.d.)

It is very important that the Census Bureau remain apolitical in order to maintain trust in the system and encourage all residents to respond. However, in current conditions, it is very difficult to keep trust in a government system from all residents. In 2020 the Census Bureau encouraged local communities to form Complete Count Committees to promote the decennial census (*Plan to Plan for 2020: Preparation*

*Guide for Census Partners*). These groups worked together with community partners to help citizens fill out the Census form.

The actual issues that faced the Census could not be predicted. Even though the citizenship question was not ultimately added to the questionnaire, the damage was already done. It is predicted that many minorities did not complete the Census due to fear of the citizenship question. The most major issue facing the 2020 Census was the COVID-19 pandemic. Census field operations were halted for two months due to CDC guidelines. Due to COVID and the halt in operations, the expenses of the Census increased more than expected. COVID caused many unexpected challenges and it is predicted that there will be an undercount due to the pandemic.

## **Methodology and Analysis**

The purpose of this practicum is to document the steps taken by City of Flagstaff, AZ and Coconino County AZ in preparation for the 2020 Decennial Census, as well as suggesting changes to the processes for more efficiency in the 2030 preparation. There are three main programs that are used in preparation for the Decennial Census: Local Update of Census Addresses (LUCA), Participant and Statistical Areas Program (PSAP), and Boundary and Annexation Survey (BAS). My research pertained to improving the system that was already in place and therefore was qualitative applied research.

For the project, City of Flagstaff and Coconino County chose to follow the Census' documentation (Respondent Guides) and How-To documents on their website and included in the materials provided before each program began. The documents and links can be found in the appendices of this document.

### *LUCA*

For the LUCA Program I obtained the data from the Census Bureau, which was Title 13 confidential. Title 13 refers to the laws which bounds the US Census. Title 13 provides protections to individuals and business including, private information is never published; The Census Bureau collects information to provide statistics; employees are sworn to protect confidentiality; and violating the law is a serious federal crime (Gauthier, 2022).

I used the LUCA tools to determine how many discrepancies between the Census Bureau's Master Address File (MAF) and City of Flagstaff's Addressing Dataset were in each Census block. This tool produced an Excel sheet with the number of differences in each block. City of Flagstaff used this sheet and sorted in by the most to least differences. The employees of the GIS and Planning departments started by checking the blocks with the most differences first. We analyzed the addresses from the Census MAF against the City of Flagstaff data and determined which addresses need to be changed, deleted, or added. Three analysts filled out another Excel spreadsheet with these changes. This process was extremely manual and time consuming. The final spreadsheet was provided back to the Census Bureau to record changes.

Please see attached LUCA Quick Start and Respondent Guides in Appendix iv and v.

### *PSAP*

The PSAP program was the County's opportunity to redesign the Census Tracts and Block Groups to better represent the population. This process was a collaboration of many groups including the GIS

team, municipalities within the County, and the Community Development team. The Census Bureau provided initial changes that the County could either keep or recommend their own changes. In all cases for 2020, the County chose to redraw the boundaries to better represent the populations present.

Tracts and Block Groups were drawn and redrawn in ArcMap several times. Each iteration of the geography changes reflected new information and followed different physical boundaries to determine which would be best for the agency. A webmapping application in ArcGIS Online was created for interest groups to view changes in population between the 2010 Census and the 2018 American Community Survey estimates, as well as visualizing where original tracts and block group boundaries were and where proposed boundaries would be. The final changes were agreed upon and then input into ArcMap. These layers were exported and then downloaded to the GUPS system. Then I used the GUPS system in QGIS to follow the changes and submit them to the Census Bureau through the system.

Please see attached PSAP Quick Start and Respondent Guides as well as PSAP Verification Phase Summary Document in Appendix vii, viii, and ix.

#### *BAS*

The BAS was a simpler program that only required a technician and analyst from Coconino County to complete. The technician ran the Symmetrical Difference tool and reviewed resulting polygons. I used the previous year's BAS submission as a guide to determine what should be submitted. Many polygons were submitted again even though they were not added by the Census Bureau in previous years. Often changes that are small, in the Census Bureau's nationwide perspective, are not accepted. The most difficult part of this program was working with the Cartographer in the Assessor's office to obtain records of changes, including annexations and de-annexations. There were several annexations that were recorded for the year 2020. These changes were submitted to the Census Bureau via a zipped shapefile through the SWIM portal. SWIM stands for Secure Web Incoming Module. It is the web program that is the safe and secure place to upload data to the Census Bureau. SWIM has become the standard for providing data to the Census Bureau.

Please see attached BAS Respondent Guide: Digital BAS Quick Start and BAS Respondent Guide: Digital in Appendix xii and xiii.

## *Issues*

A potential bias was introduced during the LUCA program when we chose to sort the data based on number of differences per block group. This bias unintentionally favored areas where there were higher densities of addresses, such as urban areas. Luckily, we were able to assess all the addresses in the database and there was no issue. However, if we had only been able to assess a portion of the dataset there would have been a bias towards urban areas. (Frank Winters. Oct 25, 2021. Arizona Geographic Information Council Conference)

The largest obstacle faced in all the programs was the limited amount of time, between 90 and 120 days depending on the program, provided by the Census Bureau. All the programs were extremely important and time sensitive. It was difficult to complete the tasks at hand while also keeping up with day-to-day operations in the City and County. During the LUCA program, analysts were pulled off their daily duties to help complete the LUCA. Another obstacle we faced was the issue of vagueness in the Census documentation. Each Respondent Guide that was provided by the Census Bureau became more complete with each program. We also learned to read through the Respondent Guide at least twice before beginning work on the program. The first read-through gives an idea of the overall scope of the project. The second read-through is an opportunity to highlight and make comments on the guide and formulate a plan of action. The project lead was responsible for reading through the Respondent Guides and disseminating the information to other analysts. The guides were technical in nature but they were also packed with important information that needed to be read more than once to be understood completely as it pertained to the project.

One of the more time-consuming pieces of the PSAP was communication with other municipalities and departments. This program was more collaborative than the others and it was difficult to communicate with all other stakeholders and get responses from them. Often the County would send an email and receive no response. It also took a great deal of effort to determine who should be the main point of contact for agencies that did not have a GIS department.

As always, cost and budget were issues as well. For the LUCA program, the City of Flagstaff had to budget for an intern to help complete the process. During all of the programs, daily work fell behind due to the time-consuming nature of the LUCA and PSAP work. An extra GIS team member would have been helpful for the LUCA and PSAP programs, however from a budgetary perspective this is not typically possible.

## *Detailed Documentation*

### *LUCA*

LUCA was established to allow local governments to review and provide updates to the U.S. Census Bureau's master list of addresses in advance of the 2020 Census. The process facilitates the Bureau's data collection to make sure that once it's time to begin the Census, the Bureau knows where your community's households are. This process helps ensure that everyone in your community is counted and that accurate data is collected for Flagstaff.

The steps to complete LUCA (as prepared by City of Flagstaff which demonstrates the large city process in Coconino County) are as follows:

- I. Review/Complete Internal Address List
  - a. An agency's address list must be as complete and up to date as possible before beginning the LUCA program. All addresses in the system should have an attribute assigning them as residential or otherwise.
- II. Receive address list from Census Bureau
  - a. The Census Coordinator should request to participate in LUCA and request LUCA materials which will include the address list. Two separate discs will be sent along with other written materials. One disc contains the list of addresses that the Census Bureau has in their system and the other disc contains important information regarding how to maintain the information and legalities. The data is all protected by Title 13 which means that anyone using the data must sign Title 13 documents. See appendix ii for Title 13 information.
- III. Compare to completed City Address list using tool
  1. The tool can be found on the Census website on the LUCA page. It will generate a list of blocks that have address discrepancies. Employees must then review the list of blocks with both address lists to determine what is missing or incorrect.
  2. Record necessary changes/additions/deletions in spreadsheet.
- IV. Return to Census Bureau
  1. The deadline is 120 days after receipt of LUCA Materials. Changes cannot be submitted after this date. All materials must be submitted by the Census Coordinator through the

Secure Web Incoming Module (SWIM). The entity will be notified when materials have been accepted.

### *PSAP*

The PSAP is a program aimed at updating the geometry of the Tracts and Block Groups from the previous Census. Agencies are given updates to geometries based on estimated population from the Census Bureau. Then, agencies are given the option to accept the Census Bureau's adjustments or recommend their own.

The steps to completing the PSAP are as follows (according to Coconino County):

- I. Invitation sent to 2020 PSAP Participants
- II. Download Census geographies to be reviewed
  - a. The Census Bureau provides all informational and instructional materials in digital format. Locate the digitally formatted materials on the PSAP website (<https://www.census.gov/programs-surveys/decennial-census/about/psap.html>) as well as on the "Data disc" provided to participants that requested DVDs during the invitation phase of 2020 Census PSAP. The Census Bureau supplies the list of changed statistical entities in the form of a Microsoft Excel file (e.g., psap20\_proposed\_changes\_.xlsx), where SS is the two-digit state FIPS code and CCC is the three-digit county FIPS code. This file is the output from Census Bureau's internal review. It appears on the previously mentioned "Data disc" and is available online for download. The Excel file contains census tracts that have been split or merged, or have had code/type changes and census tracts with modified block groups.
- III. Review with Stakeholders
  - a. Stakeholders included those who use Census data on a regular basis to make decisions for the county. Planners from Community Development who use Census data to make long term decisions for communities in the county were included. Also included were the Planning and GIS departments of the City of Flagstaff and the workgroup reached out to the same departments in the Cities of Williams, Sedona, and Page; the Towns of Fredonia and Tusayan. Coconino County GIS created an interactive map using ArcGIS Online to compare 2010 geographies to the Census Bureau's recommended changes. Please see Census PSAP Data Reviewer PDF in Appendix xi.

- IV. Input changes into ArcMap
  - a. The changes suggested by City of Flagstaff and the Coconino County planners varied from small deviations in Block Group and Tract changes recommended by the Census Bureau to creation of new Special Use Tracts where population is impossible due to zoning.
- V. Transfer ArcMap data into GUPS System
  - a. Participants that reviewed standard statistical area geographies were required to use the Census Bureau's Geographic Update Partnership Software (GUPS) to delineate updates. The GUPS runs in QGIS, which is an open source Geographic Information System (GIS), and it contains all functionality required to make 2020 Census PSAP updates, execute automated checks for program criteria compliance, and create standardized data output files for Census Bureau processing.
  - b. The user was able to export a shapefile from ArcMap and import it into QGIS in order to closely follow outlines created in ArcMap while also using the physical geographic boundaries required by the Census Bureau.
- VI. Final Review and submit to Census Bureau
  - a. The Deadline for PSAP is 90 days after download of materials. Final review was completed by the GIS team as well as partners in Community Development and at the City of Flagstaff. Review was sent to all communities with proposed changes for final comment.
  - b. The final submission used the QGIS file created by the GUPS system and sent it through the SWIM module.

#### *BAS*

The Boundary and Annexation Survey (BAS) is a local government's annual opportunity to notify the Census Bureau of any annexations or de-annexations, as well as make any adjustments to the statistical boundaries maintained by the Census Bureau.

- I. Download geographies from Census website
  - a. Geographies can be found on the Census Website on the BAS 2020 page. Downloading is as simple as selecting your state and county and downloading the resulting shapefile.
- II. Run symmetrical difference tool in ArcMap to compare Census Geographies to County Geographies

- a. This tool shows where differences are in the two layers.
- III. Review
  - a. Review the resulting layer from the symmetrical difference tool. Some polygons will just be slivers which can be ignored. But larger differences need to be reviewed and marked as either IN or OUT of the entity doing the review. They also need to be attributed to have the correct entity. This was completed by an individual and then reviewed by another team member before submission.
- IV. Return file to Census Bureau
  - a. This was saved as a shapefile with the correct Census Bureau naming convention and submitted via SWIM.

## **Results and Discussion**

All three programs were successfully completed by Flagstaff and Coconino County staff either at or before the deadlines instituted by the Census Bureau.

### *LUCA*

According to the Coconino County Feedback Address Update Summary Report, 18995 addresses were submitted. Of those, only 60 were not processed “if they did not meet the minimum requirements. Some examples of records that were not processed include the following: addresses submitted with blank or invalid action codes, added records submitted without geospatial information, added records submitted with 9-digit numeric MAFIDs, action codes other than “A” used on records without records without MAFIDs, and non-city style addresses submitted without map spots or latitude and longitude coordinates. (Form D-2201, page 1)”. Coconino County added 8,079 addresses that were accepted and 13 that were not accepted by the Census Bureau. We submitted 4,360 address corrections and all those addresses were accepted. And the County submitted 3,395 addresses that were deleted by the Census Bureau and 3,088 which were not deleted. A reason was not given for the addresses that were not accepted other than they did not meet minimum requirements.

### *PSAP*

After the review process was completed, all requested and recommended changes were transferred into the Geographical Update Partnership Software developed by the Census Bureau. According to 2010 Census geographies, Coconino County had:

- 9 Census Designated Places and 10 on Tribal Lands

- 22 Tracts and 6 Tribal Tracts
- 0 Special Use Tracts
- 79 Block Groups and 19 Tribal Block Groups

After changes, Coconino County has:

- 8 new Census Designated Places
- 5 Changes to existing Census Designated Places
- 22 Tract-level Changes
- 6 New Tracts including 3 Special Use Tracts
- 25 Block Group-level Changes

*Table 1: PSAP changes*

	2010	2020 Proposed	2020 Final
<b>Census Designated Places</b>	9	8 new, 5 changes	Accepted with changes
<b>Tracts</b>	22	6 new, 22 changes	Accepted
<b>Special Use Tracts</b>	0	3 new	Accepted
<b>Block Groups</b>	79	25 changes	Accepted

All PSAP changes were accepted with some updates by the Census Bureau. The Census Bureau provided updates to the changes submitted based on different geographic boundaries and their own population estimates. All Tracts, including Special Use Tracts and Block Groups were accepted without issue by the Census Bureau. However, the Census Designated places were not entirely accepted. Three of the updates sent in by Coconino County were changed by the Census Bureau. The Census Bureau changed the boundaries to encompass less area than preferred by the County. They determined that the changes the County was requesting covered too much empty space and needed to be centralized to the greatest amount of population. The geographies that were submitted and the geographies that were ultimately accepted are shown in the figures below.

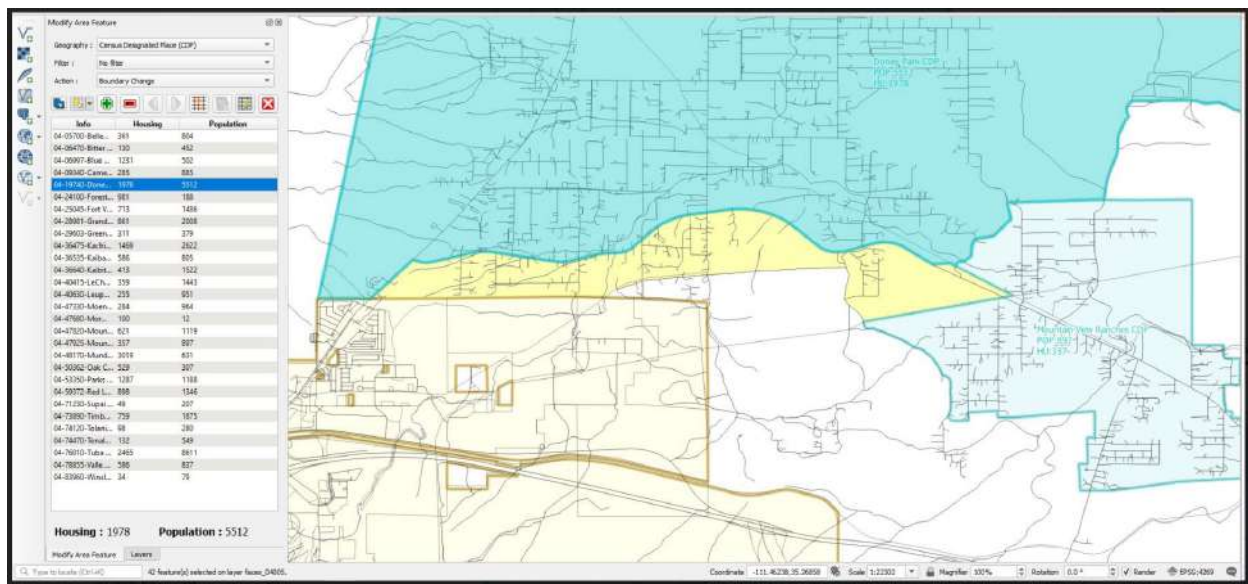


Figure 4: Doney Park CDP South – Proposed

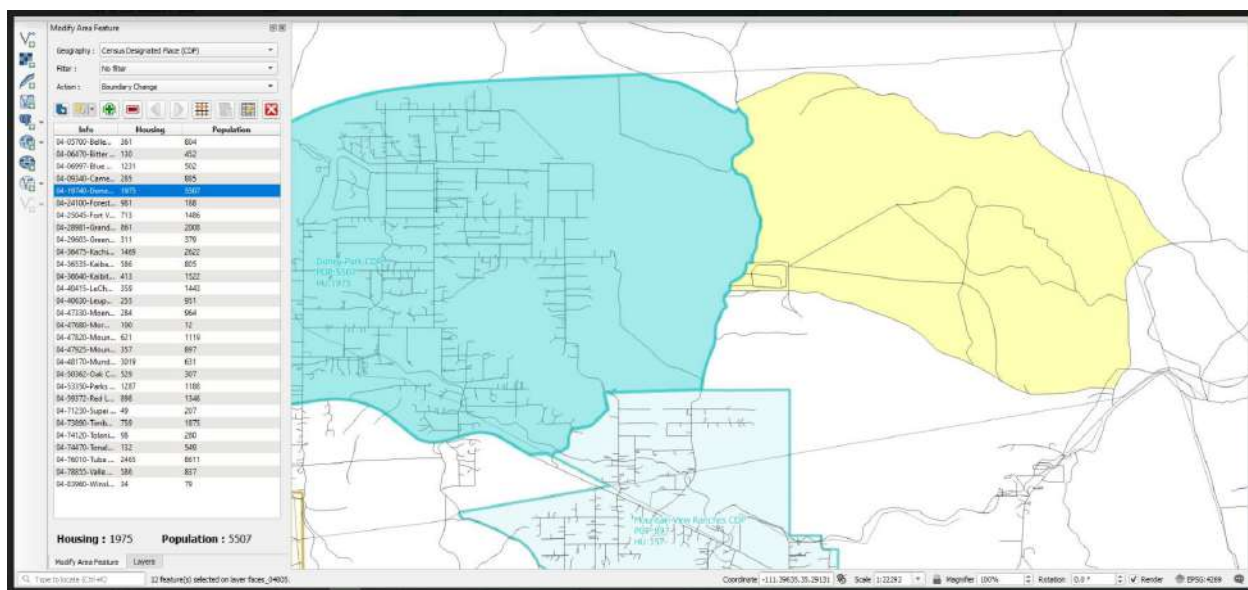
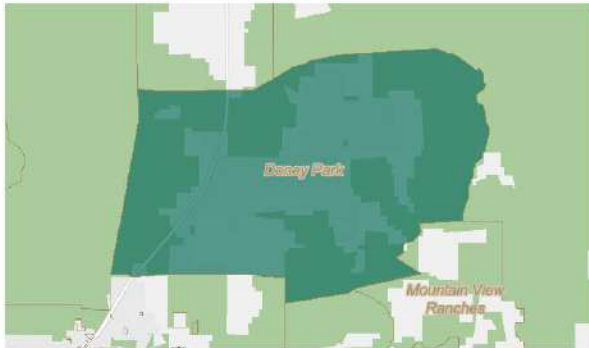


Figure 5: Doney Park CDP North – Proposed

# Doney Park CDP, Arizona

Place in Arizona



Doney Park CDP, Arizona is a city, town, place equivalent, and township located in Arizona. Doney Park CDP, Arizona has a land area of 15.0 square miles.

Figure 6: Doney Park CDP – Accepted

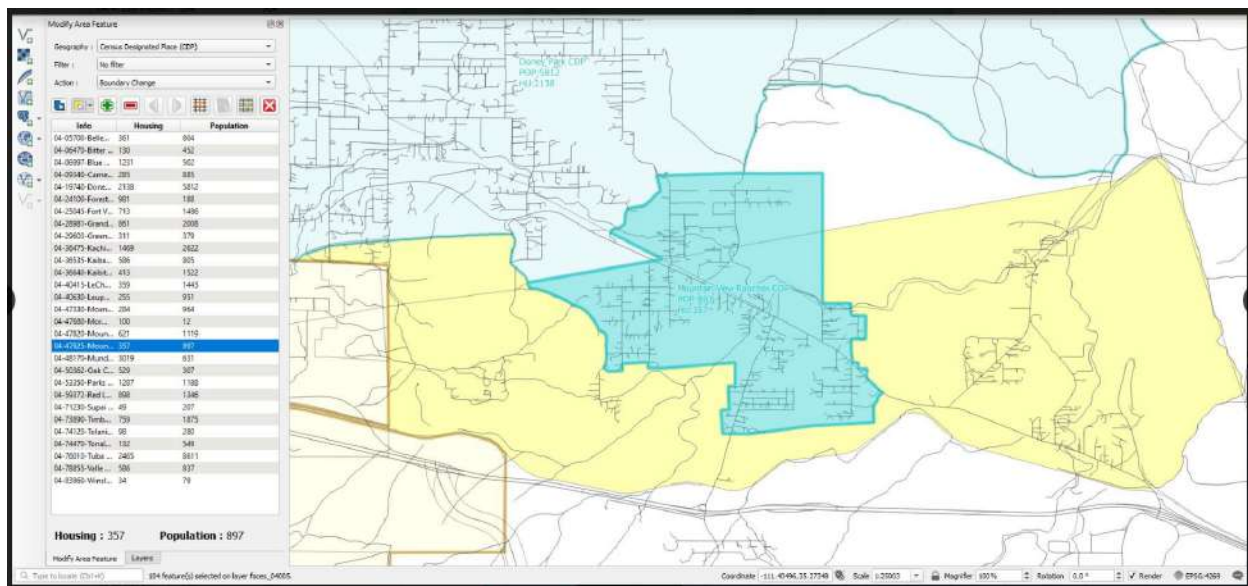
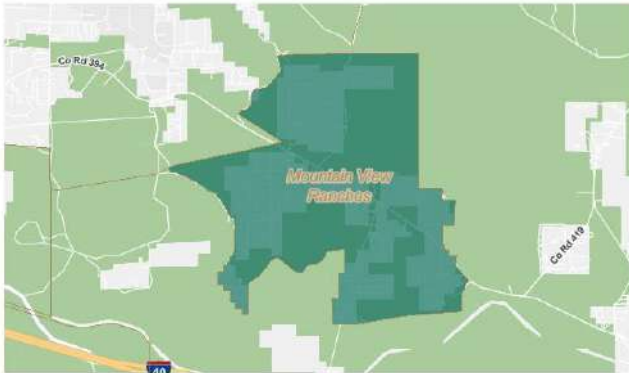


Figure 7: Mountain View Ranches CDP – Proposed

# Mountain View Ranches CDP, Arizona

Place in Arizona



Mountain View Ranches CDP, Arizona is a city, town, place equivalent, and township located in Arizona.

Figure 8: Mountain View Ranches – Accepted

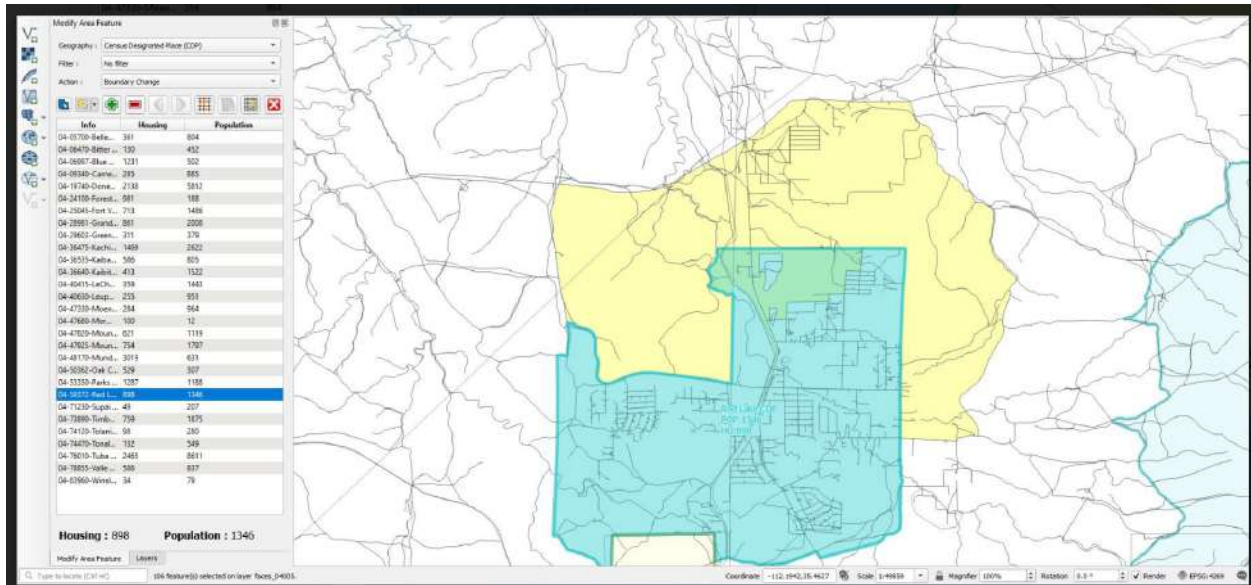


Figure 9: Red Lake CDP – Proposed

# Red Lake CDP, Arizona

Place in Arizona



Red Lake CDP, Arizona is a city, town, place equivalent, and township located in Arizona.

Figure 10: Red Lake CDP - Accepted

## BAS

There are several “County Islands” within the City of Flagstaff, in which parcels are sometimes annexed and de-annexed between the City and the County. One of these parcels in the 2020 BAS was Parcel 11316006C in Northeastern Flagstaff. Coconino County submitted the annexation of this parcel along with a few various alignment issues along the railroad in Western Flagstaff.

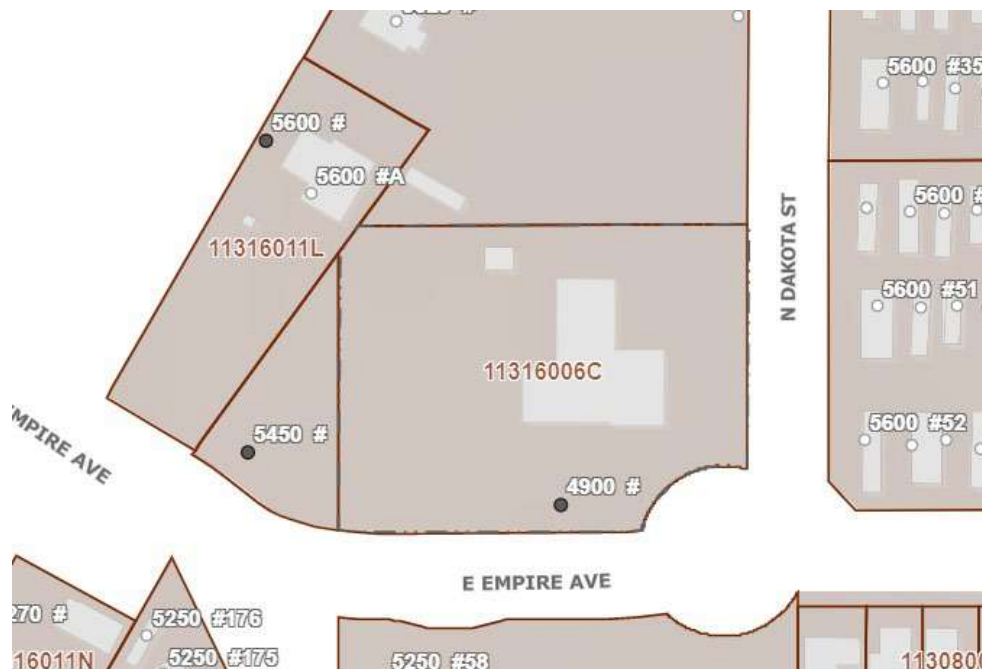
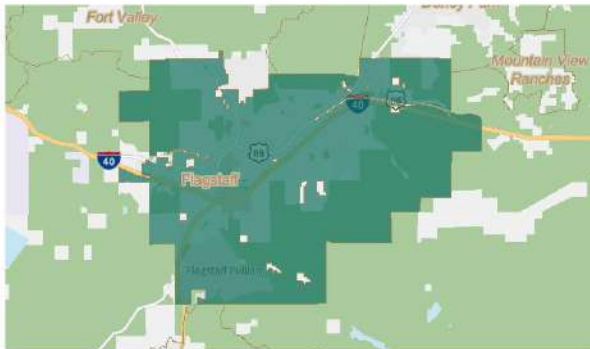


Figure 11: Parcel 113-16-006C

The parcel annexed into Coconino County from City of Flagstaff was accepted by the Census Bureau however none of the other, small, corrections were accepted. The current boundary of the City of Flagstaff and Coconino County can be see in the figures below.

## Flagstaff city, Arizona

Place in Arizona

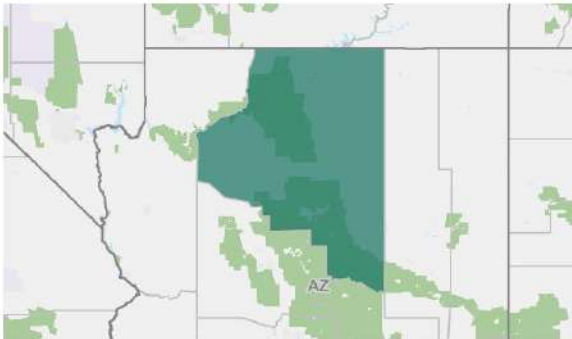


Flagstaff city, Arizona is a city, town, place equivalent, and township located in Arizona. Flagstaff city, Arizona has a land area of 66.0 square miles.

Figure 12: City of Flagstaff AZ Census Boundaries

## Coconino County, Arizona

County, or equivalent in Arizona



Coconino County, Arizona has 18,611.9 square miles of land area and is the 1st largest county in Arizona by total area. Coconino County, Arizona is bordered by Navajo County, Arizona, Kane County, Utah, San Juan County, Utah, Yavapai County, Arizona, Mohave County, Arizona, and Gila County, Arizona.

Figure 13: Coconino County AZ Census Boundaries

The final decision on boundaries was made by the Census Bureau. The county created the new CDPs that they requested however the final size and shape were not preferred. Although the boundaries were not “perfect” CDPs can easily be changed to grow with the population.

## Summary and Recommendations

As stated above, the Decennial Census gathers data that is used to make decisions for the next decade in the United States. Not only does the Decennial Census determine the representation each state has in Congress, but the data is also used to determine grant funding, to make planning decisions by local and state governments, and by the private industry for various uses.

In order to arrange for such a great undertaking, local governments are asked by the Census Bureau to participate in a few programs to prepare the addresses and geographies for the upcoming event. The City of Flagstaff and Coconino County participated in the Local Update of Census Addresses, the Participant and Statistical Areas Program, and the Boundary and Annexation Survey in order to get ready for the 2020 Census. Each program was completed by City or County staff on the GIS teams within the time limit given by the Census Bureau. The results of all programs can be read in the previous chapter.

### *Issues*

The issues that staff encountered were as follows:

- Lack of staff and time allocations
- Unclear Census Bureau Instructions
- PSAP – Collaboration with other agencies, lack of communication

Each program had a strictly enforced timeline between 90-120 days after commencement. Each program also involved several steps that had to be completed in the correct order for the data to be analyzed properly. This put a strain on the GIS team, especially during the LUCA program which involved thousands of addresses that had to be reviewed manually. During the PSAP, other agencies and jurisdictions had to be contacted and advised of the Census Bureau's recommendations. Staff members had issues trying to keep up with daily tasks as well as the additional work from the programs.

In addition to time and staff constraints, the Census Bureau was not always clear on how to complete the program tasks. A few select webinars were provided in advance of the LUCA and PSAP programs however they were quite vague, due to the fact that every jurisdiction has different problems to address. The GIS teams relied most heavily on the Respondent Guides to complete the programs. During LUCA, the Respondent Guide was read in junction with completion of the program work. Through that process we learned that the Respondent Guides need to be read several times through *before* beginning

the work. Meetings were held periodically between stakeholders to maintain transparency during the work.

During the PSAP, other agencies had to be contacted with information regarding changes to their jurisdictions. This caused issues because not all local agencies knew what the PSAP was or why it was important. Coconino County tried to contact each locality at the beginning of the PSAP to convey the intention, however it was difficult to find a strong point of contact and get responses from all of the localities, especially those without GIS and/or Planning departments.

### *Recommendations*

Some of these issues will arise despite planning, however some issues could be remedied by further preparation. My recommendations are as follows:

- Plan and prepare for staff time and allocation, possibly hire a temp to cover daily tasks while staff completes Census work.
- Read and reread Respondent Guides and take notes. Prepare a plan before starting any work.
- Prepare other agencies before PSAP and let them know it's coming, and they need to be ready for it.
- Have recorded webinars and/or short "how-To" videos from the Census Bureau for each step of the process.
- Periodic check-ins, weekly to monthly, from a dedicated Census staff member to answer questions and provide guidance as well as information about staying on track.

While the work was incredibly time consuming, it was also important to get the data to the Census Bureau, correctly and in a timely manner, in order for the 2020 Census to be completed as accurately as possible. As with any large endeavor, issues and biases came into play, however the City of Flagstaff and Coconino County took the issues in stride and learned quickly to complete the programs efficiently. The analysts worked hard and communicated well, which helped the county finish LUCA on time and finish PSAP early. The documentation created during these programs and the lessons learned from the experience will allow for the 2030 Census preparation to go smoother and be even more efficient.

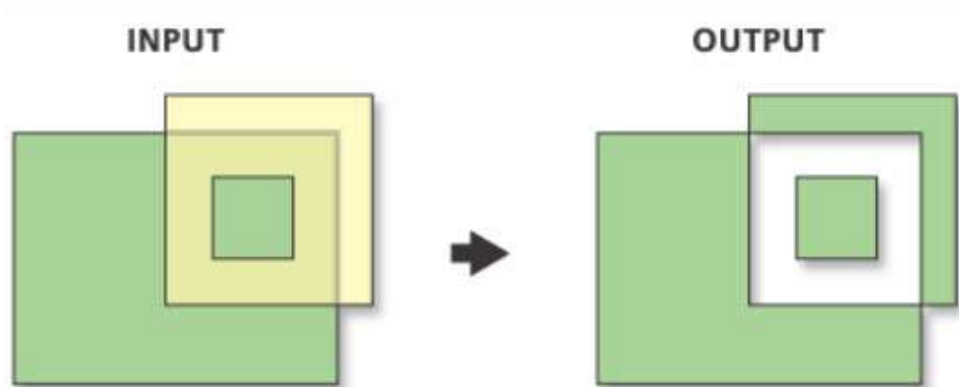
## Appendices

## Appendix A

### Dictionary of Terms

- a. **Master Address File:** “A continuously updated, nationwide file of addresses with associated status codes and geographic information”
- b. **Symmetrical Difference Tool:** A tool used in the BAS program to find the difference between Census Bureau geographies and local boundaries. “Features or portions of features in the input and update features that do not overlap will be written to the output feature class.”

### Illustration



- c. **Respondent Guide:** An in depth “How-To” guide with step by step instructions on how to complete the program as well as information, schedule, and other important information.
- d. **Quick Start Guide:** A shorter “How-To” guide including steps for how to complete the program.

e. **Blocks:**



- Statistical areas bounded by visible features such as roads, streams, and railroad tracks, and by nonvisible boundaries such as property lines, city, township, school district, county limits and short line-of-sight extensions of roads.
- The building blocks for all geographic boundaries the Census Bureau tabulates data for, such as tracts, places, and American Indian Reservations.
- Generally small in area. In a city, a census block looks like a city block bounded on all sides by streets. Census blocks in suburban and rural areas may be large, irregular, and bounded by a variety of features, such as roads, streams, and transmission lines. In remote areas, census blocks may encompass hundreds of square miles.
- A wall-to-wall coverage across the entire territory of the United States, Puerto Rico, and the Island Areas.
- Numbered uniquely with a four-digit census block number ranging from 0000 to 9999 nesting within each census tract, which nest within state and county. The first digit of the census block number identifies the block group. Block numbers beginning with a zero (in Block Group 0) are associated with water-only areas.
- Delineated by the U.S. Census Bureau once every ten years. An automated computer process looks for all visible and nonvisible features in our geographic database

([MAF/TIGER](#)) that should be a block boundary and creates a block each time those features create a polygon.

- The smallest level of geography you can get basic demographic data for, such as total population by age, sex, and race.
- f. **Block Groups:** are statistical divisions of census tracts, are generally defined to contain between 600 and 3,000 people, and are used to present data and control block numbering. A block group consists of clusters of blocks within the same census tract that have the same first digit of their four-digit census block number. For example, blocks 3001, 3002, 3003, . . . , 3999 in census tract 1210.02 belong to BG 3 in that census tract. Most BGs were delineated by local participants in the Census Bureau's Participant Statistical Areas Program (PSAP). The Census Bureau delineated BGs only where a local or tribal government declined to participate in PSAP, and a regional organization or the State Data Center was not available to participate. A BG usually covers a contiguous area. Each census tract contains at least one BG, and BGs are uniquely numbered within the census tract. Within the standard census geographic hierarchy, BGs never cross state, county, or census tract boundaries, but may cross the boundaries of any other geographic entity. Tribal census tracts and tribal BGs are separate and unique geographic areas defined within federally recognized American Indian reservations and can cross state and county boundaries (see "Tribal Census Tract" and "Tribal Block Group"). The tribal census tracts and tribal block groups may be completely different from the standard county-based census tracts and block groups defined for the same area.
- g. **Tracts:** are small, relatively permanent statistical subdivisions of a county or statistically equivalent entity that can be updated by local participants prior to each decennial census as part of the Census Bureau's Participant Statistical Areas Program (PSAP). The Census Bureau delineates census tracts in situations where no local participant responded or where state, local, or tribal governments declined to participate. The primary purpose of census tracts is to provide a stable set of geographic units for the presentation of statistical data.

Census tracts generally have a population size between 1,200 and 8,000 people, with an optimum size of 4,000 people. A census tract usually covers a contiguous area; however, the spatial size of census tracts varies widely depending on the density of settlement. Census tract boundaries are delineated with the intention of being maintained over a long time so that statistical comparisons can be made from census to census. Census tracts occasionally are split due to population growth or merged as a result of substantial population decline.

Census tract boundaries generally follow visible and identifiable features. They may follow nonvisible legal boundaries, such as minor civil division (MCD) or incorporated place boundaries in some states and situations, to allow for census tract-to-governmental unit relationships where the governmental boundaries tend to remain unchanged between censuses. State and county boundaries always are census tract boundaries in the standard census geographic hierarchy. Tribal census tracts are a unique geographic entity defined within federally recognized American Indian reservations and off-reservation trust lands and can cross state and county boundaries. The tribal census tracts may be completely different from the standard county-based census tracts defined for the same area. (see “Tribal Census Tract”).

- i. **Special Use Tracts:** should be comparable in land area size to surrounding census tracts to assure data reliability and quality when reporting on workplace-related data and to avoid data disclosure issues. The Census Bureau also recommends that, when defining special use census tracts encompassing employment centers and areas with concentrations of jobs, PSAP participants should strive for a minimum threshold of 1,200 workers/jobs.

## Appendix B

# TITLE 13—CENSUS

*This title was enacted by act Aug. 31, 1954, ch. 1158, 68 Stat. 1012*

Chap.		Sec.
1.	<b>Administration .....</b>	<b>1</b>
3.	<b>Collection and Publication of Statistics .....</b>	<b>41</b>
5.	<b>Censuses .....</b>	<b>131</b>
7.	<b>Offenses and Penalties .....</b>	<b>211</b>
9.	<b>Collection and Publication of Foreign Trade Statistics<sup>1</sup> .....</b>	<b>301</b>
10.	<b>Exchange of census<sup>2</sup> information<sup>2</sup> .....</b>	<b>401</b>

TABLE SHOWING DISPOSITION OF ALL SECTIONS OF FORMER TITLE 13

<i>Title 13 Former Sections</i>	<i>Title 13 New Sections</i>
1 .....	2
2 .....	21
3, 4 .....	Rep.
5 .....	22
6 .....	22
7-9 .....	Rep.
21-41 .....	Rep.
41a .....	Rep.
42-55 .....	Rep.
61-69 .....	Rep.
71 .....	41
72 .....	42
72a .....	42
73 .....	9, 214
74 .....	43, 224, 241
75 .....	44
76 .....	45
77 .....	Rep.
81 .....	61
82 .....	5
83 .....	9, 214
84 .....	224, 241
85 .....	62
86 .....	63
91-98 .....	Rep.
101 .....	T. 42 §244a
106 .....	Rep.
106 note .....	Rep.
107 .....	Rep.
111 .....	5, 24, 101, 102, 103, 225
112 .....	Rep.
113 .....	101
114 .....	Rep.
121 .....	131, 181
122 .....	6, 9, 24, 25, 211, 212, 213, 214, 221, 222, 223, 224, 225
123 .....	5, 132
201 .....	141
202 .....	143
203 .....	23, 24
204 .....	5, 144
205 .....	25
206 .....	145
207 .....	211
208 .....	9, 212, 213
209 .....	221, 222, 223
210 .....	224
211 .....	9
212 .....	Rep.
213 .....	7
214 .....	10

<sup>1</sup> So in original. Does not conform to chapter heading.

<sup>2</sup> So in original. Probably should be capitalized.

TABLE SHOWING DISPOSITION OF ALL SECTIONS OF FORMER TITLE 13—Continued

<i>Title 13 Former Sections</i>	<i>Title 13 New Sections</i>
215 .....	6
216 .....	5, 23, 146
217 .....	Rep.
218 .....	8
219, 220 .....	Rep.
251 .....	5, 161, 163
252 .....	6, 9, 24, 162, 211, 212, 213, 214
253 .....	Rep.

## AMENDMENTS

1990—Pub. L. 101-533, §5(b)(1), Nov. 7, 1990, 104 Stat. 2348, added item for chapter 10.

1962—Pub. L. 87-826, §1, Oct. 15, 1962, 76 Stat. 951, added item for chapter 9.

## POSITIVE LAW; CITATION

This title has been made positive law by section 1 of act Aug. 31, 1954, ch. 1158, 68 Stat. 1012, which provided in part “That title 13 of the United States Code, entitled ‘Census’ is revised, codified and enacted into law and may be cited as ‘Title 13, United States Code, section—’.”

## REFERENCES TO CENSUS OFFICE

Section 3 of act Aug. 31, 1954, ch. 1158, 68 Stat. 1024, provided that: “Whenever reference is made in any other law or in any regulation or order to the Census Office, such reference shall be held and considered to mean the Bureau of the Census referred to in section 2 of Title 13, United States Code, as set out in section 1 of this Act. This section shall not be construed as affecting historical references to the Census Office which could have no present or future application to the Bureau of the Census.”

## SEPARABILITY

Section 4 of act Aug. 31, 1954, ch. 1158, 68 Stat. 1024, provided that: “If any part of Title 13, United States Code, as set in section 1 of this Act, is held invalid, the remainder of such title shall not be affected thereby.”

## LEGISLATIVE CONSTRUCTION

Section 5 of act Aug. 31, 1954, ch. 1158, 68 Stat. 1024, provided that: “No inference of a legislative construction is to be drawn by reason of the chapter in Title 13, United States Code, as set out in section 1 of this Act, in which any section is placed, nor by reason of the captions or catchlines used in such title.”

## EFFECTIVE DATE

Section 6 of act Aug. 31, 1954, ch. 1158, 68 Stat. 1024, provided that: “The provisions of this Act shall take effect on January 1, 1955.”

## REPEALS

Section 7 of act Aug. 31, 1954, ch. 1158, 68 Stat. 1024, provided that: “The sections of the Acts, and the Acts or parts of Acts, enumerated in the following schedule,

are hereby repealed. Any rights or liabilities now existing under such statutes or parts thereof, and any proceedings instituted under, or growing out of, any of such statutes or parts thereof, shall not be affected by this repeal.”

## CHAPTER 1—ADMINISTRATION

### SUBCHAPTER I—GENERAL PROVISIONS

- Sec.
1. Definitions.
  2. Bureau of the Census.
  3. Seal.
  4. Functions of Secretary; regulations; delegation.
  5. Questionnaires; number, form, and scope of inquiries.
  6. Information from other Federal departments and agencies; acquisition of reports from other governmental and private sources.
  7. Printing; requisitions upon Public Printer; publication of bulletins and reports.
  8. Authenticated transcripts or copies of certain returns; other data; restriction on use; disposition of fees received.
  9. Information as confidential; exception.
  - 10.<sup>1</sup> Mail matter.
  11. Authorization of appropriations.
  12. Mechanical and electronic development.
  13. Procurement of professional services.
  - [14. Repealed.]
  15. Leases for 1980 decennial census.
  16. Address information reviewed by local governments.<sup>2</sup>

### SUBCHAPTER II—OFFICERS AND EMPLOYEES

21. Director of the Census; duties.
22. Qualifications of permanent personnel.
23. Additional officers and employees.
24. Special agents, supervisors, supervisors' clerks, enumerators, and interpreters; compensation; details.<sup>3</sup>
25. Duties of supervisors, enumerators, and other employees.
26. Transportation by contract.

#### AMENDMENTS

1994—Pub. L. 103-430, §2(d), Oct. 31, 1994, 108 Stat. 4394, added item 16.

1979—Pub. L. 96-52, §1(b), Aug. 13, 1979, 93 Stat. 358, added item 15.

1976—Pub. L. 94-521, §§3(b), 4(b), 5(b), 6(b), Oct. 17, 1976, 90 Stat. 2459-2461, inserted reference to “regulations” in item 4, substituted “Questionnaires” for “Schedules” in item 5, substituted “Information from other Federal departments and agencies; acquisition of reports from other governmental and private sources” for “Requests to other departments and offices for information, acquisition of reports from governmental and other sources” in item 6, and substituted “Authenticated transcripts or copies” for “Certified copies” in item 8, respectively.

1966—Pub. L. 89-473, §2(b), June 29, 1966, 80 Stat. 221, struck out item 14 “Reimbursement between appropriations”. Pub. L. 89-473 was subsequently repealed by Pub. L. 97-258, §5(b), Sept. 13, 1982, 92 Stat. 1068.

1962—Pub. L. 87-489, §1(b), June 19, 1962, 76 Stat. 104, added item 14.

1957—Pub. L. 85-207, §1, Aug. 28, 1957, 71 Stat. 481, inserted “, acquisition of reports from governmental and other sources” in item 6, and added items 12, 13 and 26.

<sup>1</sup> Section repealed by Pub. L. 86-682 without corresponding amendment of chapter analysis.

<sup>2</sup> So in original. Does not conform to section catchline.

<sup>3</sup> Section catchline amended by Pub. L. 86-769 without corresponding amendment of chapter analysis.

## SUBCHAPTER I—GENERAL PROVISIONS

### § 1. Definitions

As used in this title, unless the context requires another meaning or unless it is otherwise provided—

(1) “Bureau” means the Bureau of the Census;

(2) “Secretary” means the Secretary of Commerce; and

(3) “respondent” includes a corporation, company, association, firm, partnership, proprietorship, society, joint stock company, individual, or other organization or entity which reported information, or on behalf of which information was reported, in response to a questionnaire, inquiry, or other request of the Bureau.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1012; Pub. L. 94-521, §1, Oct. 17, 1976, 90 Stat. 2459.)

#### HISTORICAL AND REVISION NOTES

Section is new, and was inserted to eliminate the necessity for referring, throughout this title, to the Bureau of the Census, and the Secretary of Commerce, by their full designations.

#### AMENDMENTS

1976—Pub. L. 94-521 designated existing provisions as pars. (1) and (2), and added par. (3).

#### EFFECTIVE DATE OF 1976 AMENDMENT

Section 17 of Pub. L. 94-521 provided that: “The amendments made by this Act [enacting sections 181 to 184 and 196 of this title, amending this section and sections 3 to 6, 8, 23, 141, 191, 195, 214, 221, 224, 225, and 241 of this title, and enacting provisions set out as notes under this section] shall take effect on October 1, 1976, or on the date of the enactment of this Act [Oct. 17, 1976], whichever date is later”.

#### SHORT TITLE OF 1999 AMENDMENT

Pub. L. 106-113, div. B, §1000(a)(7) [div. B, title XII, subtitle E, §1251], Nov. 29, 1999, 113 Stat. 1536, 1501A-505, provided that: “This subtitle [amending section 301 of this title and enacting provisions set out as notes under section 301 of this title] may be cited as the ‘Proliferation Prevention Enhancement Act of 1999’.”

#### SHORT TITLE OF 1994 AMENDMENT

Pub. L. 103-430, §1, Oct. 31, 1994, 108 Stat. 4393, provided that: “This Act [enacting section 16 of this title, amending sections 9 and 214 of this title and section 412 of Title 39, Postal Service, and enacting provisions set out as a note under section 16 of this title] may be cited as the ‘Census Address List Improvement Act of 1994’.”

#### SEPARABILITY

Section 16 of Pub. L. 94-521 provided that: “If a provision enacted by this Act [see section 17 of Pub. L. 94-521 set out above] is held invalid, all valid provisions that are severable from the invalid provision remain in effect. If a provision of this Act [Pub. L. 94-521] is held invalid in one or more of its applications, the provision remains in effect in all valid applications that are severable from the invalid application or applications.”

### § 2. Bureau of the Census

The Bureau is continued as an agency within, and under the jurisdiction of, the Department of Commerce.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1012.)

#### HISTORICAL AND REVISION NOTES

Based on title 13, U.S.C., 1952 ed., §1 (Mar. 6, 1902, ch. 139, §1, 32 Stat. 51; Feb. 14, 1903, ch. 552, §4, 32 Stat. 826;

Mar. 4, 1913, ch. 141, §1, 37 Stat. 736; June 18, 1929, ch. 28, §21, 46 Stat. 26).

Section 1 of title 13, U.S.C., 1952 ed., provided that the "Census Office" temporarily established in the Department of the Interior in accordance with the act of Mar. 3, 1899 (ch. 419, 30 Stat. 1014) "is made" a permanent office in the Department of Commerce. Such wording is no longer necessary, and the provisions, as revised in this section, merely continue the Bureau (of the Census) as an agency within, and under the jurisdiction of, the Department of Commerce.

### § 3. Seal

The Bureau shall have a seal containing such device as has been selected heretofore, or as the Secretary may select hereafter. A description of such seal with an impression thereof shall be filed in the office of the Secretary of State. The seal shall remain in the custody of the Secretary or such officer or employee of the Bureau as he designates, and shall be affixed to all documents authenticated by the Bureau. Judicial notice shall be taken of the seal.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1012; Pub. L. 85-207, §2, Aug. 28, 1957, 71 Stat. 481; Pub. L. 94-521, §2, Oct. 17, 1976, 90 Stat. 2459.)

#### HISTORICAL AND REVISION NOTES

Based on acts Mar. 3, 1899, ch. 419, §31, 30 Stat. 1021; Mar. 6, 1902, ch. 139, §6, 32 Stat. 52.

Section is new to the United States Code, but is in accordance with current practice. Act Mar. 3, 1899, ch. 419, 30 Stat. 1014, which established the "Census Office" on a temporary basis, provided in section 31 thereof (30 Stat. 1021) for a seal for that office. The office was made permanent by act Mar. 6, 1902, ch. 139, 32 Stat. 51, and section 6 of that act (32 Stat. 52) continued in full force and effect "for the taking of the Thirteenth and subsequent censuses" all provisions of the act of Mar. 3, 1899, not inconsistent with the provisions of such 1902 act. Therefore, since the 1902 act contained no provisions with respect to a seal, section 31 of the 1899 act, providing for the seal, remained in force as it was not inconsistent. Section 33 of act July 2, 1909, ch. 2, 36 Stat. 10, which act (36 Stat. 1) related to the Thirteenth and subsequent decennial censuses, repealed the said act of Mar. 3, 1899, specifically, and all "other" laws and parts of laws inconsistent with the provisions of the 1909 act. These repealing provisions are somewhat ambiguous, but it was probably the intent of Congress, as it was the intent thereof at the time of enactment of the act of Mar. 6, 1902, referred to above, to continue in effect all provisions of the act of Mar. 3, 1899, that were not inconsistent with the act of July 2, 1909. The 1909 act contained no provisions with respect to the seal, and it accordingly follows that the provisions of section 31 of the act of Mar. 3, 1899, with respect thereto, continued in force. This is also the interpretation of the Bureau of the Census, which has continued to use a seal through the years in connection with "certificates and attestations".

In any event, this new section merely confirms past and present practice, and restores, if it does not preserve, statutory authority for possession and use of the seal which is a very necessary part of the operations of the Bureau. Further, the section should serve to forestall future differences of interpretation. In the past, some States have refused to recognize the seal of the Census Bureau on the ground that it was not authorized by law. In all probability, this position was taken, not as the result of a search of the Statutes at Large, which would have been a difficult project, but because provisions relating to the seal were not set out in the United States Code where they would have been readily accessible.

The language of this section follows substantially the language of section 31 of the act of Mar. 3, 1899, referred

to above, but has been reworded because of jurisdictional and other changes since that time. The "Census Office" was transferred from the Department of the Interior to the Department of Commerce and Labor by act Feb. 14, 1903, ch. 552, §4, 32 Stat. 826. Act Mar. 4, 1913, ch. 141, §1, 37 Stat. 736, changed the name of the latter to the Department of Commerce, and created, as a separate department, the Department of Labor. It transferred a number of bureaus and agencies from the Department of Commerce to the Department of Labor, but these transfers did not affect the Bureau of the Census, which has remained under the jurisdiction of the Department of Commerce. 1950 Reorganization Plan No. 5, §§1, 2, eff. May 24, 1950, 15 F.R. 3174, 64 Stat. 1263, transferred all functions of all officers, employees, bureaus, and agencies of the Department of Commerce to the Secretary of Commerce, and vested power in him to delegate them or any of his other functions to any of such officers, employees, bureaus, and agencies. Therefore, in this section, "Secretary", and "Secretary or such officer or employee of the Bureau as he designates", were substituted, respectively, for two references to the Director of the Census, to conform with such Plan.

#### AMENDMENTS

1976—Pub. L. 94-521 substituted "affixed to all documents authenticated by the Bureau" for "affixed to all certificates and attestations that may be required from the Bureau".

1957—Pub. L. 85-207 provided for judicial recognition of the seal.

#### EFFECTIVE DATE OF 1976 AMENDMENT

Amendment by Pub. L. 94-521 effective Oct. 17, 1976, see section 17 of Pub. L. 94-521, set out as a note under section 1 of this title.

### § 4. Functions of Secretary; regulations; delegation

The Secretary shall perform the functions and duties imposed upon him by this title, may issue such rules and regulations as he deems necessary to carry out such functions and duties, and may delegate the performance of such functions and duties and the authority to issue such rules and regulations to such officers and employees of the Department of Commerce as he may designate.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1013; Pub. L. 94-521, §3(a), Oct. 17, 1976, 90 Stat. 2459.)

#### HISTORICAL AND REVISION NOTES

Section is new, and was inserted to conform with 1950 Reorganization Plan No. 5, effective May 24, 1950, §§1, 2, 15 F.R. 3174, 64 Stat. 1263, which is set out as a note under section 591 of title 5, U. S. C., 1952 ed., Executive Departments and Government Officers and Employees [now set out in the Appendix to Title 5, Government Organization and Employees]. That plan transferred all functions (with a few exceptions not applicable to the Census Bureau) of all agencies, officers and employees of the Department of Commerce to the Secretary of Commerce, and vested power in him to delegate the functions so transferred, or any of his other functions, to such agencies, officers or employees within the Department as he designates.

See, also, section 253 of title 13, U.S.C., 1952 ed., which provided for delegation of functions in connection with the quinquennial censuses of governments, and authorized the Secretary to promulgate rules and regulations with respect to such censuses. That section has been omitted from this revised title, as the provision thereof for delegation of functions is covered by this section, and the provision thereof which related to rules and regulations is covered by section 22 of title 1, U.S.C., 1952 ed., General Provisions.

Because of the transfer effected by 1950 Reorganization Plan No. 5, referred to above, sections of title 13, U.S.C., 1952 ed., which prescribed functions of the Bureau of the Census, the Census Office, or the Director of the Census, have, in this revised title, been changed to refer to the Secretary.

#### AMENDMENTS

1976—Pub. L. 94-521 inserted “regulations;” in section catchline, authorized the Secretary to issue such rules and regulations as he deems necessary to carry out the functions and duties imposed upon him by this title, authorized delegation of authority to issue such rules and regulations to officers and employees of the Department of Commerce, and struck out a provision which allowed delegation of performance of such functions and duties to bureaus and agencies of the Department of Commerce.

#### EFFECTIVE DATE OF 1976 AMENDMENT

Amendment by Pub. L. 94-521 effective Oct. 17, 1976, see section 17 of Pub. L. 94-521, set out as a note under section 1 of this title.

### § 5. Questionnaires; number, form, and scope of inquiries

The Secretary shall prepare questionnaires, and shall determine the inquiries, and the number, form, and subdivisions thereof, for the statistics, surveys, and censuses provided for in this title.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1013; Pub. L. 94-521, § 4(a), Oct. 17, 1976, 90 Stat. 2459.)

#### HISTORICAL AND REVISION NOTES

Based on title 13, U.S.C., 1952 ed., §§ 82, 111, 123, 204, 216, 251, and section 1442 of title 42, U.S.C., 1952 ed., The Public Health and Welfare (Mar. 6, 1902, ch. 139, § 7, 32 Stat. 52; June 7, 1906, ch. 3048, 34 Stat. 218; Aug. 7, 1916, ch. 274, § 2, 39 Stat. 437; June 18, 1929, ch. 28, §§ 3, 4, 16, 46 Stat. 21, 22, 25; 1939 Reorganization Plan No. II, § 4(e), eff. July 1, 1939, 4 F.R. 2731, 53 Stat. 1431; 1940 Reorganization Plan No. III, § 3, eff. June 30, 1940, 5 F.R. 2107, 54 Stat. 1232; June 25, 1947, ch. 124, 61 Stat. 163; June 19, 1948, ch. 502, § 3, 62 Stat. 479; July 15, 1949, ch. 338, title VI, § 607, 63 Stat. 441; Sept. 7, 1950, ch. 910, § 1, 4, 64 Stat. 784, 785; July 16, 1952, ch. 912, 66 Stat. 736).

Section consolidates section 82 of title 13, U.S.C., 1952 ed., which related to statistics on cottonseed, oilseeds, nuts and kernels, fats, oils, and greases, with part of the second sentence of section 111 of such title, which section related to miscellaneous statistics; with the first sentence of section 123 of such title, which section related to censuses of manufacturers, mineral industries, and other businesses; with the second sentence of section 204 of such title, which section related to censuses of population, agriculture, irrigation, drainage, etc.; with the third sentence of section 216 of such title, which section related to censuses of agriculture; with that part of subsection (b) of section 1442 of title 42, U.S.C., 1952 ed., which made such sections 204 and 216 applicable to the censuses of housing; and with part of section 251(b) of such title relating to censuses of governments.

Sections 82, 123 and 204 of title 13, U.S.C., 1952 ed., provided that the inquiries, etc., should be determined by the Director of the Census, with the approval of the Secretary of Commerce. Section 111 thereof provided that the Director of the Census should prepare the schedules, etc., and sections 216 and 251(b) thereof (the former amended in 1952, the latter enacted in 1950) provided that the inquiries, etc., should be determined by the Secretary of Commerce. This consolidated section vests such duties in the Secretary of Commerce, which is in conformity not only with such sections 216 and 251(b), but also with 1950 Reorganization Plan No. 5, §§ 1, 2, effective May 24, 1950, 15 F.R. 3174, 64 Stat. 1263. See Revision Note to section 4 of this title.

Changes were made in phraseology.

For remainder of sections 111, 123, 204, 216, and 251 of title 13, U.S.C., 1952 ed., and of section 1442 of title 42, U.S.C., 1952 ed. (which has been transferred in its entirety to this revised title), see Distribution Table.

#### AMENDMENTS

1976—Pub. L. 94-521 substituted “Questionnaires” for “Schedules” in section catchline and in text.

#### EFFECTIVE DATE OF 1976 AMENDMENT

Amendment by Pub. L. 94-521 effective Oct. 17, 1976, see section 17 of Pub. L. 94-521, set out as a note under section 1 of this title.

#### RESTRICTION ON COLLECTION OF CENSUS DATA ON RACE

Pub. L. 110-161, div. B, title I, Dec. 26, 2007, 121 Stat. 1887, provided in part: “That none of the funds provided in this or any other Act for any fiscal year may be used for the collection of census data on race identification that does not include ‘some other race’ as a category.”

Similar provisions were contained in the following prior appropriation acts:

Pub. L. 109-108, title II, Nov. 22, 2005, 119 Stat. 2308.

Pub. L. 108-447, div. B, title II, Dec. 8, 2004, 118 Stat. 2876.

### § 6. Information from other Federal departments and agencies; acquisition of reports from other governmental and private sources

(a) The Secretary, whenever he considers it advisable, may call upon any other department, agency, or establishment of the Federal Government, or of the government of the District of Columbia, for information pertinent to the work provided for in this title.

(b) The Secretary may acquire, by purchase or otherwise, from States, counties, cities, or other units of government, or their instrumentalities, or from private persons and agencies, such copies of records, reports, and other material as may be required for the efficient and economical conduct of the censuses and surveys provided for in this title.

(c) To the maximum extent possible and consistent with the kind, timeliness, quality and scope of the statistics required, the Secretary shall acquire and use information available from any source referred to in subsection (a) or (b) of this section instead of conducting direct inquiries.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1013; Pub. L. 85-207, § 3, Aug. 28, 1957, 71 Stat. 481; Pub. L. 94-521, § 5(a), Oct. 17, 1976, 90 Stat. 2460.)

#### HISTORICAL AND REVISION NOTES

Based on title 13, U.S.C., 1952 ed., §§ 122, 215, 252, and section 1442 of title 42, U.S.C., 1952 ed., The Public Health and Welfare (June 18, 1929, ch. 28, § 15, 46 Stat. 25; June 19, 1948, ch. 502, § 2, 62 Stat. 479; July 15, 1949, ch. 338, title VI, § 607, 63 Stat. 441; Sept. 7, 1950, ch. 910, § 1, 64 Stat. 784).

Section consolidates section 215 of title 13, U.S.C., 1952 ed., with those parts of sections 122 and 252 of such title which respectively made such section 215 applicable to the quinquennial censuses of manufacturers and the mineral industries and other businesses, and governments, and with that part of subsection (b) of section 1442 of title 42, U.S.C., 1952 ed., which made such section 215 applicable to the decennial censuses of housing (see subchapters I, II, and III of chapter 5 of this title). As originally enacted in 1929, such section 215 had related only to the decennial censuses of population, agriculture, etc., the provisions for which are continued in subchapter II of chapter 5 of this title.

The provisions, as revised in this section, relate, not only to the censuses referred to above, but also, to all other investigations provided for in this title. This was probably the Congressional intent.

Words in section 215 of title 13, U.S.C., 1952 ed., “on request of the Director of the Census”, were omitted since all functions under this title are vested primarily in the Secretary (of Commerce), in view of 1950 Reorganization Plan No. 5, §§1, 2, eff. May 24, 1950, 15 F.R. 3174, 64 Stat. 1263. See Revision Note to section 4 of this title.

Changes were made in phraseology.

For remainder of sections 122 and 252 of title 13, U.S.C., 1952 ed., and of section 1442 of title 42, U.S.C., 1952 ed. (which has been transferred in its entirety to this revised title), see Distribution Table.

#### AMENDMENTS

1976—Pub. L. 94-521 substituted “Information from other Federal departments and agencies; acquisition of reports from other governmental and private sources” for “Requests to other departments and offices for information, acquisition of reports from governmental and other sources” in section catchline.

Subsec. (a). Pub. L. 94-521 substituted “considers” for “deems”, and “agency, or establishment of the Federal Government, or of the government of the District of Columbia” for “or office of the Government”.

Subsec. (c). Pub. L. 94-521 added subsec. (c).

1957—Pub. L. 85-207 inserted “, acquisition of reports from governmental and other sources” in section catchline, designated existing provisions as subsec. (a), and added subsec. (b).

#### EFFECTIVE DATE OF 1976 AMENDMENT

Amendment by Pub. L. 94-521 effective Oct. 17, 1976, see section 17 of Pub. L. 94-521, set out as a note under section 1 of this title.

### § 7. Printing; requisitions upon Public Printer; publication of bulletins and reports

The Secretary may make requisition upon the Public Printer for miscellaneous printing necessary to carry out the provisions of this title. He may further have printed by the Public Printer, in such editions as he deems necessary, preliminary and other census bulletins, and final reports of the results of the several investigations authorized by this title, and may publish and distribute such bulletins and reports.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1013.)

#### HISTORICAL AND REVISION NOTES

Based on title 13, U.S.C., 1952 ed., §213, and section 1442 of title 42, U.S.C., 1952 ed., The Public Health and Welfare (June 18, 1929, ch. 28, §13, 46 Stat. 25; July 15, 1949, ch. 338, title VI, §607, 63 Stat. 441).

Section consolidates section 213 of title 13, U.S.C., 1952 ed., with that part of subsection (b) of section 1442 of title 42, U.S.C., 1952 ed., which made such section 213 applicable to the censuses of housing.

The enumeration in section 213 of title 13, U.S.C. 1952 ed., of the types of printing (“Blanks, schedules, circulars, pamphlets, envelopes, work sheets”) was omitted as unnecessary and covered by the words “miscellaneous printing”.

The provisions have been reworded to make it clear that they relate to all statistical and census operations under this title, and changes were made in phraseology.

For remainder of section 1442 of title 42, U.S.C., 1952 ed. (which section has been transferred in its entirety to this revised title), see Distribution Table.

### § 8. Authenticated transcripts or copies of certain returns; other data; restriction on use; disposition of fees received

(a) The Secretary may, upon written request, furnish to any respondent, or to the heir, succes-

sor, or authorized agent of such respondent, authenticated transcripts or copies of reports (or portions thereof) containing information furnished by, or on behalf of, such respondent in connection with the surveys and census provided for in this title, upon payment of the actual or estimated cost of searching the records and furnishing such transcripts or copies.

(b) Subject to the limitations contained in sections 6(c) and 9 of this title, the Secretary may furnish copies of tabulations and other statistical materials which do not disclose the information reported by, or on behalf of, any particular respondent, and may make special statistical compilations and surveys, for departments, agencies, and establishments of the Federal Government, the government of the District of Columbia, the government of any possession or area (including political subdivisions thereof) referred to in section 191(a) of this title, State or local agencies, or other public and private persons and agencies, upon payment of the actual or estimated cost of such work. In the case of nonprofit agencies or organizations, the Secretary may engage in joint statistical projects, the purpose of which are otherwise authorized by law, but only if the cost of such projects are shared equitably, as determined by the Secretary.

(c) In no case shall information furnished under this section be used to the detriment of any respondent or other person to whom such information relates, except in the prosecution of alleged violations of this title.

(d) All moneys received in payment for work or services enumerated under this section shall be deposited in a separate account which may be used to pay directly the costs of such work or services, to repay appropriations which initially bore all or part of such costs, or to refund excess sums when necessary.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1013; Pub. L. 85-207, §4, Aug. 28, 1957, 71 Stat. 481; Pub. L. 94-521, §6(a), Oct. 17, 1976, 90 Stat. 2460.)

#### HISTORICAL AND REVISION NOTES

Based on title 13, U.S.C., 1952 ed., §218, and section 1442 of title 42, U.S.C., 1952 ed., The Public Health and Welfare (June 18, 1929, ch. 28, §18, 46 Stat. 25; July 15, 1949, ch. 338, title VI, §607, 63 Stat. 441).

Section consolidates section 218 of title 13, U.S.C., 1952 ed., with that part of subsection (b) of section 1442 of title 42, U.S.C., 1952 ed., which made such section 218 applicable to the censuses of housing. For remainder of such section 1442 of title 42 (which has been transferred in its entirety to this revised title), see Distribution Table.

References to the Secretary, meaning the Secretary of Commerce, were substituted for references to the Director of the Census, to conform with 1950 Reorganization Plan No. 5, §§1, 2, eff. May 24, 1950, 15 F.R. 3174, 64 Stat. 1263. See Revision Note to section 4 of this title. For the same reason, a reference in section 218 of title 13, U.S.C., 1952 ed., to the Bureau of the Census was changed, in subsection (e) of this revised section to “Department of Commerce or any bureau or agency thereof”.

Changes were made in phraseology and arrangement.

#### AMENDMENTS

1976—Pub. L. 94-521 substituted “Authenticated transcripts or copies” for “Certified copies” in section catchline.

Subsec. (a). Pub. L. 94-521 substituted provision that the Secretary may furnish to any respondent, or the successor or authorized agent of such respondent, transcripts or copies of reports containing information furnished in connection with the surveys and census, upon payment of the necessary costs, for provision that authorized the Secretary, in his discretion, to furnish the Governors of States and Territories, courts of record, and individuals, data for genealogical and other proper purposes, from the population, agriculture, and housing schedules prepared under the authority of subchapter II of chapter 5 of this title, upon payment of the necessary costs, plus one dollar for supplying a certificate.

Subsec. (b). Pub. L. 94-521 inserted provision subjecting the Secretary to the limitations contained in sections 6(c) and 9 of this title, when furnishing statistical materials under this section, substituted “copies of tabulations and other statistical materials” for “transcripts or copies of tables and other census records”, inserted provision that materials furnished under this section may not disclose information reported by, or on behalf of, a particular respondent, and substituted a provision enumerating the public and private establishments and individuals, on behalf of whom, special statistical compilations may be conducted for provision that such compilations may be conducted on behalf of State or local officials, private concerns, or individuals.

Subsec. (c). Pub. L. 94-521 struck out “the authority of” after “furnished under”, substituted “any respondent or other person” for “the persons”, and inserted “except in the prosecution of alleged violations of this title” after “relates”.

1957—Subsec. (b). Pub. L. 85-207, §4(a), inserted sentence at end respecting engagement in joint statistical projects.

Subsec. (d). Pub. L. 85-207, §4(b), required the deposit in a separate account of moneys received in payment for work or services, previously credited to an appropriation for collecting statistics, and permitted certain uses of such account.

#### EFFECTIVE DATE OF 1976 AMENDMENT

Amendment by Pub. L. 94-521 effective Oct. 17, 1976, see section 17 of Pub. L. 94-521, set out as a note under section 1 of this title.

### § 9. Information as confidential; exception

(a) Neither the Secretary, nor any other officer or employee of the Department of Commerce or bureau or agency thereof, or local government census liaison, may, except as provided in section 8 or 16 or chapter 10 of this title or section 210 of the Departments of Commerce, Justice, and State, the Judiciary, and Related Agencies Appropriations Act, 1998 or section 2(f) of the Census of Agriculture Act of 1997—

(1) use the information furnished under the provisions of this title for any purpose other than the statistical purposes for which it is supplied; or

(2) make any publication whereby the data furnished by any particular establishment or individual under this title can be identified; or

(3) permit anyone other than the sworn officers and employees of the Department or bureau or agency thereof to examine the individual reports.

No department, bureau, agency, officer, or employee of the Government, except the Secretary in carrying out the purposes of this title, shall require, for any reason, copies of census reports which have been retained by any such establishment or individual. Copies of census reports which have been so retained shall be immune

from legal process, and shall not, without the consent of the individual or establishment concerned, be admitted as evidence or used for any purpose in any action, suit, or other judicial or administrative proceeding.

(b) The provisions of subsection (a) of this section relating to the confidential treatment of data for particular individuals and establishments, shall not apply to the censuses of governments provided for by subchapter III of chapter 5 of this title, nor to interim current data provided for by subchapter IV of chapter 5 of this title as to the subjects covered by censuses of governments, with respect to any information obtained therefor that is compiled from, or customarily provided in, public records.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1013; Pub. L. 87-813, Oct. 15, 1962, 76 Stat. 922; Pub. L. 101-533, §5(b)(2), Nov. 7, 1990, 104 Stat. 2348; Pub. L. 103-430, §2(b), Oct. 31, 1994, 108 Stat. 4394; Pub. L. 105-113, §4(a)(1), Nov. 21, 1997, 111 Stat. 2276; Pub. L. 105-119, title II, §210(k), Nov. 26, 1997, 111 Stat. 2487.)

#### HISTORICAL AND REVISION NOTES

Based on title 13, U.S.C., 1952 ed., §§73, 83, 122, 208, 211, 252, and section 1442 of title 42, U.S.C., 1952 ed., The Public Health and Welfare (Aug. 7, 1916, ch. 274, §3, 39 Stat. 437; Apr. 2, 1924, ch. 80, §3, 43 Stat. 31; June 18, 1929, ch. 28, §§8, 11, 21, 46 Stat. 23, 25, 26; July 25, 1947, ch. 331, 61 Stat. 457; June 19, 1948, ch. 502, §2, 62 Stat. 479; July 15, 1949, ch. 338, title VI, §607, 63 Stat. 441; Sept. 7, 1950, ch. 910, §2, 64 Stat. 784).

Section consolidates parts of sections 73 and 83 of title 13, U.S.C., 1952 ed., part of section 208 of such title, section 211 of such title, that part of section 122 of such title which made such sections 208 and 211 applicable to the quinquennial censuses of manufacturers, the mineral industries, and other businesses (see subchapter I of chapter 5 of this revised title), that part of section 252 of such title which made such sections 208 and 211 applicable to the quinquennial censuses of governments (see subchapter III of chapter 5 of this revised title), the second proviso in such section 252, and that part of subsection (b) of section 1442 of title 42, U.S.C., 1952 ed., which made such sections 208 and 211 applicable to the decennial censuses of housing (see subchapter II of chapter 5 of this revised title).

Words “except as provided in section 8 of this title” were inserted in opening phrase of subsection (a) for the purpose of clarity.

References to the Secretary, the Department of Commerce and bureaus and agencies thereof, and to other officers and employees of such Department, bureaus or agencies, were substituted for references to the Director of the Census, the “Census Office”, and the enumeration (in section 208 of title 13, U.S.C., 1952 ed.) of certain types of employees, for the purpose of completeness, and to conform with 1950 Reorganization Plan No. 5, §§1, 2, eff. May 24, 1950, 15 F.R. 3174, 64 Stat. 1263. See Revision Note to section 4 of this title.

The penal provisions of sections 73, 83, and 208 of title 13, U.S.C., 1952 ed., prescribing penalties for wrongful disclosure of information, are set out in section 214 of this title.

Changes were made in phraseology.

For remainder of sections 122, 208, and 252 of title 13, U.S.C., 1952 ed., and of section 1442 of title 42, U.S.C., 1952 ed. (which section has been transferred in its entirety to this revised title), see Distribution Table.

#### REFERENCES IN TEXT

Section 210 of the Departments of Commerce, Justice, and State, the Judiciary, and Related Agencies Appropriations Act, 1998, referred to in subsec. (a), is section 210 of Pub. L. 105-119, title II, Nov. 26, 1997, 111 Stat.

2483, which amended this section and enacted provisions set out as a note under section 141 of this title.

Section 2(f) of the Census of Agriculture Act of 1997, referred to in subsec. (a), is classified to section 2204g(f) of Title 7, Agriculture.

#### AMENDMENTS

1997—Subsec. (a). Pub. L. 105-119, which directed the substitution, in introductory provisions, of “of this title or section 210 of the Departments of Commerce, Justice, and State, the Judiciary, and Related Agencies Appropriations Act, 1998—” for “of this title—”, was executed by substituting “of this title or section 210 of the Departments of Commerce, Justice, and State, the Judiciary, and Related Agencies Appropriations Act, 1998” for “of this title” to reflect the probable intent of Congress and the amendment by Pub. L. 105-113. See below.

Pub. L. 105-113 inserted “or section 2(f) of the Census of Agriculture Act of 1997” after “chapter 10 of this title”.

1994—Subsec. (a). Pub. L. 103-430 inserted “or local government census liaison,” after “thereof,” and “or 16” after “section 8”.

1990—Subsec. (a). Pub. L. 101-533 inserted “or chapter 10” after “section 8”.

1962—Subsec. (a). Pub. L. 87-813 inserted sentences stating that no department, bureau, agency, officer, or employee of the Government, except the Secretary in carrying out the purposes of this title, shall require, for any reason, copies of census reports which have been retained by any such establishment or individual, and providing that copies of census reports which have been so retained shall be immune from legal process, and shall not, without the consent of the individual or establishment, be admitted as evidence or used for any purpose in any action, suit or other judicial or administrative proceeding.

#### [§ 10. Repealed. Pub. L. 86-682, § 12(a), Sept. 2, 1960, 74 Stat. 708, eff. Sept. 1, 1960]

Section, act Aug. 31, 1954, ch. 1158, § 1, 68 Stat. 1014, related to free transmittal of official mail in census matters.

#### § 11. Authorization of appropriations

There is authorized to be appropriated, out of the Treasury of the United States, such sums as may be necessary to carry out all provisions of this title.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1014.)

#### HISTORICAL AND REVISION NOTES

Section is new, and has been inserted to supply the customary authorization of appropriations necessary in carrying out any of the provisions of this title.

#### BUREAU OF THE CENSUS WORKING CAPITAL FUND

Pub. L. 104-208, div. A, title I, § 101(a) [title II, § 210], Sept. 30, 1996, 110 Stat. 3009, 3009-41, provided that: “There is hereby established the Bureau of the Census Working Capital Fund, which shall be available without fiscal year limitation, for expenses and equipment necessary for the maintenance and operation of such services and projects as the Director of the Census Bureau determines may be performed more advantageously when centralized: *Provided*, That such central services shall, to the fullest extent practicable, be used to make unnecessary the maintenance of separate like services in the divisions and offices of the Bureau: *Provided further*, That a separate schedule of expenditures and reimbursements, and a statement of the current assets and liabilities of the Working Capital Fund as of the close of the last completed fiscal year, shall be prepared each year: *Provided further*, That notwithstanding 31 U.S.C. 3302, the Working Capital Fund may be cred-

ited with advances and reimbursements from applicable appropriations of the Bureau and from funds of other agencies or entities for services furnished pursuant to law: *Provided further*, That any inventories, equipment, and other assets pertaining to the services to be provided by such funds, either on hand or on order, less the related liabilities or unpaid obligations, and any appropriations made hereafter for the purpose of providing capital, shall be used to capitalize the Working Capital Fund: *Provided further*, That the Working Capital Fund shall provide for centralized services at rates which will return in full all expenses of operation, including depreciation of fund plant and equipment, amortization of automated data processing software and hardware systems, and an amount necessary to maintain a reasonable operating reserve as determined by the Director.”

#### § 12. Mechanical and electronic development

The Secretary is authorized to have conducted mechanical and electronic development work as he determines is needed to further the functions and duties of carrying out the purposes of this title and may enter into such developmental contracts as he may determine to be in the best interest of the Government.

(Added Pub. L. 85-207, § 5, Aug. 28, 1957, 71 Stat. 481.)

#### § 13. Procurement of professional services

The Secretary shall have authority to contract with educational and other research organizations for the preparation of monographs and other reports and materials of a similar nature.

(Added Pub. L. 85-207, § 5, Aug. 28, 1957, 71 Stat. 481.)

#### [§ 14. Repealed. Pub. L. 89-473, § 2(a), June 29, 1966, 80 Stat. 221]

Section, added Pub. L. 87-489, § 1(a), June 19, 1962, 76 Stat. 104, provided for reimbursement between appropriations. See section 1534 of Title 31, Money and Finance.

#### REPEALS

Pub. L. 89-473, June 29, 1966, 80 Stat. 221, which repealed this section and struck out item 14 in the analysis of sections comprising this chapter, was itself repealed by Pub. L. 97-258, § 5(b), Sept. 13, 1982, 96 Stat. 1068.

#### § 15. Leases for 1980 decennial census

The 15 percent limitation contained in section 322<sup>1</sup> of the Act of June 30, 1932 (47 Stat. 412) shall not apply to leases entered into by the Secretary for the purpose of carrying out the 1980 decennial census, but no lease may be entered into for such purpose at a rental in excess of 105 percent of the appraised fair annual rental of the leased premises, or a proportionate part of the appraised fair annual rental in the case of a lease for less than a year.

(Added Pub. L. 96-52, § 1(a), Aug. 13, 1979, 93 Stat. 358; amended Pub. L. 108-178, § 4(c), Dec. 15, 2003, 117 Stat. 2641.)

#### REFERENCES IN TEXT

Section 322 of the Act of June 30, 1932 (47 Stat. 412), referred to in text, was repealed by Pub. L. 100-678, § 7, Nov. 17, 1988, 102 Stat. 4052.

<sup>1</sup> See References in Text note below.

## AMENDMENTS

2003—Pub. L. 108-178 struck out “; 40 U.S.C. 278a” after “47 Stat. 412”.

## EFFECTIVE DATE OF 2003 AMENDMENT

Amendment by Pub. L. 108-178 effective Aug. 21, 2002, see section 5 of Pub. L. 108-178, set out as a note under section 5334 of Title 5, Government Organization and Employees.

## § 16. Address information reviewed by States and local governments

(a) The Secretary, to assist efforts to ensure the accuracy of censuses and surveys under this title, shall—

(1) publish standards defining the content and structure of address information which States and local units of general purpose government may submit to the Secretary to be used in developing a national address list;

(2)(A) develop and publish a timetable for the Bureau to receive, review, and respond to submissions of information under paragraph (1) before the decennial census date; and

(B) provide for a response by the Bureau with respect to such submissions in which the Bureau specifies its determinations regarding such information and the reasons for such determinations; and

(3) be subject to the review process developed under section 3 of the Census Address List Improvement Act of 1994 relating to responses pursuant to paragraph (2).

(b)(1) The Secretary—

(A) shall provide officials who are designated as census liaisons by a local unit of general purpose government with access to census address information for the purpose of verifying the accuracy of the address information of the Bureau for census and survey purposes; and

(B) together with such access, should provide an explanation of duties and obligations under this title.

(2) Access under paragraph (1) shall be limited to address information concerning addresses within the local unit of general purpose government represented by the census liaison or an adjacent local unit of general purpose government.

(3) The Bureau should respond to each recommendation made by a census liaison concerning the accuracy of address information, including the determination (and reasons therefor) of the Bureau regarding each such recommendation.

(4) For the purposes of paragraph (1), in a case in which a local unit of general purpose government is within another local unit of general purpose government and is not independent of the enclosing unit, the census liaison shall be designated by the local unit of general purpose government which is within the enclosing local unit of general purpose government.

(5) A census liaison may not use information made available under paragraph (1) for any purpose other than the purpose specified in paragraph (1).

(c) For the purposes of this section—

(1) the term “local unit of general purpose government” has the meaning given such term by section 184(1) of this title; and

(2) the term “State” includes the District of Columbia, the Commonwealth of Puerto Rico,

the Commonwealth of the Northern Mariana Islands, American Samoa, Guam, the Virgin Islands, and any other territory or possession of the United States.

(Added Pub. L. 103-430, §2(a), Oct. 31, 1994, 108 Stat. 4393.)

## REFERENCES IN TEXT

Section 3 of the Census Address List Improvement Act of 1994, referred to in subsec. (a)(3), is section 3 of Pub. L. 103-430, set out below.

### DEVELOPMENT OF APPEALS PROCESS BY ADMINISTRATOR OF OFFICE OF INFORMATION AND REGULATORY AFFAIRS

Section 3 of Pub. L. 103-430 provided that: “The Administrator of the Office of Information and Regulatory Affairs, acting through the Chief Statistician and in consultation with the Bureau of the Census, shall develop an appeals process for those States and local units of general purpose government which desire to appeal determinations of the Bureau of the Census pursuant to section 16(a)(2) or (b)(3) of title 13, United States Code. Appeals under such process shall be resolved before the decennial census date. The Chief Statistician shall publish the proposed appeals process for a period of public comment before finalizing such process.”

## SUBCHAPTER II—OFFICERS AND EMPLOYEES

### § 21. Director of the Census; duties

The Bureau shall be headed by a Director of the Census, appointed by the President, by and with the advice and consent of the Senate. The Director shall perform such duties as may be imposed upon him by law, regulations, or orders of the Secretary.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1014.)

## HISTORICAL AND REVISION NOTES

Based on title 13, U.S.C., 1952 ed., §2 (Mar. 6, 1902, ch. 139, §3, 32 Stat. 51; June 18, 1929, ch. 28, §21, 46 Stat. 26). The provision of section 2 of title 13, U.S.C., 1952 ed., which imposed upon the Director the duty to superintend and direct the taking of censuses of the United States was omitted in view of 1950 Reorganization Plan No. 5, effective May 24, 1950, 15 F.R. 3174, 64 Stat. 1263, which transferred all functions of all officers, employees, bureaus, and agencies of the Department of Commerce to the Secretary of Commerce, and this title, as revised, vests such duty in the Secretary. However, under section 4 of this title, he may delegate his functions hereunder.

“Bureau” was substituted for “permanent Census Office”. See Revision Note to section 2 of this title.

At the end of this section, references to regulations, and to orders of the Secretary, were added after “law” in view of the changes effected by 1950 Reorganization Plan No. 5, referred to above.

Changes were made in phraseology.

### § 22. Qualifications of permanent personnel

All permanent officers and employees of the Bureau shall be citizens of the United States.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1014; Pub. L. 86-769, §1, Sept. 13, 1960, 74 Stat. 911.)

## HISTORICAL AND REVISION NOTES

Based on title 13, U.S.C., 1952 ed., §§5, 6 (Mar. 6, 1902, ch. 139, §§5, 10, 32 Stat. 51, 53; June 18, 1929, ch. 28, §21, 46 Stat. 26).

Section consolidates section 5 of title 13, U.S.C., 1952 ed., with section 6 of such title.

A reference to “officers” was inserted for completeness, and the word “permanent” was inserted before “officers and employees” for the purpose of clarity.

The provision in section 5 of title 13, U.S.C., 1952 ed., excepting unskilled laborers from the requirements for citizenship, was omitted as superseded and covered by the Classification Act of 1949 (5 U.S.C., 1952 ed., ch. 21).

The provision that appointments and compensation shall be subject to the Classification Act of 1949 is new but is in accordance with existing law. See chapter 21 of title 5, U.S.C., 1952 ed., Executive Departments and Government Officers and Employees.

The provision in section 5 of title 13, U.S.C., 1952 ed., giving preference in appointments to war veterans and their widows, was omitted as superseded and covered by the Veterans' Preference Act of 1944 (chapter 17 of Title 5, U.S.C., 1952 ed., Executive Departments and Government Officers and Employees).

Changes were made in phraseology.

#### AMENDMENTS

1960—Pub. L. 86-769 struck out references to appointment and compensation under the Civil Service laws and the Classification Act of 1949.

#### PROGRAM FOR EMPLOYMENT OF SPANISH-ORIGIN PERSONNEL IN BUREAU; REPORT TO CONGRESS

Pub. L. 94-311, § 6, June 16, 1976, 90 Stat. 689, required Department of Commerce to implement an affirmative action program within Bureau of the Census for employment of personnel of Spanish origin or descent and to submit a report to Congress within one year of June 16, 1976, on progress of such program.

### § 23. Additional officers and employees

(a) The Secretary may establish, at rates of compensation to be fixed by him without regard to the Classification Act of 1949, as many temporary positions as may be necessary to meet the requirements of the work provided for by law. Bureau employees who are transferred to any such temporary positions shall not lose their permanent civil service status by reason of the transfer. The Secretary may make appointments to such temporary positions in conformity with the civil service laws and rules.

(b) In addition to employees of the Department of Commerce, employees of other departments and independent offices of the Government may, with the consent of the head of the respective department or office, be employed and compensated for field work in connection with the work provided for by law without regard to section 301 of the Dual Compensation Act.

(c) The Secretary may utilize temporary staff, including employees of Federal, State, or local agencies or instrumentalities, and employees of private organizations to assist the Bureau in performing the work authorized by this title, but only if such temporary staff is sworn to observe the limitations imposed by section 9 of this title.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1014; Pub. L. 86-769, § 2, Sept. 13, 1960, 74 Stat. 911; Pub. L. 88-448, title IV, § 401(p), Aug. 19, 1964, 78 Stat. 492; Pub. L. 94-521, § 12(b), Oct. 17, 1976, 90 Stat. 2465.)

#### HISTORICAL AND REVISION NOTES

Based on title 13, U.S.C., 1952 ed., §§ 203, 216, and section 1442 of title 42, U.S.C., 1952 ed., The Public Health and Welfare (June 18, 1929, ch. 28, §§ 3, 16, 46 Stat. 21, 25; July 6, 1949, ch. 298, §§ 1, 2, 63 Stat. 406; July 15, 1949, ch. 338, title VI, § 607, 63 Stat. 441; Oct. 28, 1949, ch. 782, title

XI, § 1106(a), 63 Stat. 972; July 16, 1952, ch. 912, 66 Stat. 736).

Section consolidates parts of sections 203 and 216 of title 13, U.S.C., 1952 ed., with that part of subsection (b) of section 1442 of title 42, U.S.C., 1952 ed., which made such sections 203 and 216 applicable to the censuses of housing.

Section 122 of title 13, U.S.C., 1952 ed., which related to quinquennial censuses of manufacturers, the mineral industries, transportation, and other businesses (see subchapter I of chapter 5 of this revised title), and section 252 of title 13, U.S.C., 1952 ed., which related to quinquennial censuses of governments (see subchapter III of chapter 5 of this title), made section 203 of such title applicable to those censuses. However, since the particular provisions of such section 203 that have been carried into this revised section apparently related, as supplemented by section 1442(b) of title 42, U.S.C., 1952 ed., to the decennial censuses provided for in sections 201 et seq. of such title, and in such section 1442 of title 42 (see subchapter II of chapter 5 of this revised title), and apparently could have no relevancy to the quinquennial censuses referred to above, this revised section relates only to such decennial censuses.

In subsection (a), “Departmental Service” was substituted for “District of Columbia”, since the Bureau of the Census now has its headquarters in Maryland, and not in the District of Columbia.

In this section, a reference to the Bureau of the Census was changed to a reference to the Department of Commerce, and references to the Director of the Census were changed in all but one case to references to the Secretary (of Commerce) to conform with 1950 Reorganization Plan No. 5, §§ 1, 2, eff. May 24, 1950, 15 F.R. 3174, 64 Stat. 1263. See Revision Note to section 4 of this title. The provision of section 203 of title 13, U.S.C., 1952 ed., that appointments under the particular provisions thereof that have been carried into subsection (a) of this revised section should be made upon the recommendation of the Director of the Census, have been omitted from such subsection (a) for the same reason. Further, words “or to whatever other officer is designated by the Secretary to take the census provided for in sections 141 and 142 of this title” were inserted after “Director of the Census” in par. (1) of subsection (a), to conform with such 1950 Reorganization Plan.

The first paragraph of section 203 of title 13, U.S.C., 1952 ed., which provided for the employment of two assistant directors for each decennial census period, was omitted as obsolete and superseded, in view of section 122 of such title, which made such section 203 applicable to the quinquennial censuses of manufactures and other businesses, and to surveys (see subchapter IV of chapter 5 of this title), thus rendering such first paragraph ineffective and meaningless. See also section 121(b) of title 13, U.S.C., 1952 ed.

The third proviso in the second paragraph of section 203 of title 13, U.S.C., 1952 ed., giving preference in appointments to disabled war veterans, their widows, and, under certain circumstances, to their wives, was omitted as superseded and covered by the Veterans' Preference Act of 1944 (chapter 17 of title 5, U.S.C., 1952 ed., Executive Departments and Government Officers and Employees).

Changes were made in phraseology and arrangement.

Remainder of section 203 of title 13, U.S.C., 1952 ed., is incorporated in this subchapter, and for remainder of section 216 thereof, and of section 1442 of title 42, U.S.C., 1952 ed. (which has been transferred in its entirety to this revised title), see Distribution Table.

#### REFERENCES IN TEXT

The Classification Act of 1949, referred to in subsec. (a), is act Oct. 28, 1949, ch. 782, 63 Stat. 954, as amended, which was repealed by Pub. L. 89-554, § 8(a), Sept. 6, 1966, 80 Stat. 632, and reenacted by the first section thereof as chapter 51 and subchapter III of chapter 53 of Title 5, Government Organization and Employees.

The civil service laws, referred to in subsec. (a), are set forth in Title 5. See, particularly, section 3301 et seq. of Title 5.

Section 301 of the Dual Compensation Act, referred to in subsec. (b), which was classified to section 3105 of former Title 5, Executive Departments and Government Officers and Employees, was repealed by Pub. L. 89-554, § 8(a), Sept. 6, 1966, 80 Stat. 632, and reenacted by the first section thereof as section 5533 of Title 5.

#### AMENDMENTS

1976—Subsec. (c). Pub. L. 94-521 added subsec. (c).

1964—Subsec. (b). Pub. L. 88-448 inserted “without regard to section 301 of the Dual Compensation Act”.

1960—Subsec. (a). Pub. L. 86-769 substituted “The Secretary may establish, at rates of compensation to be fixed by him without regard to the Classification Act of 1949, as many temporary positions as may be necessary to meet the requirements of the work provided for by law. Bureau employees who are transferred to any such temporary positions shall not lose their permanent civil service status by reason of the transfer. The Secretary may make appointments to such temporary positions in conformity with the civil service laws and rules” for “The Secretary may appoint, without regard to the Classification Act of 1949, at rates of compensation to be fixed by him, as many temporary employees in the Departmental Service as may be necessary to meet the requirements of the work provided for in this title. Census employees who are transferred to any such temporary positions shall not lose their permanent Civil Service status by reason of the transfer. The Secretary shall make all such temporary appointments in conformity with the Civil Service laws and rules”.

Subsec. (b). Pub. L. 86-769 substituted “by law” for “in this title”.

#### EFFECTIVE DATE OF 1976 AMENDMENT

Amendment by Pub. L. 94-521 effective Oct. 17, 1976, see section 17 of Pub. L. 94-521, set out as a note under section 1 of this title.

#### EFFECTIVE DATE OF 1964 AMENDMENT

Amendment by Pub. L. 88-448 effective on first day of first month which begins later than ninetieth day following Aug. 19, 1964, see section 403 of Pub. L. 88-448.

#### TEMPORARY POSITIONS RELATING TO DECENNIAL CENSUSES

Pub. L. 108-447, div. B, title II, § 205, Dec. 8, 2004, 118 Stat. 2883, provided that: “Hereafter, none of the funds made available by this or any other Act for the Department of Commerce shall be available to reimburse the Unemployment Trust Fund or any other fund or account of the Treasury to pay for any expenses authorized by section 8501 of title 5, United States Code, for services performed by individuals appointed to temporary positions within the Bureau of the Census for purposes relating to the decennial censuses of population.”

Similar provisions were contained in the following prior appropriation acts:

Pub. L. 106-553, § 1(a)(2) [title II, § 204], Dec. 21, 2000, 114 Stat. 2762, 2762A-78.

Pub. L. 106-113, div. B, § 1000(a)(1) [title II, § 204], Nov. 29, 1999, 113 Stat. 1535, 1501A-31.

Pub. L. 105-277, div. A, § 101(b) [title II, § 204], Oct. 21, 1998, 112 Stat. 2681-50, 2681-86.

Pub. L. 105-119, title II, § 204, Nov. 26, 1997, 111 Stat. 2479.

Pub. L. 104-208, div. A, title I, § 101(a) [title II, § 204], Sept. 30, 1996, 110 Stat. 3009, 3009-39.

Pub. L. 104-134, title I, § 101(a) [title II, § 204], Apr. 26, 1996, 110 Stat. 1321, 1321-30; renumbered title I, Pub. L. 104-140, § 1(a), May 2, 1996, 110 Stat. 1327.

Pub. L. 103-317, title II, § 204, Aug. 26, 1994, 108 Stat. 1749.

Pub. L. 103-121, title II, § 204, Oct. 27, 1993, 107 Stat. 1177.

Pub. L. 102-395, title II, § 204, Oct. 6, 1992, 106 Stat. 1855.

Pub. L. 102-140, title II, § 204, Oct. 28, 1991, 105 Stat. 806.

Pub. L. 101-515, title I, § 104, Nov. 5, 1990, 104 Stat. 2108.

Pub. L. 101-382, title I, § 141, Aug. 20, 1990, 104 Stat. 654, provided that:

“(a) GENERAL RULE.—The determination of whether temporary 1990 census services constitute ‘Federal service’ for purposes of subchapter I of chapter 85 of title 5, United States Code, shall be made under the provisions of such subchapter without regard to any provision of law not contained in such subchapter.

“(b) TEMPORARY 1990 CENSUS SERVICES.—For purposes of subsection (a), the term ‘temporary 1990 census services’ means services performed by individuals appointed to temporary positions within the Bureau of the Census for purposes relating to the 1990 decennial census of population (as determined under regulations determined by the Secretary of Commerce).”

Pub. L. 101-302, title II, May 25, 1990, 104 Stat. 215, provided that: “Services performed after April 20, 1990, by individuals appointed to temporary positions within the Bureau of the Census for purposes relating to the 1990 decennial census of population shall not constitute ‘Federal service’ for purposes of section 8501 of title 5, United States Code.”

Pub. L. 101-86, Aug. 16, 1989, 103 Stat. 593, as amended by Pub. L. 101-293, § 1, May 17, 1990, 104 Stat. 192, provided that Federal annuitants or former members of the uniformed services who return to Government service under temporary appointments to assist in carrying out the 1990 decennial census of population would be exempt from certain provisions of Title 5, Government Organization and Employees, relating to offsets from pay and other benefits.

[Section 2 of Pub. L. 101-293 provided that amendment of Pub. L. 101-86 by Pub. L. 101-293 may not be considered to make an exemption under Pub. L. 101-86 applicable to any service performed before May 17, 1990, which was in excess of that allowable under Pub. L. 101-86 (as then in effect).]

#### POLICY AND PRACTICES OF BUREAU OF CENSUS REGARDING USE OF TEMPORARY STAFF; PUBLICATION

Pub. L. 97-454, § 3, Jan. 12, 1983, 96 Stat. 2494, provided that: “Not later than 180 days after the effective date of this Act [Jan. 12, 1983], the Secretary of Commerce shall publish in the Federal Register a statement of the policy and practices of the Bureau of the Census relating to the administration of section 23(c) of title 13, United States Code. Such statement shall include a description of—

“(1) the policy of the Secretary for the use of all individuals as temporary staff pursuant to such section 23(c) to assist the Bureau of the Census in performing work authorized under such title 13;

“(2) the functions for which the Secretary, in his discretion, may appoint temporary staff to assist the Bureau in performing work authorized under such title 13;

“(3) the practice applicable to the appointment of such temporary staff in performing such work;

“(4) the requirements and penalties under such title applicable to temporary staff performing such work, together with safeguards to ensure that such temporary staff will observe the limitations imposed in section 9 of such title.”

#### § 24. Special employment provisions

(a) The Secretary may utilize the services of nontemporary employees of the Bureau (by assignment, promotion, appointment, detail, or otherwise) in temporary positions established for any census, for not to exceed the period during which appropriations are available for that census. Whenever the Secretary determines that the services of an employee which have been utilized under this section are no longer required in such a temporary position, he may, without re-

gard to the provisions of any other law, return the employee to a continuing position, with rank and compensation not less than that which he held in his last permanent position in the Bureau: *Provided*, That no employee shall, by reason of his service in a temporary position under this subsection, lose the protection of any law or regulation with respect to his separation, suspension, furlough, or reduction in rank or compensation below the level held in his last permanent position in the Bureau. Service by a non-temporary employee in a temporary position under this subsection shall be creditable for step-increases (both periodic and longevity) under title VII of the Classification Act of 1949, as amended, as though it were a continuation of service in his last permanent position.

(b) As used in this title with respect to appointments or positions, "temporary" shall be construed to mean not in excess of one year, or not in excess of the specific period during which appropriations are available for the conduct of a particular census, whichever is longer. No employee of the Bureau who holds only a temporary appointment within the meaning of this section shall be considered as other than strictly temporary for purposes of any other provision of law relating to separations, suspensions, or reductions in rank or compensation.

(c) The enlisted men and officers of the uniformed services may be appointed and compensated for service in temporary enumerator positions for the enumeration of personnel of the uniformed services.

(d) The Secretary may fix compensation on a piece-price basis without limitation as to the amount earned per diem, and payments may be made to enumerators for the use of private automobiles on official business without regard to section 4 of the Travel Expense Act of 1949, as amended (5 U.S.C. 837), but at rates not in excess of the rates provided by that Act.

(e) The Secretary may authorize the expenditure of necessary sums for travel expenses of persons selected for appointment for attendance at training courses held by the Department of Commerce with respect to any of the work provided for by law.

(f) Notwithstanding any other provision of law prohibiting the expenditure of public money for telephone service, the Secretary, under such regulations as he shall prescribe, may authorize reimbursement for tolls or charges for telephone service from private residences or private apartments to the extent such charges are determined by the Secretary to have been incurred to facilitate the collection of information in connection with the censuses and surveys authorized by this title.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1015; Pub. L. 86-769, § 3, Sept. 13, 1960, 74 Stat. 911; Pub. L. 88-535, Aug. 31, 1964, 78 Stat. 744.)

#### HISTORICAL AND REVISION NOTES

Based on title 13, U.S.C., 1952 ed., §§ 111, 122, 203, 252, and section 1442 of title 42, U.S.C. 1952 ed., The Public Health and Welfare (Mar. 6, 1902, ch. 139, § 7, 32 Stat. 52; June 7, 1906, ch. 3048, 34 Stat. 218; June 18, 1929, ch. 28, § 3, 46 Stat. 21; 1939 Reorganization Plan No. II, § 4(e), eff. July 1, 1939, 4 F.R. 2731, 53 Stat. 1431; 1940 Reorganization Plan No. III, § 3, eff. June 30, 1940, 5 F.R. 2107,

54 Stat. 1232; June 25, 1947, ch. 124, 61 Stat. 163; June 19, 1948, ch. 502, § 2, 62 Stat. 479; July 6, 1949, ch. 298, §§ 1, 2, 63 Stat. 406; July 15, 1949, ch. 338, title VI, § 607, 63 Stat. 441; Oct. 28, 1949, ch. 782, title XI, § 1106(a), 63 Stat. 972; Sept. 7, 1950, ch. 910, §§ 2, 4, 64 Stat. 784, 785).

Section consolidates those provisions of sections 111, 122, 203 and 252 of title 13, U.S.C., 1952 ed., which related to appointment of special personnel for census work, collection of statistics, etc., and the use of permanent employees for such purpose, with that part of subsection (b) of section 1442 of title 42, U.S.C., 1952 ed., which made such section 203 applicable to housing censuses (subchapter II of chapter 5 of this title).

The provisions have been reworded to make it clear that they relate to all collections of statistics, censuses, etc., provided for in this title.

References to the Director of the Census have been changed to references to the Secretary (of Commerce) to conform with 1950 Reorganization Plan No. 5, §§ 1, 2, eff. May 24, 1950, 15 F.R. 3174, 64 Stat. 1263. See Revision Note to section 4 of this title.

Words "except that such special agents shall be appointed in accordance with the civil service laws" were omitted as obsolete and unnecessary in view of the Classification Act of 1949 (see 5 U.S.C., 1952 ed., ch. 21).

The provisions of section 203 of title 13, U.S.C., 1952 ed., relating to per diem rates of compensation for special agents, to authority to detail permanent employees and special agents to act as supervisors or enumerators, and to duties thereof, were omitted as obsolete and superseded by the Classification Act of 1949.

The provision of section 203 of title 13, U.S.C., 1952 ed., that the Director of the Census might delegate to the supervisors the authority to appoint enumerators, was omitted because all functions of the Director and other officers and employees of the Department of Commerce and its bureaus and agencies were transferred to the Secretary by 1950 Reorganization Plan No. 5, referred to above. However, section 4 of this title provides for delegation of functions by the Secretary.

Words "on a temporary basis" were inserted after "appointed" in subsection (a) for the purpose of clarity.

Changes were made in phraseology and arrangement. Remainder of section 203 of title 13, U.S.C., 1952 ed., is incorporated in this subchapter, and for remainder of sections 111, 122 and 252 thereof, and of section 1442 of title 42, U.S.C., 1952 ed. (which has been transferred in its entirety to this revised title), see Distribution Table.

#### REFERENCES IN TEXT

Title VII of the Classification Act of 1949, as amended, referred to in subsec. (a), is title VII of act Oct. 28, 1949, ch. 872, 63 Stat. 967, as amended, which was classified to sections 1121 to 1123 of former Title 5, Executive Departments and Government Officers and Employees, and was repealed by Pub. L. 89-554, § 8(a), Sept. 6, 1966, 80 Stat. 632, and reenacted by the first section thereof as sections 5335 and 5336 of Title 5, Government Organization and Employees.

Section 4 of the Travel Expense Act of 1949, as amended (5 U.S.C. 837), referred to in subsec. (d), was repealed by Pub. L. 89-554, § 8(a), Sept. 6, 1966, 80 Stat. 632, and reenacted by the first section thereof as section 5704 of Title 5.

#### AMENDMENTS

1964—Subsec. (f). Pub. L. 88-535 added subsec. (f).

1960—Pub. L. 86-769 amended section generally, and among other changes, permitted the utilization of non-temporary employees in temporary service, and their return, when the Secretary so determines, to a continuing position with rank and compensation not less than that of their last permanent position, with no loss of protection of any law or regulation with respect to their separation, suspension, furlough or reduction in rank or compensation below their last permanent position, provided that service by nontemporary employees in temporary positions is creditable for step-increases

as though a continuation of their last permanent positions, defined “temporary”, and provided for payments to enumerators for the use of private automobiles on official business.

SALARY PROTECTION FOR EMPLOYEES SUBJECT TO  
CLASSIFICATION ACT OF 1949

Special provisions of this section respecting utilization of nontemporary employees of the Bureau of the Census in temporary positions in connection with any census unaffected by provisions for salary protection to employees subject to Classification Act of 1949, see section 103 of Pub. L. 87-270, title I, Sept. 21, 1961, 75 Stat. 569.

**§ 25. Duties of supervisors, enumerators, and other employees**

(a) Each supervisor shall perform the duties imposed upon him by the Secretary in the enforcement of chapter 5 of this title in accordance with the Secretary's orders and instructions.

(b) Each enumerator or other employee detailed to serve as enumerator shall be charged with the collection in his subdivision of the facts and statistics called for on such schedules as the Secretary determines shall be used by him in connection with any census or survey provided for by chapter 5 of this title.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1015; Pub. L. 88-530, Aug. 31, 1964, 78 Stat. 737.)

HISTORICAL AND REVISION NOTES

Based on title 13, U.S.C., 1952 ed., §§ 122, 205, and section 1442 of title 42, U.S.C., 1952 ed., The Public Health and Welfare (June 18, 1929, ch. 28, § 5, 46 Stat. 22; June 19, 1948, ch. 502, § 2, 62 Stat. 479; July 15, 1949, ch. 338, title VI, § 607, 63 Stat. 441).

Section consolidates section 205 of title 13, U.S.C., 1952 ed., with that part of section 122 of such title which made such section 205 applicable to the surveys provided for by section 121 of such title (see subchapter IV of chapter 5), and with that part of subsection (b) of section 1442 of title 42, U.S.C., 1952 ed., which made such section 205 applicable to the censuses of housing.

References to the Secretary, meaning the Secretary of Commerce, were substituted for references to the Director of the Census, to conform with 1950 Reorganization Plan No. 5, §§ 1, 2, eff. May 24, 1950, 15 F.R. 3174, 64 Stat. 1263. See Revision Note to section 4 of this title.

Changes were made in phraseology and arrangement.

AMENDMENTS

1964—Subsec. (c). Pub. L. 88-530 repealed subsec. (c) which related to duties of enumerators in Bureau of the Census.

**§ 26. Transportation by contract**

The Secretary may contract with field employees for the rental and use within the continental limits of the United States of means of transportation, other than motorcycle, automobile, or airplane, and for the rental and use outside of the continental United States of any means of transportation, which means may be owned by the field employee. Such rental contracts shall be made without regard to section 4 of the Travel Expense Act of 1949, as amended (5 U.S.C. 837). The rentals shall be at rates equivalent to the prevailing rental rates of the locality. The rental contracts within the continental United States may be entered into only when the use by the field employee of such other means of transportation is safer, more economi-

cal, or more advantageous to the Government than use of his motorcycle, automobile, or airplane in conducting the census.

(Added Pub. L. 85-207, § 6, Aug. 28, 1957, 71 Stat. 482.)

REFERENCES IN TEXT

Section 4 of the Travel Expense Act of 1949, as amended (5 U.S.C. 837), referred to in text, was repealed by Pub. L. 89-554, § 8(a), Sept. 6, 1966, 80 Stat. 632, and reenacted by the first section thereof as section 5704 of Title 5, Government Organization and Employees.

**CHAPTER 3—COLLECTION AND  
PUBLICATION OF STATISTICS**

SUBCHAPTER I—COTTON

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| Sec.<br>41.<br>42.<br><br>43.<br>44.<br>45. | Collection and publication.<br>Contents of reports; number of bales of linter; distribution; publication by Department of Agriculture.<br>Records and reports of cotton ginner.<br>Foreign cotton statistics.<br>Simultaneous publication of cotton reports. |
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SUBCHAPTER II—OILSEEDS, NUTS, AND  
KERNELS; FATS, OILS, AND GREASES

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| 61.<br>62.<br>63. | Collection and publication.<br>Additional statistics.<br>Duplicate collection of statistics prohibited; access to available statistics. |
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SUBCHAPTER III—APPAREL AND TEXTILES

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| 81. | Statistics on apparel and textile industries. |
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SUBCHAPTER IV—QUARTERLY FINANCIAL  
STATISTICS

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| 91. | Collection and publication. |
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SUBCHAPTER V—MISCELLANEOUS

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| 101.<br>102.<br>103. | Defective, dependent, and delinquent classes; crime.<br>Religion.<br>Designation of reports. |
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AMENDMENTS

1986—Pub. L. 99-467, § 1(b), Oct. 14, 1986, 100 Stat. 1192, redesignated items for subchapters III and IV as subchapters IV and V, respectively, and added items for subchapter III and section 81.

1983—Pub. L. 97-454, § 1(b), Jan. 12, 1983, 96 Stat. 2494, redesignated item for subchapter III as subchapter IV and added items for subchapter III and section 91.

SUBCHAPTER I—COTTON

**§ 41. Collection and publication**

The Secretary shall collect and publish statistics concerning the—

- (1) amount of cotton ginned;
- (2) quantity of raw cotton consumed in manufacturing establishments of every character;
- (3) quantity of baled cotton on hand;
- (4) number of active consuming cotton spindles;
- (5) number of active spindle hours; and
- (6) quantity of cotton imported and exported, with the country of origin and destination.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1016.)

HISTORICAL AND REVISION NOTES

Based on title 13, U.S.C., 1952 ed., § 71 (Apr. 2, 1924, ch. 80, § 1, 43 Stat. 31; June 18, 1929, ch. 28, § 21, 46 Stat. 26).

“Secretary” was substituted for “Director of the Census” to conform with 1950 Reorganization Plan No. 5, §§1, 2, effective May 24, 1950, 15 F.R. 3174, 64 Stat. 1263. See Revision Note to section 4 of this title.

Changes were made in phraseology and arrangement.

**§ 42. Contents of reports; number of bales of lint-er; distribution; publication by Department of Agriculture**

(a) The statistics of the quantity of cotton ginned shall show the quantity ginned from each crop prior to August 1, September 1, September 15, October 1, October 15, November 1, November 15, December 1, December 15, January 1, January 15, February 1, and March 1; but the Secretary may limit the canvasses of August 1 and September 1 to those sections of the cotton-growing States in which cotton has been ginned.

(b) The quantity of cotton consumed in manufacturing establishments, the quantity of baled cotton on hand, the number of active consuming cotton spindles, the number of active spindle-hours, and the statistics of cotton imported and exported shall relate to each month, and shall be published as soon as possible after the close of the month.

(c) In collecting and publishing statistics of cotton on hand in warehouses and other storage establishments, and of cotton known as the “carry-over” in the United States, the Secretary shall ascertain and publish as a separate item in the report of cotton statistics the number of bales of linters as distinguished from the number of bales of cotton.

(d) The Secretary shall furnish to the Department of Agriculture, immediately prior to the publication of each report of that Department regarding the cotton crop, the latest available statistics hereinbefore mentioned, and the Department of Agriculture shall publish the same in connection with each of its reports concerning cotton.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1016; Pub. L. 92-331, § 4, June 30, 1972, 86 Stat. 400.)

**HISTORICAL AND REVISION NOTES**

Based on title 13, U.S.C., 1952 ed., §§72, 72a (Apr. 2, 1924, ch. 80, §2, 43 Stat. 31; June 18, 1929, ch. 28, §21, 46 Stat. 26; June 27, 1930, ch. 639, 46 Stat. 821; June 28, 1949, ch. 256, §1, 63 Stat. 278).

Section consolidates sections 72 and 72a of title 13, U.S.C., 1952 ed.

“Secretary” was substituted for “Director of the Census” to conform with 1950 Reorganization Plan No. 5, §§1, 2, effective May 24, 1950, 15 F.R. 3174, 64 Stat. 1263. See Revision Note to section 4 of this title.

Changes were made in phraseology and arrangement.

**AMENDMENTS**

1972—Subsec. (a). Pub. L. 92-331 substituted “September 1, September 15, October 1, October 15, November 1, November 15, December 1, December 15, January 1, January 15, February 1,” for “August 16, September 1, September 16, October 1, October 18, November 1, November 14, December 1, December 13, January 16,” and “September 1” for “August 16”.

**§ 43. Records and reports of cotton ginner**

Every cotton ginner shall keep a record of the county or parish in which each bale of cotton ginned by him is grown and report at the completion of the ginning season, but not later than

the March canvass, of each year a segregation of the total number of bales ginned by counties or parishes in which grown.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1016; Pub. L. 92-143, Oct. 15, 1971, 85 Stat. 393.)

**HISTORICAL AND REVISION NOTES**

Based on title 13, U.S.C., 1952 ed., §74 (Apr. 2, 1924, ch. 80, §4, 43 Stat. 32; June 18, 1929, ch. 28, §21, 46 Stat. 26; June 14, 1938, ch. 358, 52 Stat. 678).

Section was derived from second paragraph of section 74 of title 13, U.S.C., 1952 ed. For remainder of such section 74, see Distribution Table.

Changes were made in phraseology.

**AMENDMENTS**

1971—Pub. L. 92-143 inserted “completion of the ginning season, but not later than the”.

**§ 44. Foreign cotton statistics**

In addition to the information regarding cotton in the United States provided for in this subchapter, the Secretary shall compile, by correspondence or the use of published reports and documents, any available information concerning the production, consumption, and stocks of cotton in foreign countries, and the number of cotton-consuming spindles in such countries. Each report published by the Department of Commerce or agency or bureau thereof regarding cotton shall contain an abstract of the latest available information obtained under the provisions of this section, and the Secretary shall furnish the same to the Department of Agriculture for publication in connection with the reports of that department concerning cotton in the same manner as in the case of statistics relating to the United States.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1016.)

**HISTORICAL AND REVISION NOTES**

Based on title 13, U.S.C., 1952 ed., §75 (Apr. 2, 1924, ch. 80, §5, 43 Stat. 32; June 18, 1929, ch. 28, §21, 46 Stat. 26).

References to the Director of the Census were changed to references to the Secretary (of Commerce), and words “Department of Commerce or agency or bureau thereof” were substituted for “Bureau of the Census”, to conform with 1950 Reorganization Plan No. 5, §§1, 2, effective May 24, 1950, 15 F.R. 3174, 64 Stat. 1263. See Revision Note to section 4 of this title.

Changes were made in phraseology.

**§ 45. Simultaneous publication of cotton reports**

The reports of cotton ginned to the dates as of which the Department of Agriculture is also required to issue cotton crop reports shall be issued simultaneously with the cotton crop reports of that department, the two reports to be issued from the same place at 3 o'clock post-meridian on or before the 12th day of the month to which the respective reports relate.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1017; Pub. L. 92-331, §3, June 30, 1972, 86 Stat. 400.)

**HISTORICAL AND REVISION NOTES**

Based on title 13, U.S.C., 1952 ed., §76 (Apr. 2, 1924, ch. 80, §6, 43 Stat. 32; June 18, 1929, ch. 28, §21, 46 Stat. 26; June 28, 1949, ch. 256, §2, 63 Stat. 278).

**AMENDMENTS**

1972—Pub. L. 92-331 substituted provisions requiring the two reports to be issued from the same place at 3

o'clock postmeridian on or before the 12th day of the month to which the respective reports relate for provisions requiring the two reports to be issued from the same place at 11 o'clock antemeridian on the 8th day following that on which the respective reports relate, and struck out provisions setting forth the date of release in the event the original release date falls on a Sunday, legal holiday, or other nonworkday in the Department of Commerce at Washington.

## SUBCHAPTER II—OILSEEDS, NUTS, AND KERNELS; FATS, OILS, AND GREASES

### § 61. Collection and publication

(a) The Secretary shall collect, collate, and publish monthly statistics concerning—

(1) the quantities of—

(A) cotton seed, soybeans, peanuts, flaxseed, corn germs, copra, sesame seed, bassu nuts and kernels, and other oilseeds, nuts, and kernels received, crushed, and on hand at oil mills;

(B) crude and refined oils, cakes, and meals, and other primary products, by type or kind, of the seeds, nuts, and kernels referred to in clause (A) of this paragraph, manufactured, shipped out, and on hand at oil mills and processing establishments;

(C) crude and refined vegetable oils, by type or kind, used by class of product and held by manufacturers of vegetable shortening, margarine, soap, and other principal products using large quantities of vegetable oils;

(D) crude and refined vegetable oils, by type or kind, held in warehouses and in transit to consuming establishments; and

(2) the quantities, by types or kinds, of—

(A) animal fats and oils and greases produced;

(B) animal fats and oils and greases shipped and held by producers;

(C) animal fats and oils and greases, fish and marine mammal oils used by class of product and held by manufacturers of shortening, margarine, soap, and other principal products which require the use of large quantities of animal fats and oils and greases, fish and marine mammal oils;

(D) animal fats and oils and greases, fish and marine mammal oils held in warehouses, cold storage, and in transit to consuming establishments.

(b) The Secretary shall not be required to collect, more frequently than he deems necessary to provide reliable statistical reports, information from any person who produces, holds, or consumes fats and oils in inconsequential quantities.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1017.)

#### HISTORICAL AND REVISION NOTES

Based on title 13, U.S.C., 1952 ed., § 81 (Aug. 7, 1916, ch. 274, § 1, 39 Stat. 436; July 25, 1947, ch. 331, 61 Stat. 457).

References to the Secretary (of Commerce) were substituted for references to the Director of the Census, to conform with 1950 Reorganization Plan No. 5, §§ 1, 2, effective May 24, 1950, 15 F.R. 3174, 64 Stat. 1263. See Revision Note to section 4 of this title.

Changes were made in phraseology and arrangement.

### § 62. Additional statistics

This subchapter does not restrict or limit the Secretary in the collection and publication, under the general authority of the Secretary, of such statistics on fats and oils or products thereof not specifically required in this subchapter, as he deems to be in the public interest.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1018.)

#### HISTORICAL AND REVISION NOTES

Based on title 13, U.S.C., 1952 ed., § 85 (Aug. 7, 1916, ch. 274, § 5, as added July 25, 1947, ch. 331, 61 Stat. 457).

References to the Secretary (of Commerce) were substituted for reference to the Director of the Census and for reference to the Bureau (of the Census), to conform with 1950 Reorganization Plan No. 5, §§ 1, 2, effective May 24, 1950, 15 F.R. 3174, 64 Stat. 1263. See Revision Note to section 4 of this title.

Changes were made in phraseology.

### § 63. Duplicate collection of statistics prohibited; access to available statistics

Statistics required under Federal law, as of the effective date of this title, to be collected by any other Federal department or agency in a manner comparable both as to form and period of time to the collection of statistics provided for by this subchapter shall not be collected by the Secretary under the authority of this subchapter. Immediately upon his request, the Secretary shall have access to any such statistics and shall include them in the publication required by this subchapter.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1018.)

#### HISTORICAL AND REVISION NOTES

Based on title 13, U.S.C., 1952 ed., § 86 (Aug. 7, 1916, ch. 274, § 6, as added July 25, 1947, ch. 331, 61 Stat. 457).

References to the Secretary (of Commerce) were substituted for references to the Director of the Census to conform with 1950 Reorganization Plan No. 5, §§ 1, 2, effective May 24, 1950, 15 F.R. 3174, 64 Stat. 1263. See Revision Note to section 4 of this title.

Words “, as of the effective date of this title,” were inserted in the first sentence for the purpose of clarity.

Changes were made in phraseology.

#### REFERENCES IN TEXT

The effective date of this title, referred to in text, is Jan. 1, 1955.

## SUBCHAPTER III—APPAREL AND TEXTILES

### § 81. Statistics on apparel and textile industries

The Secretary shall collect and publish quarterly statistics relating to domestic apparel and textile industries.

(Added Pub. L. 99-467, § 1(a), Oct. 14, 1986, 100 Stat. 1192.)

## SUBCHAPTER IV—QUARTERLY FINANCIAL STATISTICS

#### AMENDMENTS

1986—Pub. L. 99-467, § 1(a), Oct. 14, 1986, 100 Stat. 1192, substituted “IV” for “III” as subchapter designation.

### § 91. Collection and publication

(a) The Secretary shall collect and publish quarterly financial statistics of business operations, organization, practices, management,

and relation to other businesses, including data on sales, expenses, profits, assets, liabilities, stockholders' equity, and related accounts generally used by businesses in income statements, balance sheets, and other measures of financial condition.

(b) Except to the extent determined otherwise by the Secretary on the basis of changed circumstances, the nature of statistics collected and published under this section, and the manner of the collection and publication of such statistics, shall conform to the quarterly financial reporting program carried out by the Federal Trade Commission before the effective date of this section under section 6(b) of the Federal Trade Commission Act.

(c) For purposes of section 6103(j)(1) of the Internal Revenue Code of 1986, the conducting of the quarterly financial report program under this section shall be considered as the conducting of a related statistical activity authorized by law.

(d)(1) The Secretary shall not select an organization or entity for participation in a survey, if—

- (A) the organization or entity—
  - (i) has assets of less than \$50,000,000;
  - (ii) completed participation in a prior survey in the preceding 10-year period, as determined by the Secretary; and
  - (iii) was selected for that prior survey participation after September 30, 1990; or
- (B) the organization or entity—
  - (i) has assets of more than \$50,000,000 and less than \$100,000,000;
  - (ii) completed participation in a prior survey in the preceding 2-year period, as determined by the Secretary; and
  - (iii) was selected for that prior survey participation after September 30, 1995.

(2)(A) The Secretary shall furnish advice and similar assistance to ease the burden of a small business concern which is attempting to compile and furnish the business information required of organizations and entities participating in the survey.

(B) To facilitate the provision of the assistance under subparagraph (A), the Secretary shall establish a toll-free telephone number.

(C) The Secretary shall expand the use of statistical sampling techniques to select organizations and entities having assets less than \$100,000,000 to participate in the survey.

(3) The Secretary may undertake such additional paperwork burden reduction initiatives with respect to the conduct of the survey as may be deemed appropriate by the Secretary.

(4) For purposes of this subsection:

(A) The term “small business concern” means a business concern that meets the requirements of section 3(a) of the Small Business Act and the regulations promulgated pursuant thereto.

(B) The term “survey” means the collection of information by the Secretary pursuant to this section for the purpose of preparing the publication entitled “Quarterly Financial Report for Manufacturing, Mining, and Trade Corporations”.

(Added Pub. L. 97-454, §1(a)(2), Jan. 12, 1983, 96 Stat. 2494; amended Pub. L. 99-514, §2, Oct. 22,

1986, 100 Stat. 2095; Pub. L. 104-13, §3, May 22, 1995, 109 Stat. 184.)

#### TERMINATION OF SECTION

*For termination of section by section 4(b) of Pub. L. 97-454, see Effective and Termination Date note below.*

#### REFERENCES IN TEXT

The effective date of this section, referred to in subsec. (b), is Jan. 12, 1983, see Effective and Termination Date note set out below.

Section 6(b) of the Federal Trade Commission Act, referred to in subsec. (b), is classified to section 46(b) of Title 15, Commerce and Trade.

Section 6103(j)(1) of the Internal Revenue Code of 1986, referred to in subsec. (c), is classified to section 6103(j)(1) of Title 26, Internal Revenue Code.

Section 3(a) of the Small Business Act, referred to in subsec. (d)(4)(A), is classified to section 632(a) of Title 15, Commerce and Trade.

#### AMENDMENTS

1995—Subsec. (d). Pub. L. 104-13 added subsec. (d).

1986—Subsec. (c). Pub. L. 99-514 substituted “Internal Revenue Code of 1986” for “Internal Revenue Code of 1954”.

#### EFFECTIVE DATE OF 1995 AMENDMENT

Amendment by Pub. L. 104-13 effective Oct. 1, 1995, see section 4(a) of Pub. L. 104-13, set out as an Effective Date note under section 3501 of Title 44, Public Printing and Documents.

#### EFFECTIVE AND TERMINATION DATE; REPORT TO CONGRESS

Pub. L. 97-454, §4, Jan. 12, 1983, 96 Stat. 2495, as amended by Pub. L. 101-227, §1, Dec. 12, 1989, 103 Stat. 1943; Pub. L. 103-105, §1(a), Oct. 12, 1993, 107 Stat. 1030; Pub. L. 105-252, §1, Oct. 9, 1998, 112 Stat. 1886; Pub. L. 109-79, §1, Sept. 30, 2005, 119 Stat. 2044, provided that:

“(a) This Act [enacting section 91 of this title and provisions set out as notes under sections 23 and 91 of this title] shall take effect on the date of the enactment of this Act [Jan. 12, 1983].

“(b) This Act, including the amendments made by this Act, shall cease to have effect after September 30, 2015.

“(c) Not later than 2 years after such effective date [Jan. 12, 1983], the Secretary of Commerce shall submit a report to the Congress regarding the administration of the program transferred by this Act [enacting section 91 of this title and provisions set out as notes under sections 23 and 91 of this title]. Such report shall describe—

“(1) the estimated respondent burden, including any changes in the estimated respondent burden after the transfer of such program;

“(2) the application made by various public and private organizations of the information published under such program; and

“(3) technical or administration problems encountered in carrying out such program.”

[Section 1(b) of Pub. L. 103-105 provided that: “The amendment made under subsection (a) [amending section 4 of Pub. L. 97-454, set out above] shall take effect on September 30, 1993.]

#### TRANSFER OF FUNCTIONS RELATING TO QUARTERLY FINANCIAL STATISTICS

Section 2 of Pub. L. 97-454, as amended by Pub. L. 99-514, §2, Oct. 22, 1986, 100 Stat. 2095, provided that:

“(a) There are transferred to the Secretary of Commerce, for administration under section 91 of title 13, United States Code, all functions relating to the quarterly financial report program which was carried out by the Federal Trade Commission before the effective date of this Act [Jan. 12, 1983] pursuant to the author-

ity of section 6(b) of the Federal Trade Commission Act (15 U.S.C. 46(b)).

“(b) All personnel, property, and records of the Federal Trade Commission which the Director of the Office of Management and Budget determines, after consultation with the Secretary of Commerce and the Chairman of the Federal Trade Commission, to be employed, held, or used in connection with any function relating to the quarterly financial report program shall be transferred to the Department of Commerce. For purposes of sections 6103, 7213, and 7431, and other provisions of the Internal Revenue Code of 1986 [26 U.S.C. 6103, 7213, 7431], return information (as defined in section 6103(b) of such Code) which is transferred under this subsection shall be treated as if it were furnished to the Bureau of the Census under section 6103(j)(1) of such Code solely for administering the quarterly financial report program under section 91 of title 13, United States Code. Such transfer shall be carried out not later than 90 days after the effective date of this Act [Jan. 12, 1983].”

## SUBCHAPTER V—MISCELLANEOUS

### AMENDMENTS

1986—Pub. L. 99-467, §1(a), Oct. 14, 1986, 100 Stat. 1192, substituted “V” for “IV” as subchapter designation.

1983—Pub. L. 97-454, §1(a)(1), Jan. 12, 1983, 96 Stat. 2494, substituted “IV” for “III” as subchapter designation.

### § 101. Defective, dependent, and delinquent classes; crime

(a) The Secretary may collect decennially statistics relating—

- (1) to the defective, dependent, and delinquent classes; and
- (2) to crime, including judicial statistics pertaining thereto.

(b) The statistics authorized by subsection (a) of this section shall include information upon the following questions, namely: age, sex, color, nativity, parentage, literacy by race, color, nativity, and parentage, and such other questions relating to such subjects as the Secretary deems proper.

(c) In addition to the decennial collections authorized by subsections (a) and (b) of this section, the Secretary may compile and publish annually statistics relating to crime and to the defective, dependent, and delinquent classes.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1018.)

#### HISTORICAL AND REVISION NOTES

Based on title 13, U.S.C., 1952 ed., §§111, 113 (Mar. 6, 1902, ch. 139, §7, 32 Stat. 52; June 7, 1906, ch. 3048, 34 Stat. 218; June 18, 1929, ch. 28, §3, 46 Stat. 21; Mar. 4, 1931, ch. 490, 46 Stat. 1517; 1939 Reorganization Plan No. II, §4(e), eff. July 1, 1939, 4 F.R. 2731, 53 Stat. 1431; 1940 Reorganization Plan No. III, §3, 5 F.R. 2107, 54 Stat. 1232; June 25, 1947, ch. 124, 61 Stat. 163; Sept. 7, 1950, ch. 910, §4, 64 Stat. 785).

Section consolidates part of section 111 of title 13, U.S.C., 1952 ed., with section 113 of such title which also related to statistics with respect to crime and to the “defective, dependent, and delinquent classes”.

“Secretary”, meaning the Secretary of Commerce, was substituted for “Director of the Census” to conform with Reorganization Plan No. 5, §1, 2, eff. May 24, 1950, 15 F.R. 3174, 64 Stat. 1263. See Revision Note to section 4 of this title.

The provisions of section 111 of title 13, U.S.C., 1952 ed., authorizing statistics relating to transportation by water, and express business, to mines, mining, quarries, and minerals, to savings banks and other savings institutions, mortgage, loan, and investment companies,

and similar institutions, and to street railways, electric light and power, telephone, and telegraph business, were omitted as superseded and covered by sections 121-123 of such title (enacted in 1948), which are set out elsewhere in this title. See Distribution Table.

Section 111 of title 13, U.S.C., 1952 ed., also authorized the decennial collection of statistics relating to the fishing industry “in cooperation with the Fish and Wildlife Service”. In the basic statutory provision (see amendment by act June 7, 1906, ch. 3048, 34 Stat. 218, “Fish and Wildlife Service” read “Bureau of Fisheries” and it was changed, by the codifiers, in such section 111 to the former designation because of 1940 Reorganization Plan No. III, §3, 5 F.R. 2107, 54 Stat. 1232, which consolidated the Bureau of Fisheries and the Bureau of Biological Survey into one agency to be known as the “Fish and Wildlife Service”. However, at the time of the enactment of the 1906 act, referred to above, both the Bureau of the Fisheries, and the Census Bureau (then referred to as the “Census Office”), were in the Department of Commerce. The Bureau of Fisheries was transferred to the Department of the Interior by 1939 Reorganization Plan No. II, §4(e), 4 F.R. 2731, 53 Stat. 1431, and it is within that department that the Fish and Wildlife Service now functions. Therefore, such provision in section 111 of title 13, U.S.C., 1952 ed., has been omitted from this revised title as obsolete. In any event section 121 of title 13, U.S.C., 1952 ed. (subchapter I of chapter 5 of this revised title) is broad enough to authorize such collection.

The provisions of section 111 of title 13, U.S.C., 1952 ed., which authorized statistics relating to religion, and the provisions thereof which related to the designation of reports, are set out as separate sections in this subchapter; and the provisions thereof which related to the preparation of schedules, and which authorized the appointment of special agents, are set out in chapter 1 of this title. See Distribution Table.

The proviso in section 111 of title 13, U.S.C., 1952 ed., which prohibited the collection of statistics relating to religious or church membership when the disclosure of such information was prohibited by religious or church doctrine, teaching or discipline, has been incorporated in chapter 7 of this title. See Distribution Table.

### § 102. Religion

The Secretary may collect decennially statistics relating to religious bodies.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1018.)

#### HISTORICAL AND REVISION NOTES

Based on title 13, U.S.C., 1952 ed., §111 (Mar. 6, 1902, ch. 139, §7, 32 Stat. 52; June 7, 1906, ch. 3048, 34 Stat. 218; June 18, 1929, ch. 28, §3, 46 Stat. 21; 1939 Reorganization Plan No. II, §4(e), eff. July 1, 1939, 4 F.R. 2731, 53 Stat. 1431; 1940 Reorganization Plan No. III, §3, eff. June 30, 1940, 5 F.R. 2107, 54 Stat. 1232; June 25, 1947, ch. 124, 61 Stat. 163; Sept. 7, 1950, ch. 910, §4, 64 Stat. 785).

Section was taken from that part of section 111 of title 13, U.S.C., 1952 ed., which related to statistics on religion. For remainder of such section 111, see this subchapter and Distribution Table.

Changes were made in phraseology.

### § 103. Designation of reports

All reports covering any of the statistics collected under the provisions of this subchapter shall be designated as “Special Reports” followed by the name of whatever bureau or agency of the Department of Commerce is designated by the Secretary to collect and compile such statistics.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1018.)

#### HISTORICAL AND REVISION NOTES

Based on title 13, U.S.C., 1952 ed., §111 (Mar. 6, 1902, ch. 139, §7, 32 Stat. 52; June 7, 1906, ch. 3048, 34 Stat. 218;

June 18, 1929, ch. 28, §3, 46 Stat. 21; 1939 Reorganization Plan No. II, §4(e), eff. July 1, 1939, 4 F.R. 2731, 53 Stat. 1431; 1940 Reorganization Plan No. III, §3, eff. June 30, 1940, 5 F.R. 2107, 54 Stat. 1232; June 25, 1947, ch. 124, 61 Stat. 163; Sept. 7, 1950, ch. 910, §4, 64 Stat. 785).

Section was taken from that part of section 111 of title 13, U.S.C., 1952 ed., which related to designation of reports prepared under that section. For remainder of such section 111, see this subchapter, and Distribution Table.

Section 111 of title 13, U.S.C. 1952 ed., provided that the reports prepared under the provisions of that section should be designated as "Special Reports of the Census Office". In this revised section it is provided that such reports shall be designated as "Special Reports" followed by the name of whatever bureau or agency of the Department of Commerce is designated by the Secretary to collect and compile such statistics". This change conforms with 1950 Reorganization Plan No. 5, §§1, 2, eff. May 24, 1950, 15 F.R. 3174, 64 Stat. 1263, which transferred the functions of all agencies, bureaus, officers, and employees of the Department of Commerce to the Secretary, and vested power in him to delegate any of such transferred functions, or any of his other functions, to any of such agencies, bureaus, officers, or employees. See section 4 of this title.

Changes were made in phraseology.

Section 7 of the act of Mar. 6, 1902, ch. 139, 32 Stat. 52, cited above, from which section 111 of title 13, U.S.C., 1952 ed., was derived, contained additional provisions (which were not classified to the United States Code) relating to the duty of the Director of the Census to publish the Official Register of the United States, and to the transmission to him of the data to be included therein. Such provisions have been omitted as they were superseded by act Mar. 3, 1925, ch. 421, §2(a)(b), 43 Stat. 1105, which was formerly classified to section 3 of title 13, U.S.C., 1952 ed., and which, in turn, was repealed by section 5 of act Aug. 28, 1935, ch. 795, 49 Stat. 957, and superseded by sections 1 and 2 of that act. Such sections 1 and 2, as amended, are classified to section 654 of title 5, U.S.C., 1952 ed., Executive Departments and Government Officers and Employees. Under that section, the Official Register is published by the Civil Service Commission. Provisions relating to its distribution are contained in sections 139, 139a and 280a of title 44, U.S.C., 1952 ed., Public Printing and Documents.

## CHAPTER 5—CENSUSES

### SUBCHAPTER I—MANUFACTURES, MINERAL INDUSTRIES, AND OTHER BUSINESSES

- Sec.  
131. Collection and publication; five-year periods.  
132. Controlling law; effect on other agencies.

### SUBCHAPTER II—POPULATION, HOUSING, AND UNEMPLOYMENT

141. Population and other census information.  
[142 to 146. Repealed.]

### SUBCHAPTER III—GOVERNMENTS

161. Quinquennial censuses; inclusion of certain data.  
[162. Repealed.]  
163. Authority of other agencies.<sup>1</sup>

### SUBCHAPTER IV—INTERIM CURRENT DATA

181. Population.  
182. Surveys.  
183. Use of most recent population data.  
184. Definitions.

### SUBCHAPTER V—GEOGRAPHIC SCOPE, PRELIMINARY AND SUPPLEMENTAL STATISTICS, AND USE OF SAMPLING

191. Geographic scope of censuses.

193. Preliminary and supplemental statistics.  
195. Use of sampling.  
196. Special censuses.

#### AMENDMENTS

1997—Pub. L. 105-113, §3(b)(2), Nov. 21, 1997, 111 Stat. 2275, substituted "POPULATION, HOUSING, AND UNEMPLOYMENT" for "POPULATION, HOUSING, AGRICULTURE, IRRIGATION, AND UNEMPLOYMENT" in the item for subchapter II, and struck out item 142 "Agriculture and irrigation".

1986—Pub. L. 99-544, §1(c), Oct. 27, 1986, 100 Stat. 3046, substituted "IRRIGATION, AND UNEMPLOYMENT" for "IRRIGATION, DRAINAGE, AND UNEMPLOYMENT" in item for subchapter II, and "Agriculture and irrigation" for "Agriculture, irrigation, and drainage" in item 142.

1976—Pub. L. 94-521, §§7(b), 8(b), 11(b), Oct. 17, 1976, 90 Stat. 2462-2464, substituted "Population and other census information" for "Population, unemployment, and housing" in item 141, without reference to amendment thereto by Pub. L. 94-171, and added items 181 to 184 and 196, respectively.

1975—Pub. L. 94-171, §2(b), Dec. 23, 1975, 89 Stat. 1024, inserted "; tabulation for legislative apportionment" in item 141.

1957—Pub. L. 85-207, §7, Aug. 28, 1957, 71 Stat. 482, in amending analysis generally, substituted "MANUFACTURES" for "MANUFACTURERS" in item for subchapter I; substituted in item 141 "Population, unemployment, and housing" for "Population, agriculture, irrigation, drainage, and unemployment; territory included", and in item 142 "Agriculture, irrigation, and drainage." for "Housing, scope of inquiries; territory included; supplementary statistics.", struck out items 143 to 146, 162 and 163; and added Subchapter V.

### SUBCHAPTER I—MANUFACTURES, MINERAL INDUSTRIES, AND OTHER BUSINESSES

#### § 131. Collection and publication; five-year periods

The Secretary shall take, compile, and publish censuses of manufactures, of mineral industries, and of other businesses, including the distributive trades, service establishments, and transportation (exclusive of means of transportation for which statistics are required by law to be filed with, and are compiled and published by, a designated regulatory body), in the year 1964, then in the year 1968, and every fifth year thereafter, and each such census shall relate to the year immediately preceding the taking thereof. (Aug. 31, 1954, ch. 1158, 68 Stat. 1019; Pub. L. 85-207, §8, Aug. 28, 1957, 71 Stat. 482; Pub. L. 88-532, Aug. 31, 1964, 78 Stat. 737.)

#### HISTORICAL AND REVISION NOTES

Based on title 13, U.S.C., 1952 ed., §121 (June 19, 1948, ch. 502, §1, 62 Stat. 478; June 18, 1954, ch. 315, 68 Stat. 258).

Section was subsection (a) of section 121 of title 13, U.S.C., 1952 ed. The remainder of such section 121, which constituted subsection (b) thereof, is incorporated in subchapter IV of this chapter.

At the beginning, "The Secretary", meaning the Secretary of Commerce, was substituted for a reference to the Director of the Bureau of the Census, and, at the end, the provision that the territorial scope of the censuses should be determined by the Secretary was substituted for the provision of section 121 of title 13, U.S.C., 1952 ed., that such determination should be made by the Director with the approval of the Secretary, to conform with 1950 Reorganization Plan No. 5, §§1, 2, eff. May 24, 1950, 15 F.R. 3174, 64 Stat. 1263, which

<sup>1</sup> Item 163 editorially inserted because section 163 is still in existence. Item 163 was eliminated in the general amendment of analysis by Pub. L. 85-207, §7, Aug. 28, 1957, 71 Stat. 482.

transferred all functions of all officers and employees, agencies and bureaus of the Department of Commerce to the Secretary. However, the Secretary, under that plan, may delegate any of such transferred functions, as well as any other of his functions, to any of such officers, employees, agencies and bureaus. See, also, section 4 of this title.

The reference in section 121 of title 13, U.S.C., 1952 ed., to the year “1949” as the year for commencement of the quinquennial censuses was changed to the year “1954”, since the former designation is obsolete, and the provision of such section that the census of manufacturers should not be taken in 1949 was omitted as obsolete.

Changes were made in phraseology.

#### AMENDMENTS

1964—Pub. L. 88-532 substituted “in the year 1964, then in the year 1968, and” for “in the year 1954 and” and struck out provisions which related to the taking of certain censuses in the year 1955.

1957—Pub. L. 85-207 struck out sentence which included the United States and its territories and such possessions as the Secretary might determine in the censuses to be taken. See section 191 of this title.

#### CENSUS DATA ON WOMEN OWNED BUSINESSES; STUDY AND REPORT

Pub. L. 100-533, title V, § 501, Oct. 25, 1988, 102 Stat. 2697, provided that:

“(a) BUREAU OF LABOR STATISTICS.—The Bureau of Labor Statistics of the Department of Labor shall include in any census report it may prepare on women owned business data on—

- “(1) sole proprietorships;
- “(2) partnerships; and
- “(3) corporations.

“(b) BUREAU OF THE CENSUS.—The Bureau of the Census of the Department of Commerce shall include in its Business Census for 1992 and each such succeeding census data on the number of corporations which are 51 per centum or more owned by women.

“(c) COMBINED STUDY.—Not later than one hundred and eighty days after the effective date of this section [Oct. 25, 1988], the Office of the Chief Counsel for Advocacy of the Small Business Administration (hereinafter referred to in this subsection as the ‘Office’) shall conduct a study and prepare a report recommending the most cost effective and accurate means to gather and present the data required to be collected pursuant to subsections (a) and (b). The Department of Commerce and the Department of Labor shall provide the Office such assistance and cooperation as may be necessary and appropriate to achieve the purposes of this subsection.”

### § 132. Controlling law; effect on other agencies

To the extent that the provisions of this subchapter or subchapter IV of this chapter conflict with any other provision of this title or other law, pertaining to the Secretary of the Department of Commerce, the provisions of this title shall control; but nothing in this title shall be deemed to revoke or impair the authority of any other Federal agency with respect to the collection or release of information.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1019.)

#### HISTORICAL AND REVISION NOTES

Based on title 13, U.S.C., 1952 ed., § 123 (June 19, 1948, ch. 502, § 3, 62 Stat. 479).

Section was derived from all of section 123 of title 13, U.S.C., 1952 ed., except the first sentence. That sentence is incorporated with other provisions in chapter 1 of this title. See Distribution Table.

The reference “Secretary or Department of Commerce” was substituted for reference to the Bureau of

the Census to conform with 1950 Reorganization Plan No. 5, §§ 1, 2, eff. May 24, 1950, 15 F.R. 3174, 64 Stat. 1263. See Revision Note to section 4 of this title.

Changes were made in phraseology.

### SUBCHAPTER II—POPULATION, HOUSING, AND UNEMPLOYMENT

#### AMENDMENTS

1997—Pub. L. 105-113, § 3(b)(1), Nov. 21, 1997, 111 Stat. 2275, substituted “POPULATION, HOUSING, AND UNEMPLOYMENT” for “POPULATION, HOUSING, AGRICULTURE, IRRIGATION, AND UNEMPLOYMENT”.

1986—Pub. L. 99-544, § 1(b), Oct. 27, 1986, 100 Stat. 3046, struck out “DRAINAGE” after “IRRIGATION”.

### § 141. Population and other census information

(a) The Secretary shall, in the year 1980 and every 10 years thereafter, take a decennial census of population as of the first day of April of such year, which date shall be known as the “decennial census date”, in such form and content as he may determine, including the use of sampling procedures and special surveys. In connection with any such census, the Secretary is authorized to obtain such other census information as necessary.

(b) The tabulation of total population by States under subsection (a) of this section as required for the apportionment of Representatives in Congress among the several States shall be completed within 9 months after the census date and reported by the Secretary to the President of the United States.

(c) The officers or public bodies having initial responsibility for the legislative apportionment or districting of each State may, not later than 3 years before the decennial census date, submit to the Secretary a plan identifying the geographic areas for which specific tabulations of population are desired. Each such plan shall be developed in accordance with criteria established by the Secretary, which he shall furnish to such officers or public bodies not later than April 1 of the fourth year preceding the decennial census date. Such criteria shall include requirements which assure that such plan shall be developed in a nonpartisan manner. Should the Secretary find that a plan submitted by such officers or public bodies does not meet the criteria established by him, he shall consult to the extent necessary with such officers or public bodies in order to achieve the alterations in such plan that he deems necessary to bring it into accord with such criteria. Any issues with respect to such plan remaining unresolved after such consultation shall be resolved by the Secretary, and in all cases he shall have final authority for determining the geographic format of such plan. Tabulations of population for the areas identified in any plan approved by the Secretary shall be completed by him as expeditiously as possible after the decennial census date and reported to the Governor of the State involved and to the officers or public bodies having responsibility for legislative apportionment or districting of such State, except that such tabulations of population of each State requesting a tabulation plan, and basic tabulations of population of each other State, shall, in any event, be completed, reported, and transmitted to each respective State within one year after the decennial census date.

(d) Without regard to subsections (a), (b), and (c) of this section, the Secretary, in the year 1985 and every 10 years thereafter, shall conduct a mid-decade census of population in such form and content as he may determine, including the use of sampling procedures and special surveys, taking into account the extent to which information to be obtained from such census will serve in lieu of information collected annually or less frequently in surveys or other statistical studies. The census shall be taken as of the first day of April of each such year, which date shall be known as the "mid-decade census date".

(e)(1) If—

(A) in the administration of any program established by or under Federal law which provides benefits to State or local governments or to other recipients, eligibility for or the amount of such benefits would (without regard to this paragraph) be determined by taking into account data obtained in the most recent decennial census, and

(B) comparable data is obtained in a mid-decade census conducted after such decennial census,

then in the determination of such eligibility or amount of benefits the most recent data available from either the mid-decade or decennial census shall be used.

(2) Information obtained in any mid-decade census shall not be used for apportionment of Representatives in Congress among the several States, nor shall such information be used in prescribing congressional districts.

(f) With respect to each decennial and mid-decade census conducted under subsection (a) or (d) of this section, the Secretary shall submit to the committees of Congress having legislative jurisdiction over the census—

(1) not later than 3 years before the appropriate census date, a report containing the Secretary's determination of the subjects proposed to be included, and the types of information to be compiled, in such census;

(2) not later than 2 years before the appropriate census date, a report containing the Secretary's determination of the questions proposed to be included in such census; and

(3) after submission of a report under paragraph (1) or (2) of this subsection and before the appropriate census date, if the Secretary finds new circumstances exist which necessitate that the subjects, types of information, or questions contained in reports so submitted be modified, a report containing the Secretary's determination of the subjects, types of information, or questions as proposed to be modified.

(g) As used in this section, "census of population" means a census of population, housing, and matters relating to population and housing.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1019; Pub. L. 85-207, § 9, Aug. 28, 1957, 71 Stat. 483; Pub. L. 94-171, §§ 1, 2(a), Dec. 23, 1975, 89 Stat. 1023, 1024; Pub. L. 94-521, § 7(a), Oct. 17, 1976, 90 Stat. 2461.)

#### HISTORICAL AND REVISION NOTES

Based on title 13, U.S.C., 1952 ed., § 201 (June 18, 1929, ch. 28, § 1, 46 Stat. 21; May 17, 1932, ch. 190, 47 Stat. 158).

References to the Secretary, meaning the Secretary of Commerce, were substituted for references to the Di-

rector of the Census, to conform with 1950 Reorganization Plan No. 5, §§ 1, 2, eff. May 24, 1950, 15 F.R. 3174, 64 Stat. 1263. See Revision Note to section 4 of this title.

The provision for taking the censuses in "1930 and every ten years thereafter" was changed to "1960 and every ten years thereafter" since the censuses for the years 1930, 1940 and 1950 have been completed.

The requirement that decennial censuses of "distribution" and "mines" should also be taken was omitted as superseded by section 121 of title 13, U.S.C., 1952 ed. (enacted in 1948), the provisions of which were carried into subchapter I of this chapter.

Section 1442 of title 42, U.S.C., 1952 ed., the Public Health and Welfare (which section has been transferred in its entirety to this revised title), made all provisions of chapter 4 of title 13, U.S.C., 1952 ed., applicable to the housing censuses provided for in such section. However, section 201 of such title 13 (which section was a part of such chapter 4), which, as indicated above, has been carried into this revised section, could not, except, possibly, for the provisions thereof relating to the territorial scope of the censuses and to the census duties of the governors of Guam, Samoa, the Virgin Islands, and the Canal Zone, have any relevancy to such housing censuses, and such section 1442 of title 42, U.S.C., 1952 ed., contained its own provisions relating to territorial scope of the housing censuses. Therefore the provisions of this revised section have not been made so applicable.

Changes were made in phraseology.

#### AMENDMENTS

1976—Pub. L. 94-521 substituted "Population and other census information" for "Population, unemployment, and housing" in section catchline, without reference to amendment of catchline by Pub. L. 94-171.

Subsec. (a). Pub. L. 94-521 substituted "1980" for "1960" and "decennial census of population" for "census of population, unemployment, and housing (including utilities and equipment)", inserted "of such year" after "April", substituted "which date shall be known as the decennial census date" for "which shall be known as the census date", and inserted provisions authorizing the Secretary to take the decennial census in whatever form and content he determines, using sampling procedures and special surveys, and authorizing him to obtain other such census information as is necessary, in connection with the decennial census.

Subsec. (b). Pub. L. 94-521 inserted "under subsection (a) of this section" after "population by States", inserted "in Congress among the several States" after "Representatives", and substituted "9 months after the census date" for "eight months of the census date".

Subsec. (c). Pub. L. 94-521 substituted "the decennial census date" for "the census date" wherever appearing.

Subsecs. (d) to (g). Pub. L. 94-521 added subsecs. (d) to (g).

1975—Pub. L. 94-171, § 2(a), inserted "tabulation for legislative apportionment" in section catchline.

Subsec. (c). Pub. L. 94-171, § 1, added subsec. (c).

1957—Pub. L. 85-207 substituted "Population, unemployment, and housing" for "Population, agriculture, irrigation, drainage, and unemployment; territory excluded" in section catchline; inserted in text housing census provisions, struck out census coverage of agriculture, irrigation, and drainage and geographical provisions, and designated existing provisions as so amended as subsec. (a); and added subsec. (b). Census of agriculture, irrigation, and drainage and the geographical provisions are covered by sections 142 and 191 of this title.

#### EFFECTIVE DATE OF 1976 AMENDMENT

Amendment by Pub. L. 94-521 effective Oct. 17, 1976, see section 17 of Pub. L. 94-521, set out as a note under section 1 of this title.

#### STATISTICAL SAMPLING OR ADJUSTMENT IN DECENNIAL ENUMERATION OF POPULATION

Pub. L. 105-119, title II, § 209, Nov. 26, 1997, 111 Stat. 2480, provided that:

“(a) Congress finds that—

“(1) it is the constitutional duty of the Congress to ensure that the decennial enumeration of the population is conducted in a manner consistent with the Constitution and laws of the United States;

“(2) the sole constitutional purpose of the decennial enumeration of the population is the apportionment of Representatives in Congress among the several States;

“(3) section 2 of the 14th article of amendment to the Constitution clearly states that Representatives are to be ‘apportioned among the several States according to their respective numbers, counting the whole number of persons in each State’;

“(4) article I, section 2, clause 3 of the Constitution clearly requires an ‘actual Enumeration’ of the population, and section 195 of title 13, United States Code, clearly provides ‘Except for the determination of population for purposes of apportionment of Representatives in Congress among the several States, the Secretary shall, if he considers it feasible, authorize the use of the statistical method known as “sampling” in carrying out the provisions of this title.’;

“(5) the decennial enumeration of the population is one of the most critical constitutional functions our Federal Government performs;

“(6) it is essential that the decennial enumeration of the population be as accurate as possible, consistent with the Constitution and laws of the United States;

“(7) the use of statistical sampling or statistical adjustment in conjunction with an actual enumeration to carry out the census with respect to any segment of the population poses the risk of an inaccurate, invalid, and unconstitutional census;

“(8) the decennial enumeration of the population is a complex and vast undertaking, and if such enumeration is conducted in a manner that does not comply with the requirements of the Constitution or laws of the United States, it would be impracticable for the States to obtain, and the courts of the United States to provide, meaningful relief after such enumeration has been conducted; and

“(9) Congress is committed to providing the level of funding that is required to perform the entire range of constitutional census activities, with a particular emphasis on accurately enumerating all individuals who have historically been undercounted, and toward this end, Congress expects—

“(A) aggressive and innovative promotion and outreach campaigns in hard-to-count communities;

“(B) the hiring of enumerators from within those communities;

“(C) continued cooperation with local government on address list development; and

“(D) maximized census employment opportunities for individuals seeking to make the transition from welfare to work.

“(b) Any person aggrieved by the use of any statistical method in violation of the Constitution or any provision of law (other than this Act [see Tables for classification]), in connection with the 2000 or any later decennial census, to determine the population for purposes of the apportionment or redistricting of Members in Congress, may in a civil action obtain declaratory, injunctive, and any other appropriate relief against the use of such method.

“(c) For purposes of this section—

“(1) the use of any statistical method as part of a dress rehearsal or other simulation of a census in preparation for the use of such method, in a decennial census, to determine the population for purposes of the apportionment or redistricting of Members in Congress shall be considered the use of such method in connection with that census; and

“(2) the report ordered by title VIII of Public Law 105-18 [111 Stat. 217] and the Census 2000 Operational Plan shall be deemed to constitute final agency action regarding the use of statistical methods in the 2000 decennial census, thus making the question of

their use in such census sufficiently concrete and final to now be reviewable in a judicial proceeding.

“(d) For purposes of this section, an aggrieved person (described in subsection (b)) includes—

“(1) any resident of a State whose congressional representation or district could be changed as a result of the use of a statistical method challenged in the civil action;

“(2) any Representative or Senator in Congress; and

“(3) either House of Congress.

“(e)(1) Any action brought under this section shall be heard and determined by a district court of three judges in accordance with section 2284 of title 28, United States Code. The chief judge of the United States court of appeals for each circuit shall, to the extent practicable and consistent with the avoidance of unnecessary delay, consolidate, for all purposes, in one district court within that circuit, all actions pending in that circuit under this section. Any party to an action under this section shall be precluded from seeking any consolidation of that action other than is provided in this paragraph. In selecting the district court in which to consolidate such actions, the chief judge shall consider the convenience of the parties and witnesses and efficient conduct of such actions. Any final order or injunction of a United States district court that is issued pursuant to an action brought under this section shall be reviewable by appeal directly to the Supreme Court of the United States. Any such appeal shall be taken by a notice of appeal filed within 10 days after such order is entered; and the jurisdictional statement shall be filed within 30 days after such order is entered. No stay of an order issued pursuant to an action brought under this section may be issued by a single Justice of the Supreme Court.

“(2) It shall be the duty of a United States district court hearing an action brought under this section and the Supreme Court of the United States to advance on the docket and to expedite to the greatest possible extent the disposition of any such matter.

“(f) Any agency or entity within the executive branch having authority with respect to the carrying out of a decennial census may in a civil action obtain a declaratory judgment respecting whether or not the use of a statistical method, in connection with such census, to determine the population for the purposes of the apportionment or redistricting of Members in Congress is forbidden by the Constitution and laws of the United States.

“(g) The Speaker of the House of Representatives or the Speaker’s designee or designees may commence or join in a civil action, for and on behalf of the House of Representatives, under any applicable law, to prevent the use of any statistical method, in connection with the decennial census, to determine the population for purposes of the apportionment or redistricting of Members in Congress. It shall be the duty of the Office of the General Counsel of the House of Representatives to represent the House in such civil action, according to the directions of the Speaker. The Office of the General Counsel of the House of Representatives may employ the services of outside counsel and other experts for this purpose.

“(h) For purposes of this section and section 210 [set out below]—

“(1) the term ‘statistical method’ means an activity related to the design, planning, testing, or implementation of the use of representative sampling, or any other statistical procedure, including statistical adjustment, to add or subtract counts to or from the enumeration of the population as a result of statistical inference; and

“(2) the term ‘census’ or ‘decennial census’ means a decennial enumeration of the population.

“(i) Nothing in this Act shall be construed to authorize the use of any statistical method, in connection with a decennial census, for the apportionment or redistricting of Members in Congress.

“(j) Sufficient funds appropriated under this Act or under any other Act for purposes of the 2000 decennial

census shall be used by the Bureau of the Census to plan, test, and become prepared to implement a 2000 decennial census, without using statistical methods, which shall result in the percentage of the total population actually enumerated being as close to 100 percent as possible. In both the 2000 decennial census, and any dress rehearsal or other simulation made in preparation for the 2000 decennial census, the number of persons enumerated without using statistical methods must be publicly available for all levels of census geography which are being released by the Bureau of the Census for: (1) all data releases before January 1, 2001; (2) the data contained in the 2000 decennial census Public Law 94-171 [amending this section] data file released for use in redistricting; (3) the Summary Tabulation File One (STF-1) for the 2000 decennial census; and (4) the official populations of the States transmitted from the Secretary of Commerce through the President to the Clerk of the House used to reapportion the districts of the House among the States as a result of the 2000 decennial census. Simultaneously with any other release or reporting of any of the information described in the preceding sentence through other means, such information shall be made available to the public on the Internet. These files of the Bureau of the Census shall be available concurrently to the release of the original files to the same recipients, on identical media, and at a comparable price. They shall contain the number of persons enumerated without using statistical methods and any additions or subtractions thereto. These files shall be based on data gathered and generated by the Bureau of the Census in its official capacity.

“(k) This section shall apply in fiscal year 1998 and succeeding fiscal years.”

#### CENSUS MONITORING BOARD

Pub. L. 105-119, title II, §210(a)-(j), Nov. 26, 1997, 111 Stat. 2483-2487, provided that:

“(a) There shall be established a board to be known as the Census Monitoring Board (hereafter in this section referred to as the ‘Board’).

“(b) The function of the Board shall be to observe and monitor all aspects of the preparation and implementation of the 2000 decennial census (including all dress rehearsals and other simulations of a census in preparation therefor).

“(c)(1) The Board shall be composed of 8 members as follows:

“(A) Two individuals appointed by the majority leader of the Senate.

“(B) Two individuals appointed by the Speaker of the House of Representatives.

“(C) Four individuals appointed by the President, of whom—

“(i) one shall be on the recommendation of the minority leader of the Senate; and

“(ii) one shall be on the recommendation of the minority leader of the House of Representatives.

All members of the Board shall be appointed within 60 days after the date of enactment of this Act [Nov. 26, 1997]. A vacancy in the Board shall be filled in the manner in which the original appointment was made.

“(2) Members shall not be entitled to any pay by reason of their service on the Board, but shall receive travel expenses, including per diem in lieu of subsistence, in accordance with sections 5702 and 5703 of title 5, United States Code.

“(3) The Board shall have—

“(A) a co-chairman who shall be appointed jointly by the members under subsection (c)(1)(A) and (B), and

“(B) a co-chairman who shall be appointed jointly by the members under subsection (c)(1)(C).

“(4) The Board shall meet at the call of either co-chairman.

“(5) A quorum shall consist of five members of the Board.

“(6) The Board may promulgate any regulations necessary to carry out its duties.

“(d)(1) The Board shall have—

“(A) an executive director who shall be appointed jointly by the members under subsection (c)(1)(A) and (B), and

“(B) an executive director who shall be appointed jointly by the members under subsection (c)(1)(C), each of whom shall be paid at a rate not to exceed level IV of the Executive Schedule.

“(2) Subject to such rules as the Board may prescribe, each executive director—

“(A) may appoint and fix the pay of such additional personnel as that executive director considers appropriate; and

“(B) may procure temporary and intermittent services under section 3109(b) of title 5, United States Code, but at rates for individuals not to exceed the daily equivalent of the maximum annual rate of pay payable for grade GS-15 of the General Schedule.

Such rules shall include provisions to ensure an equitable division or sharing of resources, as appropriate, between the respective staff of the Board.

“(3) The staff of the Board shall be appointed without regard to the provisions of title 5, United States Code, governing appointments in the competitive service, and shall be paid without regard to the provisions of chapter 51 and subchapter III of chapter 53 of such title (relating to classification and General Schedule pay rates).

“(4) The Administrator of the General Services Administration, in coordination with the Secretary of Commerce, shall locate suitable office space for the operation of the Board in the W. Edwards Deming Building in Suitland, Maryland. The facilities shall serve as the headquarters of the Board and shall include all necessary equipment and incidentals required for the proper functioning of the Board.

“(e)(1) For the purpose of carrying out its duties, the Board may hold such hearings (at the call of either co-chairman) and undertake such other activities as the Board determines to be necessary to carry out its duties.

“(2) The Board may authorize any member of the Board or of its staff to take any action which the Board is authorized to take by this subsection.

“(3)(A) Each co-chairman of the Board and any members of the staff who may be designated by the Board under this paragraph shall be granted access to any data, files, information, or other matters maintained by the Bureau of the Census (or received by it in the course of conducting a decennial census of population) which they may request, subject to such regulations as the Board may prescribe in consultation with the Secretary of Commerce.

“(B) The Board or the co-chairmen acting jointly may secure directly from any other Federal agency, including the White House, all information that the Board considers necessary to enable the Board to carry out its duties. Upon request of the Board or both co-chairmen, the head of that agency (or other person duly designated for purposes of this paragraph) shall furnish that information to the Board.

“(4) The Board shall prescribe regulations under which any member of the Board or of its staff, and any person whose services are procured under subsection (d)(2)(B), who gains access to any information or other matter pursuant to this subsection shall, to the extent that any provisions of section 9 or 214 of title 13, United States Code, would apply with respect to such matter in the case of an employee of the Department of Commerce, be subject to such provisions.

“(5) Upon the request of the Board, the head of any Federal agency is authorized to detail, without reimbursement, any of the personnel of such agency to the Board to assist the Board in carrying out its duties. Any such detail shall not interrupt or otherwise affect the civil service status or privileges of the Federal employee.

“(6) Upon the request of the Board, the head of a Federal agency shall provide such technical assistance to the Board as the Board determines to be necessary to carry out its duties.

“(7) The Board may use the United States mails in the same manner and under the same conditions as Federal agencies and shall, for purposes of the frank, be considered a commission of Congress as described in section 3215 of title 39, United States Code.

“(8) Upon request of the Board, the Administrator of General Services shall provide to the Board on a reimbursable basis such administrative support services as the Board may request.

“(9) For purposes of costs relating to printing and binding, including the cost of personnel detailed from the Government Printing Office, the Board shall be deemed to be a committee of the Congress.

“(f)(1) The Board shall transmit to the Congress—

“(A) interim reports, with the first such report due by April 1, 1998;

“(B) additional reports, the first of which shall be due by February 1, 1999, the second of which shall be due by April 1, 1999, and subsequent reports at least semiannually thereafter;

“(C) a final report which shall be due by September 1, 2001; and

“(D) any other reports which the Board considers appropriate.

The final report shall contain a detailed statement of the findings and conclusions of the Board with respect to the matters described in subsection (b).

“(2) In addition to any matter otherwise required under this subsection, each such report shall address, with respect to the period covered by such report—

“(A) the degree to which efforts of the Bureau of the Census to prepare to conduct the 2000 census—

“(i) shall achieve maximum possible accuracy at every level of geography;

“(ii) shall be taken by means of an enumeration process designed to count every individual possible; and

“(iii) shall be free from political bias and arbitrary decisions; and

“(B) efforts by the Bureau of the Census intended to contribute to enumeration improvement, specifically, in connection with—

“(i) computer modernization and the appropriate use of automation;

“(ii) address list development;

“(iii) outreach and promotion efforts at all levels designed to maximize response rates, especially among groups that have historically been undercounted (including measures undertaken in conjunction with local government and community and other groups);

“(iv) establishment and operation of field offices; and

“(v) efforts relating to the recruitment, hiring, and training of enumerators.

“(3) Any data or other information obtained by the Board under this section shall be made available to any committee or subcommittee of Congress of appropriate jurisdiction upon request of the chairman or ranking minority member of such committee or subcommittee. No such committee or subcommittee, or member thereof, shall disclose any information obtained under this paragraph which is submitted to it on a confidential basis unless the full committee determines that the withholding of that information is contrary to the national interest.

“(4) The Board shall study and submit to Congress, as part of its first report under paragraph (1)(A), its findings and recommendations as to the feasibility and desirability of using postal personnel or private contractors to help carry out the decennial census.

“(g) There is authorized to be appropriated \$4,000,000 for each of fiscal years 1998 through 2001 to carry out this section.

“(h) To the extent practicable, members of the Board shall work to promote the most accurate and complete census possible by using their positions to publicize the need for full and timely responses to census questionnaires.

“(i)(1) No individual described in paragraph (2) shall be eligible—

“(A) to be appointed or to continue serving as a member of the Board or as a member of the staff thereof; or

“(B) to enter into any contract with the Board.

“(2) This subsection applies with respect to any individual who is serving or who has ever served—

“(A) as the Director of the Census; or

“(B) with any committee or subcommittee of either House of Congress, having jurisdiction over any aspect of the decennial census, as—

“(i) a Member of Congress; or

“(ii) a congressional employee.

“(j) The Board shall cease to exist on September 30, 2001.”

#### CENSUS DATA ON GRANDPARENTS AS PRIMARY CAREGIVERS FOR THEIR GRANDCHILDREN

Pub. L. 104-193, title I, §105, Aug. 22, 1996, 110 Stat. 2163, provided that:

“(a) IN GENERAL.—Not later than 90 days after the date of the enactment of this Act [Aug. 22, 1996], the Secretary of Commerce, in carrying out section 141 of title 13, United States Code, shall expand the data collection efforts of the Bureau of the Census (in this section referred to as the ‘Bureau’) to enable the Bureau to collect statistically significant data, in connection with its decennial census and its mid-decade census, concerning the growing trend of grandparents who are the primary caregivers for their grandchildren.

“(b) EXPANDED CENSUS QUESTION.—In carrying out subsection (a), the Secretary of Commerce shall expand the Bureau’s census question that details households which include both grandparents and their grandchildren. The expanded question shall be formulated to distinguish between the following households:

“(1) A household in which a grandparent temporarily provides a home for a grandchild for a period of weeks or months during periods of parental distress.

“(2) A household in which a grandparent provides a home for a grandchild and serves as the primary caregiver for the grandchild.”

#### DECENNIAL CENSUS IMPROVEMENT ACT OF 1991

Pub. L. 102-135, Oct. 24, 1991, 105 Stat. 635, known as the Decennial Census Improvement Act of 1991, provided that the Secretary of Commerce was to contract with the National Academy of Sciences for a study of the means by which the Government could achieve the most accurate population count possible and ways for the Government to collect other demographic and housing data, and that the Academy was to submit to the Secretary and to committees of Congress an interim report and, within 36 months after the date of the contract, a final report on the study.

#### STUDY OF COUNTING OF HOMELESS FOR NATIONAL CENSUS

Pub. L. 101-645, title IV, §402, Nov. 29, 1990, 104 Stat. 4723, provided that not later than 1 year after Nov. 29, 1990, the General Accounting Office was to conduct a study of the methodology and procedures used by the Bureau of the Census in counting the number of homeless persons for the most recent decennial census conducted pursuant to this title, to determine the accuracy of such count, and report to the Congress the results of that study.

#### MONITORING ECONOMIC PROGRESS OF RURAL AMERICA

Pub. L. 101-624, title XXIII, §2382, Nov. 28, 1990, 104 Stat. 4050, provided that Director of Bureau of the Census was to expand data collection efforts of Bureau to enable it to collect statistically significant data concerning changing economic condition of rural counties and communities in United States, including data on rural employment, poverty, income, and other information concerning rural labor force, and authorized to be appropriated \$1,000,000 for each fiscal year for such ef-

forts, prior to repeal by Pub. L. 104-127, title VII, §707, Apr. 4, 1996, 110 Stat. 1112.

AMERICANS OF SPANISH ORIGIN OR DESCENT; STUDY FOR DEVELOPMENT OF CREDITABLE ESTIMATES IN FUTURE CENSUSES

Pub. L. 94-311, §4, June 16, 1976, 90 Stat. 688, provided that: "The Department of Commerce, in cooperation with appropriate Federal, State and local agencies and various population study groups and experts, shall immediately undertake a study to determine what steps would be necessary for developing creditable estimates of undercounts of Americans of Spanish origin or descent in future censuses."

NEEDS AND CONCERNS OF SPANISH-ORIGIN POPULATION; USE OF SPANISH LANGUAGE QUESTIONNAIRES AND BILINGUAL ENUMERATORS

Pub. L. 94-311, §5, June 16, 1976, 90 Stat. 689, provided that: "The Secretary of Commerce shall ensure that, in the Bureau of the Census data-collection activities, the needs and concerns of the Spanish-origin population are given full recognition through the use of Spanish language questionnaires, bilingual enumerators, and other such methods as deemed appropriate by the Secretary."

**[§ 142. Repealed. Pub. L. 105-113, §3(a), Nov. 21, 1997, 111 Stat. 2275]**

Section, acts Aug. 31, 1954, ch. 1158, 68 Stat. 1020; Aug. 28, 1957, Pub. L. 85-207, §10, 71 Stat. 483; Mar. 15, 1976, Pub. L. 94-229, §1, 90 Stat. 210; Oct. 27, 1986, Pub. L. 99-544, §1(a), 100 Stat. 3046, provided that Secretary of Commerce take periodic censuses of agriculture and irrigation.

EFFECTIVE DATE OF REPEAL

Repeal effective Oct. 1, 1998, see section 3(d) of Pub. L. 105-113, set out as an Effective Date of 1997 Amendment note under section 1991 of Title 7, Agriculture.

1997 CENSUS OF AGRICULTURE

Pub. L. 105-86, title I, Nov. 18, 1997, 111 Stat. 2083, provided in part: "That, notwithstanding any other provision of law, the Secretary of Agriculture shall conduct the 1997 Census of Agriculture, to the extent practicable, pursuant to the provisions of title 13, United States Code."

**[§§ 143 to 146. Repealed. Pub. L. 85-207, §11, Aug. 28, 1957, 71 Stat. 483]**

Sections, act Aug. 31, 1954, ch. 1158, 68 Stat. 1020, related to the following subject matter:

Section 143, decennial census period; completion of reports upon inquiries. See section 141 of this title.

Section 144, restriction on inquiries. See sections 141(a) and 142 of this title.

Section 145, commencement of inquiries as to population, agriculture, and housing; time for completion. See sections 141(a) and 142(a) of this title.

Section 146, mid-decade censuses of agriculture; exclusion of certain areas; preliminary statistics. See sections 142(a), 191, and 193 of this title.

SUBCHAPTER III—GOVERNMENTS

**§ 161. Quinquennial censuses; inclusion of certain data**

The Secretary shall take, compile, and publish for the year 1957 and for every fifth year thereafter a census of governments. Each such census shall include, but shall not be limited to, data on taxes and tax valuations, governmental receipts, expenditures, indebtedness, and employees of States, counties, cities, and other governmental units.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1021; Pub. L. 85-207, §12, Aug. 28, 1957, 71 Stat. 483.)

HISTORICAL AND REVISION NOTES

Based on title 13, U.S.C., 1952 ed., §251 (Sept. 7, 1950, ch. 910, §1, 64 Stat. 784).

Section was derived from subsection (a) of section 251 of title 13, U.S.C., 1952 ed. For remainder of such section 251, see Distribution Table.

Reference to the year 1957 was substituted for reference to the year 1952, since the latter reference is now obsolete.

Changes were made in phraseology.

AMENDMENTS

1957—Pub. L. 85-207 struck out "in the United States and in such of its Territories and possessions as may be determined by the Secretary" in last sentence. Geographical provisions now covered by section 191 of this title.

**[§ 162. Repealed. Pub. L. 85-207, §13, Aug. 28, 1957, 71 Stat. 483]**

Section, act Aug. 31, 1954, ch. 1158, 68 Stat. 1021, related to acquisition of reports and material from governmental units, private persons, and agencies. See section 6(b) of this title.

**§ 163. Authority of other agencies**

This subchapter does not revoke or impair the authority of any other Federal agency with respect to the collection or release of information.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1021.)

HISTORICAL AND REVISION NOTES

Based on title 13, U.S.C., 1952 ed., §251 (Sept. 7, 1950, ch. 910, §1, 64 Stat. 784).

Section was derived from part of subsection (b) of section 251 of title 13, U.S.C., 1952 ed. Subsection (a) of such section 251 is also incorporated in this subchapter, and the remainder of such subsection (b) thereof is incorporated in subchapter I of chapter 1 of this title. See Distribution Table.

Changes were made in phraseology.

SUBCHAPTER IV—INTERIM CURRENT DATA

**§ 181. Population**

(a) During the intervals between each census of population required under section 141 of this title, the Secretary, to the extent feasible, shall annually produce and publish for each State, county, and local unit of general purpose government which has a population of fifty thousand or more, current data on total population and population characteristics and, to the extent feasible, shall biennially produce and publish for other local units of general purpose government current data on total population. Such data shall be produced and published for each State, county, and other local unit of general purpose government for which data is compiled in the most recent census of population taken under section 141 of this title. Such data may be produced by means of sampling or other methods, which the Secretary determines will produce current, comprehensive, and reliable data.

(b) If the Secretary is unable to produce and publish current data during any fiscal year on total population for any county and local unit of general purpose government as required by this section, a report shall be submitted by the Sec-

retary to the President of the Senate and to the Speaker of the House of Representatives not later than 90 days before the commencement of the following fiscal year, enumerating each government excluded and giving the reasons for such exclusion.

(Added Pub. L. 94-521, §8(a), Oct. 17, 1976, 90 Stat. 2462.)

#### CODIFICATION

A prior section 181, act Aug. 31, 1954, ch. 1158, 68 Stat. 1021, authorizing the Secretary to conduct surveys necessary to furnish current data on subjects covered by the censuses under this title, was repealed by section 8(a) of Pub. L. 94-521. See section 182 of this title.

#### EFFECTIVE DATE

Section effective Oct. 17, 1976, see section 17 of Pub. L. 94-521, set out as a note under section 1 of this title.

### § 182. Surveys

The Secretary may make surveys deemed necessary to furnish annual and other interim current data on the subjects covered by the censuses provided for in this title.

(Added Pub. L. 94-521, §8(a), Oct. 17, 1976, 90 Stat. 2463.)

#### EFFECTIVE DATE

Section effective Oct. 17, 1976, see section 17 of Pub. L. 94-521, set out as a note under section 1 of this title.

### § 183. Use of most recent population data

(a) Except as provided in subsection (b), for the purpose of administering any law of the United States in which population or other population characteristics are used to determine the amount of benefit received by State, county, or local units of general purpose government, the Secretary shall transmit to the President for use by the appropriate departments and agencies of the executive branch the data most recently produced and published under this title.

(b) This section shall not apply with respect to any law of the United States which, for purposes of determining the amount of benefit received by State, county, or local units of general purpose government, provides that only population or population characteristics data obtained in the most recent decennial census may be used in such determination.

(Added Pub. L. 94-521, §8(a), Oct. 17, 1976, 90 Stat. 2463.)

#### EFFECTIVE DATE

Section effective Oct. 17, 1976, see section 17 of Pub. L. 94-521, set out as a note under section 1 of this title.

### § 184. Definitions

For purposes of this subchapter—

(1) the term “local unit of general purpose government” means the government of a county, municipality, township, Indian tribe, Alaskan native village, or other unit of government (other than a State) which is a unit of general government, and

(2) the term “State” includes the District of Columbia.

(Added Pub. L. 94-521, §8(a), Oct. 17, 1976, 90 Stat. 2463.)

#### EFFECTIVE DATE

Section effective Oct. 17, 1976, see section 17 of Pub. L. 94-521, set out as a note under section 1 of this title.

### SUBCHAPTER V—GEOGRAPHIC SCOPE, PRELIMINARY AND SUPPLEMENTAL STATISTICS, AND USE OF SAMPLING

#### § 191. Geographic scope of censuses

(a) Each of the censuses authorized by this chapter shall include each State, the District of Columbia, the Virgin Islands, Guam, the Commonwealth of the Northern Mariana Islands, and the Commonwealth of Puerto Rico, and as may be determined by the Secretary, such other possessions and areas over which the United States exercises jurisdiction, control, or sovereignty. Inclusion of other areas over which the United States exercises jurisdiction or control shall be subject to the concurrence of the Secretary of State.

(b) For censuses taken in the Virgin Islands, Guam, the Commonwealth of the Northern Mariana Islands, or any possession or area not specifically designated in subsection (a) of this section, the Secretary may use census information collected by the Governor or highest ranking Federal official, if such information was obtained in accordance with plans prescribed or approved by the Secretary.

(c) If, pursuant to a determination by the Secretary under subsection (a) of this section, any census is not taken in a possession or area over which the United States exercises jurisdiction, control, or sovereignty, the Secretary may include data obtained from other Federal agencies or government sources in the census report. Any data obtained from foreign governments shall be obtained through the Secretary of State.

(Added Pub. L. 85-207, §14, Aug. 28, 1957, 71 Stat. 483; amended Pub. L. 94-521, §9, Oct. 17, 1976, 90 Stat. 2463.)

#### AMENDMENTS

1976—Subsec. (a). Pub. L. 94-521 struck out “(other than censuses of population)” after “this chapter” and “Alaska, Hawaii” after “the District of Columbia”, inserted “the Commonwealth of the Northern Mariana Islands” after “Guam”, and struck out provision that censuses of population shall include all geographic areas referred to in first sentence of subsec. (a).

Subsec. (b). Pub. L. 94-521 inserted “the Commonwealth of the Northern Mariana Islands” after “Guam”, and substituted “use census information” for “utilize or adopt census data” and “if such information was obtained” for “when such data are obtained”.

Subsec. (c). Pub. L. 94-521 substituted “If, pursuant to a determination by the Secretary under subsection (a) of this section” for “When, under determination by the Secretary as provided in paragraph (a) above”.

#### EFFECTIVE DATE OF 1976 AMENDMENT

Amendment by Pub. L. 94-521 effective Oct. 17, 1976, see section 17 of Pub. L. 94-521, set out as a note under section 1 of this title.

#### ADMISSION OF ALASKA AND HAWAII TO STATEHOOD

Alaska was admitted into the Union on Jan. 3, 1959, on issuance of Proc. No. 3269, Jan. 3, 1959, 24 F.R. 81, 73 Stat. c16, and Hawaii was admitted into the Union on Aug. 21, 1959, on issuance of Proc. No. 3309, Aug. 21, 1959, 24 F.R. 6868, 73 Stat. c74. For Alaska Statehood Law, see Pub. L. 85-508, July 7, 1958, 72 Stat. 339, set out as

a note preceding section 21 of Title 48, Territories and Insular Possessions. For Hawaii Statehood Law, see Pub. L. 86-3, Mar. 18, 1959, 73 Stat. 4, set out as a note preceding section 491 of Title 48.

### § 193. Preliminary and supplemental statistics

In advance of, in conjunction with, or after the taking of each census provided for by this chapter, the Secretary may make surveys and collect such preliminary and supplementary statistics related to the main topic of the census as are necessary to the initiation, taking, or completion thereof.

(Added Pub. L. 85-207, §14, Aug. 28, 1957, 71 Stat. 484.)

### § 195. Use of sampling

Except for the determination of population for purposes of apportionment of Representatives in Congress among the several States, the Secretary shall, if he considers it feasible, authorize the use of the statistical method known as “sampling” in carrying out the provisions of this title.

(Added Pub. L. 85-207, §14, Aug. 28, 1957, 71 Stat. 484; amended Pub. L. 94-521, §10, Oct. 17, 1976, 90 Stat. 2464.)

#### AMENDMENTS

1976—Pub. L. 94-521 substituted “for purposes of apportionment of Representatives in Congress among the several States, the Secretary shall, if he considers it feasible” for “for apportionment purposes, the Secretary may, where he deems it appropriate”.

#### EFFECTIVE DATE OF 1976 AMENDMENT

Amendment by Pub. L. 94-521 effective Oct. 17, 1976, see section 17 of Pub. L. 94-521, set out as a note under section 1 of this title.

### § 196. Special censuses

The Secretary may conduct special censuses for the government of any State, or of any county, city, or other political subdivision within a State, for the government of the District of Columbia, and for the government of any possession or area (including political subdivisions thereof) referred to in section 191(a) of this title, on subjects covered by the censuses provided for in this title, upon payment to the Secretary of the actual or estimated cost of each such special census. The results of each such special census shall be designated “Official Census Statistics”. These statistics may be used in the manner provided by applicable law.

(Added Pub. L. 94-521, §11(a), Oct. 17, 1976, 90 Stat. 2464.)

#### EFFECTIVE DATE

Section effective Oct. 17, 1976, see section 17 of Pub. L. 94-521, set out as a note under section 1 of this title.

#### SPECIAL CENSUS WHEN MAJOR POPULATION CHANGES OCCUR DUE TO LARGE NUMBERS OF LEGAL IMMIGRANTS WITHIN SIX MONTHS OF REGULAR DECENNIAL CENSUS DATE

Pub. L. 96-369, §118, Oct. 1, 1980, 94 Stat. 1357, provided that: “Notwithstanding any other provision of law, when the President determines that a State, county, or local unit of general purpose government is significantly affected by a major population change due to a

large number of legal immigrants within six months of a regular decennial census date, he may order a special census, pursuant to section 196 of title XIII of the United States Code [this section], or other method of obtaining a revised estimate of the population, of such jurisdiction or subsections of that jurisdiction in which the immigrants are concentrated. If the President decides to conduct a special census, it may be conducted solely at Federal expense.”

#### EXECUTIVE ORDER NO. 12256

Ex. Ord. No. 12256, Dec. 15, 1980, 45 F.R. 83189, which required the Bureau of the Census to supply estimates of the number of legal immigrants within certain jurisdictions, was revoked by Ex. Ord. No. 12553, Feb. 25, 1986, 51 F.R. 7237.

## CHAPTER 7—OFFENSES AND PENALTIES

### SUBCHAPTER I—OFFICERS AND EMPLOYEES

Sec.

- 211. Receiving or securing compensation for appointment of employees.
- 212. Refusal or neglect of employees to perform duties.
- 213. False statements, certificates, and information.
- 214. Wrongful disclosure of information.

### SUBCHAPTER II—OTHER PERSONS

- 221. Refusal or neglect to answer questions; false answers.
- 222. Giving suggestions or information with intent to cause inaccurate enumeration of population.
- 223. Refusal, by owners, proprietors, etc., to assist census employees.
- 224. Failure to answer questions affecting companies, businesses, religious bodies, and other organizations; false answers.
- 225. Applicability of penal provisions in certain cases.

### SUBCHAPTER III—PROCEDURE

- 241. Evidence.

### SUBCHAPTER I—OFFICERS AND EMPLOYEES

#### § 211. Receiving or securing compensation for appointment of employees

Whoever—

(1) receives or secures to himself any fee, reward, or compensation as a consideration for the appointment of any person as supervisor, enumerator, clerk, or other officer or employee of the Department of Commerce or bureau or agency thereof, referred to in subchapter II of chapter 1 of this title; or

(2) in any way receives or secures to himself any part of the compensation paid to any person so appointed—

shall be fined not more than \$3,000 or imprisoned not more than five years, or both.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1022.)

#### HISTORICAL AND REVISION NOTES

Based on title 13, U.S.C., 1952 ed., §§122, 207, 252, and section 1442 of title 42, U.S.C., 1952 ed., The Public Health and Welfare (June 18, 1929, ch. 28, §7, 46 Stat. 23; June 19, 1948, ch. 502, §2, 62 Stat. 479; July 15, 1949, ch. 338, title VI, §607, 63 Stat. 441; Sept. 7, 1950, ch. 910, §2, 64 Stat. 784.)

Section consolidates section 207 of title 13, U.S.C., 1952 ed., which was a part of chapter 4 of such title re-

lating to the censuses of population, agriculture, irrigation, etc. (subchapter II of chapter 5 of this revised title), with those parts of sections 122 and 252 of such title which made such section 207 applicable to the censuses of manufactures, the mineral industries, and other businesses, and governments (subchapters I and III of chapter 5 of this revised title), and with that part of subsection (b) of section 1442 of title 42, U.S.C., 1952, ed., which made such section 207 applicable to the censuses of housing (subchapter II of chapter 5 of this revised title). For remainder of sections 122 and 252 of title 13, U.S.C., 1952 ed., and of section 1442 of title 42, U.S.C., 1952 ed. (which section has been transferred in its entirety to this revised title), see Distribution Table.

This section, as revised, relates to appointments of all officers and employees referred to in subchapter II of chapter 1 of this title, which was the probable original legislative intent.

Reference in section 207 of title 13, U.S.C., 1952 ed., to the offense, herein described, as a felony, and words in such section, “and upon conviction thereof,” were omitted from this revised section, the former, as covered by section 1 of title 18, U.S.C., 1952 ed., Crimes and Criminal Procedure, classifying offenses, and the latter, as surplusage.

The reference “Department of Commerce or bureau or agency thereof” was inserted in recognition of 1950 Reorganization Plan No. 5, §§1, 2, eff. May 24, 1950, 15 F.R. 3174, 64 Stat. 1263 (see Revision Note to section 4 of this title). However, the qualifying words, “referred to in subchapter II of chapter 1 of this title,” limits the provisions to appointment or employment of persons in connection with the statistics and censuses provided for in this title.

Changes were made in phraseology.

## § 212. Refusal or neglect of employees to perform duties

Whoever, being an employee referred to in subchapter II of chapter 1 of this title, and having taken and subscribed the oath of office, neglects or refuses, without justifiable cause, to perform the duties enjoined on such employee by this title, shall be fined not more than \$500.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1022.)

### HISTORICAL AND REVISION NOTES

Based on title 13, U.S.C., 1952 ed., §§122, 208, 252, and section 1442 of title 42, U.S.C., 1952 ed., The Public Health and Welfare (June 18, 1929, ch. 28, §8, 46 Stat. 23; June 19, 1948, ch. 502, §2, 62 Stat. 479; June 19, 1949, ch. 338, title VI, §607, 63 Stat. 441; Sept. 7, 1950, ch. 910, §2, 64 Stat. 784).

Section consolidates part of section 208 of title 13, U.S.C., 1952 ed., which was a part of chapter 4 of such title relating to the censuses of population, agriculture, etc., with those parts of sections 122 and 252 of such title which made such section 208 applicable to the censuses of manufactures, the mineral industries and other businesses, and governments, and with that part of subsection (b) of section 1442 of title 42, U.S.C., 1952 ed., which made such section 208 applicable to the housing censuses. For remainder of sections 122, 208 and 252 of title 13, U.S.C., 1952 ed., and of section 1442 of title 42, U.S.C., 1952 ed., (which section has been transferred in its entirety to this revised title), see Distribution Table.

Section has been made applicable to all employees referred to in subchapter II of chapter 1 of this title, and to duties enjoined on them by any provision of this title, which was probably the original legislative intent.

The words “being an employee referred to in subchapter II of chapter 1 of this title” were substituted for the enumeration in section 208 of title 13, U.S.C., 1952 ed., of “supervisor, supervisor’s clerk, enumerator,

interpreter, special agent, or other employee”, since such reference will cover those employees.

Reference in section 208 of title 13, U.S.C., 1952 ed., to the offense, herein described as a misdemeanor, and words therein “, and upon conviction thereof”, were omitted, the former, as superseded and covered by section 1 of title 18, U.S.C., 1952 ed., Crimes and Criminal Procedure, classifying offenses, and the latter, as surplusage.

Changes were made in phraseology.

## § 213. False statements, certificates, and information

(a) Whoever, being an officer or employee referred to in subchapter II of chapter 1 of this title, willfully and knowingly swears or affirms falsely as to the truth of any statement required to be made or subscribed by him under oath by or under authority of this title, shall be guilty of perjury, and shall be fined not more than \$2,000 or imprisoned not more than five years, or both.

(b) Whoever, being an officer or employee referred to in subchapter II of chapter 1 of this title—

(1) willfully and knowingly makes a false certificate or fictitious return; or

(2) knowingly or willfully furnishes or causes to be furnished, or, having been such an officer or employee, knowingly or willfully furnished or caused to be furnished, directly or indirectly, to the Secretary or to any other officer or employee of the Department of Commerce or bureau or agency thereof, any false statement or false information with reference to any inquiry for which he was authorized and required to collect information provided for in this title—

shall be fined not more than \$2,000 or imprisoned not more than five years, or both.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1022.)

### HISTORICAL AND REVISION NOTES

Based on title 13, U.S.C., 1952 ed., §§122, 208, 252, and section 1442 of title 42, U.S.C., 1952 ed., The Public Health and Welfare (June 18, 1929, ch. 28, §8, 46 Stat. 23; June 19, 1948, ch. 502, §2, 62 Stat. 479; July 15, 1949, ch. 338, title VI, §607, 63 Stat. 441; Sept. 7, 1950, ch. 910, §2, 64 Stat. 784).

Section consolidates part of section 208 of title 13, U.S.C., 1952 ed., with that part of section 122 of such title which made such section 208 applicable to the quinquennial censuses of manufactures, the mineral industries, and other businesses (see subchapter I of chapter 5 of this revised title), that part of section 252 of such title which made such section 208 applicable to the quinquennial censuses of governments (see subchapter III of chapter 5 of this revised title), and that part of subsection (b) of section 1442 of title 42, U.S.C., 1952 ed., which made such section 208 applicable to the decennial censuses of housing (see subchapter II of chapter 5 of this revised title). For remainder of sections 122, 208, and 252 of title 13, U.S.C., 1952 ed., and of section 1442 of title 42, U.S.C., 1952 ed. (which section has been transferred in its entirety to this revised title), see Distribution Table.

As set out in this revised section, the provisions relate to all investigations, surveys, collections of statistics, and censuses provided for in this title, and to officers as well as employees, which was probably the original legislative intent.

References to the offenses described in subsection (b) of this revised section as being felonies, were omitted as covered by section 1 of title 18, U.S.C., 1952 ed.,

Crimes and Criminal Procedure, classifying offenses; and words “upon conviction thereof” and “upon conviction of” were omitted as surplusage.

Changes were made in phraseology and arrangement.

#### § 214. Wrongful disclosure of information

Whoever, being or having been an employee or staff member referred to in subchapter II of chapter 1 of this title, having taken and subscribed the oath of office, or having sworn to observe the limitations imposed by section 9 of this title, or whoever, being or having been a census liaison within the meaning of section 16 of this title, publishes or communicates any information, the disclosure of which is prohibited under the provisions of section 9 of this title, and which comes into his possession by reason of his being employed (or otherwise providing services) under the provisions of this title, shall be fined not more than \$5,000 or imprisoned not more than 5 years, or both.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1023; Pub. L. 94-521, §12(a), Oct. 17, 1976, 90 Stat. 2464; Pub. L. 103-430, §2(c), Oct. 31, 1994, 108 Stat. 4394.)

#### HISTORICAL AND REVISION NOTES

Based on title 13, U.S.C., 1952 ed., §§73, 83, 122, 208, 252, and section 1442 of title 42, U.S.C., 1952 ed., The Public Health and Welfare (Aug. 7, 1916, ch. 274, §3, 39 Stat. 437; Apr. 2, 1924, ch. 80, §3, 43 Stat. 31; June 18, 1929, ch. 28, §§8, 21, 46 Stat. 23, 26; July 25, 1947, ch. 331, 61 Stat. 437; June 19, 1948, ch. 502, §2, 62 Stat. 479; July 15, 1949, ch. 338, title VI, §607, 63 Stat. 441; Sept. 7, 1950, ch. 910, §2, 64 Stat. 784).

Section consolidates parts of sections 73, 83 and 208 of title 13, U.S.C., 1952 ed., that part of section 122 of such title which made such section 208 applicable to the quinquennial censuses of manufactures, the mineral industries, and other businesses (see subchapter I of chapter 5 of this revised title), that part of section 252 of such title which made such section 208 applicable to the quinquennial censuses of governments (see subchapter III of chapter 5 of this revised title), and that part of subsection (b) of section 1442 of title 42, U.S.C., 1952 ed., which made such section 208 applicable to the decennial censuses of housing (see subchapter II of chapter 5 of this title).

Words “Secretary or other authorized officer or employee of the Department of Commerce or bureau or agency thereof” were substituted for reference to the Director of the Census. See Revision Note to section 9 of this title, into which other parts of sections 73, 83 and 208 of title 13, U.S.C., 1952 ed., have been carried.

The provision in section 208 of title 13, U.S.C., 1952 ed., designating the offense as a felony, was omitted as covered by section 1 of title 18, U.S.C., 1952 ed., Crimes and Criminal Procedure, and words in such section “upon conviction thereof” and “in the discretion of the court”, were omitted as surplusage.

Changes were made in phraseology.

#### AMENDMENTS

1994—Pub. L. 103-430 inserted “or whoever, being or having been a census liaison within the meaning of section 16 of this title,”.

1976—Pub. L. 94-521 provided that staff members would be liable for wrongful communication of information under this section, inserted “or having sworn to observe the limitations imposed by section 9 of this title” after “oath of office”, substituted a provision predicating liability under this section upon disclosure of information prohibited by section 9 of this title for a former provision predicating such liability upon disclosure of information without the written authority of the Secretary or other authorized officer or employee of the Department of Commerce or bureau or agency

thereof, substituted “being employed (or otherwise providing services)” for “employment”, increased maximum amount of fine under this section to \$5,000 from \$1,000, and increased maximum prison term to 5 years from 2 years.

#### EFFECTIVE DATE OF 1976 AMENDMENT

Amendment by Pub. L. 94-521 effective Oct. 17, 1976, see section 17 of Pub. L. 94-521, set out as a note under section 1 of this title.

#### SUBCHAPTER II—OTHER PERSONS

#### § 221. Refusal or neglect to answer questions; false answers

(a) Whoever, being over eighteen years of age, refuses or willfully neglects, when requested by the Secretary, or by any other authorized officer or employee of the Department of Commerce or bureau or agency thereof acting under the instructions of the Secretary or authorized officer, to answer, to the best of his knowledge, any of the questions on any schedule submitted to him in connection with any census or survey provided for by subchapters I, II, IV, and V of chapter 5 of this title, applying to himself or to the family to which he belongs or is related, or to the farm or farms of which he or his family is the occupant, shall be fined not more than \$100.

(b) Whoever, when answering questions described in subsection (a) of this section, and under the conditions or circumstances described in such subsection, willfully gives any answer that is false, shall be fined not more than \$500.

(c) Notwithstanding any other provision of this title, no person shall be compelled to disclose information relative to his religious beliefs or to membership in a religious body.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1023; Pub. L. 85-207, §15, Aug. 28, 1957, 71 Stat. 484; Pub. L. 94-521, §13, Oct. 17, 1976, 90 Stat. 2465.)

#### HISTORICAL AND REVISION NOTES

Based on title 13, U.S.C., 1952 ed., §§122, 209, and section 1442 of title 42, U.S.C., 1952 ed., The Public Health and Welfare (June 18, 1929, ch. 28, §9, 46 Stat. 23; June 19, 1948, ch. 502, §2, 62 Stat. 479; July 15, 1949, ch. 338, title VI, §607, 63 Stat. 441).

Section consolidates the first paragraph of section 209 of title 13, U.S.C., 1952 ed., which section related to the decennial censuses of population, agriculture, etc. (see subchapter II of chapter 5 of this revised title), with that part of section 122 of such title which made such section 209 applicable to the quinquennial censuses of manufactures, the mineral industries, and other businesses (see subchapter I of chapter 5 of this revised title) and applicable to the surveys provided for by section 121(b) of such title (see subchapter IV of chapter 5 of this revised title), and that part of subsection (b) of section 1442 of title 42, U.S.C., 1952 ed., which made such section 209 applicable to the decennial censuses of housing (see subchapter II of chapter 5 of this revised title). For remainder of sections 122 and 209 of title 13, U.S.C., 1952 ed., and of section 1442 of title 42, U.S.C., 1952 ed. (which section has been transferred in its entirety to this revised title), see Distribution Table.

The language of section 209 of title 13, U.S.C., 1952 ed., providing that it should “be the duty” of all persons over eighteen years of age, to answer correctly, to the best of their knowledge, when requested, etc., was omitted as unnecessary and redundant. The provisions, as herein revised, define offenses and prescribe penalties for committing them, and are deemed sufficient for the purpose of enforcement. However, some of the language used in the omitted provisions was necessarily included in the description of the offense.

The designation of the first offense, herein described, as a “misdemeanor”, was omitted as covered by section 1 of title 18, U.S.C., 1952 ed., Crimes and Criminal Procedure, classifying crimes; and words “upon conviction thereof” were omitted as surplusage.

References to the Secretary (of Commerce) and to any “authorized officer or employee of the Department of Commerce or bureau or agency thereof”, etc., were substituted for references to the Director of the Census and to any “supervisor, enumerator, or special agent, or other employee of the Census Office”, to conform with 1950 Reorganization Plan No. 5, §§1, 2, eff. May 24, 1950, 15 F.R. 3174, 64 Stat. 1263. See revision note to section 4 of this title.

Changes were made in phraseology.

#### AMENDMENTS

1976—Subsec. (a). Pub. L. 94-521, §13(1), struck out provision authorizing imprisonment for not more than sixty days for refusing or willfully neglecting to answer questions under this section.

Subsec. (b). Pub. L. 94-521, §13(2), struck out provision authorizing imprisonment for not more than one year for willfully giving a false answer to a question under this section.

Subsec. (c). Pub. L. 94-521, §13(3), added subsec. (c).

1957—Subsec. (a). Pub. L. 85-207 substituted “I, II, IV, and V” for “I, II, and IV”.

#### EFFECTIVE DATE OF 1976 AMENDMENT

Amendment by Pub. L. 94-521 effective Oct. 17, 1976, see section 17 of Pub. L. 94-521, set out as a note under section 1 of this title.

### § 222. Giving suggestions or information with intent to cause inaccurate enumeration of population

Whoever, either directly or indirectly, offers or renders to any officer or employee of the Department of Commerce or bureau or agency thereof engaged in making an enumeration of population under subchapter II, IV, or V of chapter 5 of this title, any suggestion, advice, information or assistance of any kind, with the intent or purpose of causing an inaccurate enumeration of population to be made, shall be fined not more than \$1,000 or imprisoned not more than one year, or both.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1023; Pub. L. 85-207, §16, Aug. 28, 1957, 71 Stat. 484.)

#### HISTORICAL AND REVISION NOTES

Based on title 13, U.S.C., 1952 ed., §§122, 209 (June 18, 1929, ch. 28, §9, 46 Stat. 23; June 19, 1948, ch. 502, §2, 62 Stat. 479).

Section consolidates the second paragraph of section 209 of title 13, U.S.C., 1952 ed., which was a part of chapter 4 of that title relating to censuses of population, agriculture, etc., with that part of section 122 of such title which made such section 209 applicable to the interim surveys provided for by section 121(b) of such title (see subchapter IV of chapter 5 of this revised title). For remainder of such sections 122 and 209, see Distribution Table.

Section 122 of title 13, U.S.C., 1952 ed., made section 209 of such title applicable to the quinquennial censuses of manufactures, the mineral industries, and other businesses provided for by section 121(a) thereof (subchapter I of chapter 5 of this revised title), and applicable, with certain qualifications and exceptions, to the interim surveys, which section 121(b) thereof provided for, not only with respect to those censuses but also the censuses provided for in “other Acts” (chapter 5 of this title). However, the particular provisions of such section 209 that have been carried into this revised section related only to population enumerations, and this sec-

tion has accordingly been restricted to the population censuses authorized under subchapter II of chapter 5 of this title, and to the interim surveys authorized under subchapter IV of such chapter only in so far as they relate to population enumerations. The exceptions and qualifications with respect to the application of this section to such interim surveys are set out elsewhere in this subchapter.

Reference to “any officer or employee” was substituted for “any supervisor, supervisor’s clerk, enumerator, interpreter, special agent, or other officer or employee”, as the latter enumeration of the types of employees is unnecessary and redundant; and “Department of Commerce or bureau or agency thereof” was substituted for “Census Office”, to conform with 1950 Reorganization Plan No. 5, §§1, 2, effective May 24, 1950, 15 F.R. 3174, 64 Stat. 1263. See Revision Note to section 4 of this title.

Subsection (b) of section 1442 of title 42, U.S.C., 1952 ed., The Public Health and Welfare (which section has been transferred in its entirety to this revised title), made section 209 of title 13, U.S.C., 1952 ed., applicable to the censuses of housing (subchapter II of chapter 5 of this revised title). However, the particular provisions of such section 209 that have been carried into this revised section, could not, by their terms, be relevant to housing censuses, hence no reference is made in this section to such censuses.

Words in section 209 of title 13, U.S.C., 1952 ed., “either as to the number of persons resident in any district or community, or in any other respect”, were omitted from the revised section as unnecessary and superfluous.

Reference to the offense described as a “misdemeanor” was omitted as covered by section 1 of title 18, U.S.C., Crimes and Criminal Procedure, classifying offenses; and words “and upon conviction thereof” were omitted as surplusage.

Changes were made in phraseology.

#### AMENDMENTS

1957—Pub. L. 85-207 substituted “II, IV, or V” for “II or IV”.

### § 223. Refusal, by owners, proprietors, etc., to assist census employees

Whoever, being the owner, proprietor, manager, superintendent, or agent of any hotel, apartment house, boarding or lodging house, tenement, or other building, refuses or willfully neglects, when requested by the Secretary or by any other officer or employee of the Department of Commerce or bureau or agency thereof, acting under the instructions of the Secretary, to furnish the names of the occupants of such premises, or to give free ingress thereto and egress therefrom to any duly accredited representative of such Department or bureau or agency thereof, so as to permit the collection of statistics with respect to any census provided for in subchapters I and II of chapter 5 of this title, or any survey authorized by subchapter IV or V of such chapter insofar as such survey relates to any of the subjects for which censuses are provided by such subchapters I and II, including, when relevant to the census or survey being taken or made, the proper and correct enumeration of all persons having their usual place of abode in such premises, shall be fined not more than \$500.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1023; Pub. L. 85-207, §17, Aug. 28, 1957, 71 Stat. 484.)

#### HISTORICAL AND REVISION NOTES

Based on title 13, U.S.C., 1952 ed., §§122, 209, and section 1442 of title 42, U.S.C., 1952 ed., The Public Health

and Welfare (June 18, 1929, ch. 28, §9, 46 Stat. 23; June 19, 1948, ch. 502, §2, 62 Stat. 479; July 15, 1949, ch. 338, title VI, §607, 63 Stat. 441).

Section consolidates the third paragraph of section 209 of title 13, U.S.C., 1952 ed., which was a part of chapter 4 of that title relating to censuses of population, agriculture, etc. (subchapter II of chapter 5 of this revised title), with that part of section 122 of such title which made such section 209 applicable to the quinquennial censuses of manufactures, the mineral industries, and other businesses provided for by section 121(a) of such title (subchapter I of chapter 5 of this revised title) and, with certain qualifications and exceptions, applicable to the interim surveys provided for by section 121(b) of such title (subchapter IV of chapter 5 of this revised title), and with that part of subsection (b) of section 1442 of title 42, U.S.C., 1952 ed., which made such section 209 applicable to the decennial censuses of housing (subchapter II of chapter 5 of this revised title). For remainder of sections 122 and 209 of this revised title, and of section 1442 of title 42, U.S.C., 1952 ed. (which section has been transferred in its entirety to this revised title), see Distribution Table.

Section 122 of title 13, U.S.C., 1952 ed., made section 209 of such title applicable to the interim surveys (provided for by section 121(b) thereof) not only with respect to the censuses of manufacturers, the mineral industries, and other businesses provided for by section 121(a) thereof, but also with respect to the censuses provided for by "other Acts" (chapter 5 of this title). However, section 252 of that title, which was a part of a chapter thereof relating to the quinquennial censuses of governments (subchapter III of chapter 5 of this revised title), in making certain sections of chapter 4 thereof applicable to such censuses, did not specify such section 209. Therefore, this revised section is not made so applicable, either to the censuses of governments provided for in subchapter III of chapter 5 of this title, or to surveys provided for in subchapter IV thereof in so far as such surveys relate to governments.

The language of section 209 of title 13, U.S.C., 1952 ed., providing that it should "be the duty" of every owner, proprietor, etc., to furnish the described information or assistance was omitted as unnecessary and redundant. The provisions, as herein revised, define an offense and prescribe a penalty for committing it, and are deemed sufficient for the purpose of enforcement. However, some of the language used in the omitted provisions was necessarily included in the description of the offense.

References to the Secretary (of Commerce) and to "any other officer or employee of the Department of Commerce or bureau or agency thereof" were substituted for references to the Director of the Census and the Census Office, to conform with 1950 Reorganization Plan No. 5, §§1, 2, eff. May 24, 1950, 15 F.R. 3174, 64 Stat. 1263. See Revision Note to section 4 of this title.

The enumeration of the different types of employees, in section 209 of title 13, U.S.C., 1952 ed., "supervisor, enumerator," etc., was omitted as unnecessary and covered by the reference in this revised section to "officer or employee".

Reference in section 209 of title 13, U.S.C., 1952 ed., to the described offense as a "misdemeanor" was omitted as covered by section 1 of title 18, U.S.C., 1952 ed., Crimes and Criminal Procedure, classifying offenses, and words in such section "and upon conviction thereof" were omitted as surplusage.

Changes were made in phraseology.

The qualifications and exceptions contained in that part of section 122 of title 13, U.S.C., 1952 ed., which made section 209 of such title applicable to the surveys provided for in section 121(b) thereof (subchapter IV of chapter 5 of this revised title), are set out elsewhere in this subchapter.

#### AMENDMENTS

1957—Pub. L. 85-207 inserted "or V" after "subchapter IV".

### § 224. Failure to answer questions affecting companies, businesses, religious bodies, and other organizations; false answers

Whoever, being the owner, official, agent, person in charge, or assistant to the person in charge, of any company, business, institution, establishment, religious body, or organization of any nature whatsoever, neglects or refuses, when requested by the Secretary or other authorized officer or employee of the Department of Commerce or bureau or agency thereof, to answer completely and correctly to the best of his knowledge all questions relating to his company, business, institution, establishment, religious body, or other organization, or to records or statistics in his official custody, contained on any census or other schedule or questionnaire prepared and submitted to him under the authority of this title, shall be fined not more than \$500; and if he willfully gives a false answer to any such question, he shall be fined not more than \$10,000.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1024; Pub. L. 85-207, §18, Aug. 28, 1957, 71 Stat. 484; Pub. L. 94-521, §14, Oct. 17, 1976, 90 Stat. 2465.)

#### HISTORICAL AND REVISION NOTES

Based on title 13, U.S.C., 1952 ed., §§74, 84, 122, 210, and section 1442 of title 42, U.S.C., 1952 ed., The Public Health and Welfare (Aug. 7, 1916, ch. 274, §4, 39 Stat. 437; Apr. 2, 1924, ch. 80, §4, 43 Stat. 32; June 18, 1929, ch. 28, §§10, 21, 46 Stat. 24, 26; June 14, 1938, ch. 358, 52 Stat. 678; July 25, 1947, ch. 331, 61 Stat. 457; June 19, 1948, ch. 502, §2, 62 Stat. 479; July 15, 1949, ch. 338, title VI, §607, 63 Stat. 441).

Section consolidates parts of sections 74 and 84 of title 13, U.S.C., 1952 ed., relating to cotton statistics and statistics on oilseeds, nuts and kernels, fats, oils and greases (subchapters I and II of chapter 3 of this revised title), all of section 210 of such title, which section was a part of chapter 4 thereof relating to the decennial censuses of population, agriculture, etc. (subchapter II of chapter 5, of this revised title), with that part of section 122 of such title which made such section 210 applicable to the quinquennial censuses of manufactures, the mineral industries, and other businesses provided for in section 121(a) of such title (subchapter I of chapter 5 of this revised title), and, with certain qualifications and exceptions, applicable to the interim surveys provided for by section 121(b) of such title (subchapter IV of chapter 5 of this revised title), and that part of subsection (b) of section 1442 of title 42, U.S.C., 1952 ed., which made such section 210 applicable to the decennial censuses of housing (subchapter II of chapter 5 of this revised title). For remainder of sections 74, 84 and 122 of title 13, U.S.C., 1952 ed., and of section 1442 of title 42, U.S.C., 1952 ed. (which section has been transferred in its entirety to this revised title), see Distribution Table.

Section 210 of title 13, U.S.C., 1952 ed., by its own terms was applicable to the collection of miscellaneous statistics provided for by section 111 of such title (subchapter III of chapter 3 of this revised title), except that such section 111 placed certain restrictions upon the collection of statistics on religion. These restrictions, along with those of section 122 of such title with respect to the making of surveys, and along with provisions excepting this section from application to the censuses of governments provided for by section 251 of title 13, U.S.C., 1952 ed. (subchapter III of chapter 5 of this revised title), are set out as another section in this revised title. Subject to those exceptions and restrictions, this section applies to all collections and censuses provided for in this title, in so far as it is relevant.

Sections 74, 84 and 210 of title 13, U.S.C., 1952 ed., described the same type of offenses, but the penal provisions varied. Section 74 prescribed maximum fine of \$1,000 and maximum imprisonment of one year, for refusal to answer or giving a false answer; section 84 prescribed maximum fine of \$1,000 for refusal to answer or giving false answer, with no imprisonment; and section 210 prescribed maximum fine of \$500 and maximum imprisonment of sixty days for refusal to answer, and maximum fine of \$10,000 and maximum imprisonment of one year for giving a false answer. In addition, such section 74 prescribed a minimum fine of \$300 for refusal to answer or giving a false answer. This revised section adopts the penalties of such section 210, which was the latest enactment on the subject, and which might have been regarded as having superseded the penal provisions of such sections 74 and 84. According to its own terms, its penal provisions were applicable not only to the censuses of population, agriculture, etc., provided for in chapter 4 of title 13, U.S.C., 1952 ed., but also to any schedules prepared under the act of March 6, 1902 (sections 1-6, 77, 101, 111, and 112 of such title), or under acts amendatory thereof "or supplemental thereto." This reference did not cover sections 74 and 84 specifically, but such sections, enacted in 1924 and 1916, respectively, could probably be regarded as having been "supplemental" to the 1902 act. In any event, this revised section establishes uniform penalties for refusal to answer, or giving a false answer in the circumstances stated. Further, the prescribed penalties are the maximum, and any lesser penalty can be imposed if the facts of the case warrant it.

Reference to the "Secretary [of Commerce] or other authorized officer or employee of the Department of Commerce or bureau or agency thereof" was substituted for references to the Director of the Census and employees of the Bureau of the Census, to conform with 1950 Reorganization Plan No. 5, §§1, 2, eff. May 24, 1950, 15 F.R. 3174, 64 Stat. 1263. See Revision Note to section 4 of this title.

References to the offenses as being in each case a "misdemeanor" were omitted as covered by section 1 of title 18, U.S.C., 1952 ed., Crimes and Criminal Procedure, classifying crimes; and words "upon conviction thereof" and "at the discretion of the court" were omitted as surplusage.

The provision permitting the requests to be made by registered mail, by telegraph, by visiting representative, or by one or more of these methods, was contained in sections 74 and 84 of title 13, U.S.C., 1952 ed., but not in section 210 of such title. It is retained in this section as probably a desirable provision to apply generally.

Provisions in sections 74, 84 and 210 of title 13, U.S.C., 1952 ed., that it "shall be the duty" of the persons referred to, to answer correctly, etc., were omitted as unnecessary and redundant. This section defines offenses and prescribes penalties for committing them, and are deemed sufficient for the purpose of enforcement. However, some of the language used in the omitted provisions was necessarily included in the description of the offenses.

Changes were made in phraseology.

#### AMENDMENTS

1976—Pub. L. 94-521 struck out provision enumerating methods by which the Department of Commerce may transmit a request to answer census questions under this section, substituted "schedule or questionnaire" for "schedule", struck out provision authorizing a sixty day maximum prison term for neglecting or refusing to answer census questions submitted under this section and a similar provision authorizing a one year maximum prison term for willfully giving a false answer to any such questions.

1957—Pub. L. 85-207 inserted "by certified mail," after "by registered mail,".

#### EFFECTIVE DATE OF 1976 AMENDMENT

Amendment by Pub. L. 94-521 effective Oct. 17, 1976, see section 17 of Pub. L. 94-521, set out as a note under section 1 of this title.

### § 225. Applicability of penal provisions in certain cases

(a) In connection with any survey conducted by the Secretary or other authorized officer or employee of the Department of Commerce or bureau or agency thereof pursuant to subchapter IV of chapter 5 of this title, the provisions of sections 221, 222, 223 and 224 of this title shall apply—

(1) with respect to the answering of questions and furnishing of information, only to such inquiries as are within the scope of the schedules and questionnaires and of the type and character heretofore used in connection with the taking of complete censuses under subchapters I and II of chapter 5 of this title, or in connection with any censuses hereafter taken pursuant to such subchapters;

(2) only after publication of a determination with reasons therefor certified by the Secretary, or by some other authorized officer or employee of the Department of Commerce or bureau or agency thereof with the approval of the Secretary, that the information called for is needed to aid or permit the efficient performance of essential governmental functions or services, or has significant application to the needs of the public, business, or industry and is not publicly available from nongovernmental or other governmental sources;

(3) in the case of any new survey, only after public notice, given by the Secretary or other authorized officer or employee of the Department of Commerce or bureau or agency thereof at least thirty days in advance of requesting a return, that such survey is under consideration.

(b) The provisions for imprisonment provided by section 222 of this title shall not apply in connection with any survey conducted pursuant to subchapter II of chapter 3 of this title, or to subchapter IV of chapter 5 of this title.

(c) The provisions of sections 221, 222, 223, and 224 of this title shall not apply to any censuses or surveys of governments provided for by subchapters III and IV of chapter 5 of this title, nor to other surveys provided for by subchapter IV of such chapter which are taken more frequently than annually.

(d) Where the doctrine, teaching, or discipline of any religious denomination or church prohibits the disclosure of information relative to membership, a refusal, in such circumstances, to furnish such information shall not be an offense under this chapter.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1024; Pub. L. 94-521, §15(a), Oct. 17, 1976, 90 Stat. 2465.)

#### HISTORICAL AND REVISION NOTES

Based on title 13, U.S.C., 1952 ed., §§111, 122 (Mar. 2, 1902, ch. 139, §7, 32 Stat. 52; June 7, 1906, ch. 3048, 34 Stat. 218; June 18, 1929, ch. 28, §3, 46 Stat. 26; 1939 Reorg. Plan No. II, §4(e), eff. July 1, 1939, 4 F.R. 2731, 53 Stat. 1431; 1940 Reorg. Plan No. III, §3, eff. June 30, 1940, 5 F.R. 2107, 54 Stat. 1232; June 25, 1947, ch. 124, 61 Stat. 163; June 19, 1948, ch. 502, §1, 62 Stat. 478; Sept. 7, 1950, ch. 910, §4, 64 Stat. 785).

Section consolidates parts of sections 111 and 122 of title 13, U.S.C., 1952 ed., with changes in phraseology necessary to effect consolidation and to preserve the intent, scope and meaning of the parts of such sections

so consolidated. For remainder of such sections 111 and 122, see Distribution Table.

Subsections (a) and (b) of this revised section are from section 122 of title 13, U.S.C., 1952 ed., and in subsection (a) references to the Secretary (of Commerce) and to “other authorized officer or employee of the Department of Commerce or bureau or agency thereof” were substituted for references to the Director of the Census to conform with 1950 Reorganization Plan No. 5, §§1, 2, eff. May 24, 1950, 15 F.R. 3174, 64 Stat. 1263. See Revision Note to section 4 of this title.

Subsection (c) is partly new (but preserves existing law), and partly from section 122 of title 13, U.S.C., 1952 ed. Section 252 of title 13, U.S.C., 1952 ed., which related to the censuses of governments provided by section 251 thereof (see subchapter III of chapter 5 of this title), made certain sections in chapter 4 of that title relating to censuses of population, agriculture, etc., applicable to such censuses of governments. However, it did not list sections 209 and 210 of such title among the sections made so applicable, probably because they would hardly be relevant and capable of application to such censuses. Subsection (c) makes it clear that sections 221–224 of this revised title, into which were carried the provisions of such sections 209 and 210, and which speak in general terms, are not applicable to the censuses and surveys of governments.

Subsection (d) is from section 111 of title 13, U.S.C., 1952 ed. Words in this subsection, “a refusal, in such circumstances, to furnish such information shall not be an offense under this chapter”, read “such information shall not be required”. It was felt that such exception in such section 111 was actually more in the nature of an exception to the penal provisions, and it has been so treated in this revised title. The collection of statistics on religion are provided for in section 102 of this title.

#### AMENDMENTS

1976—Subsec. (a)(1). Pub. L. 94-521, §15(a)(1), inserted “and questionnaires” after “schedules”.

Subsec. (b). Pub. L. 94-521, §15(a)(2), struck out reference to imprisonment provisions provided by sections 221 and 224 of this title.

#### EFFECTIVE DATE OF 1976 AMENDMENT

Amendment by Pub. L. 94-521 effective Oct. 17, 1976, see section 17 of Pub. L. 94-521, set out as a note under section 1 of this title.

### SUBCHAPTER III—PROCEDURE

#### § 241. Evidence

When any request for information, made by the Secretary or other authorized officer or employee of the Department of Commerce or bureau or agency thereof, is made by registered or certified mail or telegram, the return receipt therefor or other written receipt thereof shall be prima facie evidence of an official request in any prosecution under such section.

(Aug. 31, 1954, ch. 1158, 68 Stat. 1025; Pub. L. 85-207, §19, Aug. 28, 1957, 71 Stat. 484; Pub. L. 94-521, §15(b), Oct. 17, 1976, 90 Stat. 2465.)

#### HISTORICAL AND REVISION NOTES

Based on title 13, U.S.C., 1952 ed., §§74, 84 (Aug. 7, 1916, ch. 274, §4, 39 Stat. 437; Apr. 2, 1924, ch. 80, §4, 43 Stat. 32; June 18, 1929, ch. 28, §21, 46 Stat. 26; June 14, 1938, ch. 358, 52 Stat. 678; July 25, 1947, ch. 331, 61 Stat. 457).

Section consolidates part of section 74 of title 13, U.S.C., 1952 ed., which section related to the collection of cotton statistics, with part of section 84 of such title, which section related to the collection of statistics on oilseeds, nuts and kernels, fats, oils and greases. For remainder of such sections 74 and 84, see Distribution Table.

Section 74 of title 13, U.S.C., 1952 ed., authorized the making of requests for information by registered mail,

and provided that, if so made, the registry receipt should be “accepted as evidence of such demand”. Section 84 thereof authorized the making of requests by registered mail, or “by telegraph”, and provided that, if so made, the “return” receipt therefor should be “prima facie evidence of an official request”. The authorizations contained in such sections have been carried into section 224 of this title, and the evidentiary provisions thereof have been carried into this section, and they apply to investigations other than those to which such sections 74 and 84 related. See Revision Note to section 224 of this title.

In this revised section, the language of section 84 of title 13, U.S.C., 1952 ed., was largely followed as probably being the more desirable, but “or other written receipt thereof” was inserted since there is no return receipt with respect to a telegram, and words “in any prosecution under such section” were inserted for the purpose of completeness.

Further, words “Secretary or other authorized officer or employee of the Department of Commerce or bureau or agency thereof” were substituted for references to the Director of the Census, to conform with 1950 Reorganization Plan No. 5, §§1, 2, eff. May 24, 1950, 15 F.R. 3174, 64 Stat. 1263. See Revision Note to section 4 of this title.

Changes were made in phraseology.

#### AMENDMENTS

1976—Pub. L. 94-521 struck out “as authorized by section 224 of this title” after “telegram”.

1957—Pub. L. 85-207 inserted “or certified” after “registered”.

#### EFFECTIVE DATE OF 1976 AMENDMENT

Amendment by Pub. L. 94-521 effective Oct. 17, 1976, see section 17 of Pub. L. 94-521, set out as a note under section 1 of this title.

### CHAPTER 9—COLLECTION AND PUBLICATION OF FOREIGN COMMERCE AND TRADE STATISTICS

Sec.	
301.	Collection and publication.
302.	Rules, regulations, and orders.
303.	Secretary of Treasury, functions. <sup>1</sup>
304.	Filing export information, delayed filings, penalties for failure to file.
305.	Penalties for unlawful export information activities.
306.	Delegation of functions.
307.	Relationship to general census law.

#### AMENDMENTS

2002—Pub. L. 107-228, div. B, title XIV, §1404(f)(2), Sept. 30, 2002, 116 Stat. 1456, added item 305 and struck out former item 305 “Violations, penalties”.

#### § 301. Collection and publication

(a) The Secretary is authorized to collect information from all persons exporting from, or importing into, the United States and the non-contiguous areas over which the United States exercises sovereignty, jurisdiction, or control, and from all persons engaged in trade between the United States and such noncontiguous areas and between those areas, or from the owners, or operators of carriers engaged in such foreign commerce or trade, and shall compile and publish such information pertaining to exports, imports, trade, and transportation relating thereto, as he deems necessary or appropriate to enable him to foster, promote, develop, and further

<sup>1</sup> So in original. Does not conform to section catchline.

the commerce, domestic and foreign, of the United States and for other lawful purposes.

(b) The Secretary shall submit to the Committee on Ways and Means of the House of Representatives and the Committee on Finance of the Senate, on quarterly and cumulative bases, statistics on United States imports for consumption and United States exports by country and by product. Statistics on United States imports shall be submitted in accordance with the Harmonized Tariff Schedule of the United States Annotated for Statistical Reporting Purposes and general statistical note 1 thereof, in detail as follows:

- (1) net quantity;
- (2) United States customs value;
- (3) purchase price or its equivalent;
- (4) equivalent of arm's length value;
- (5) aggregate cost from port of exportation to United States port of entry;
- (6) a United States port of entry value comprised of (5) plus (4), if applicable, or, if not applicable, (5) plus (3); and
- (7) for transactions where (3) and (4) are equal, the total value of such transactions.

The data for paragraphs (1), (2), (3), (5), and (6) shall be reported separately for nonrelated and related party transactions, and shall also be reported as a total of all transactions.

(c) In submitting any information under subsection (b) with respect to exports, the Secretary shall state separately from the total value of all exports—

- (1)(A) the value of agricultural commodities exported under the Agricultural Trade Development and Assistance Act of 1954, as amended; and
- (B) the total amount of all export subsidies paid to exporters by the United States under such Act for the exportation of such commodities; and
- (2) the value of goods exported under the Foreign Assistance Act of 1961.

(d) To assist the Secretary to carry out the provisions of subsections (b) and (c)—

- (1) the Secretary of Agriculture shall furnish information to the Secretary concerning the value of agricultural commodities exported under provisions of the Agricultural Trade Development and Assistance Act of 1954, as amended, and the total amounts of all export subsidies paid to exporters by the United States under such Act for the exportation of such commodities; and
- (2) the Secretary of State shall furnish information to the Secretary concerning the value of goods exported under the provisions of the Foreign Assistance Act of 1961, as amended.

(e) There shall be reported, on monthly and cumulative bases, for each heading or subheading in the Harmonized Tariff Schedule of the United States Annotated for Statistical Reporting Purposes, the United States port of entry value (as determined under subsection (b)(6)). There shall be reported, on monthly and cumulative bases, the balance of international trade for the United States reflecting (1) the aggregate value of all United States imports as reported in accordance with the first sentence of this subsection, and (2) the aggregate value of

all United States exports. The information required to be reported under this subsection shall be reported in a form that is adjusted for economic inflation or deflation (on a constant dollar basis consistent with the reporting of the National Income and Product Accounts), and in a form that is not so adjusted.

(f) On or before January 1, 1981, and as often thereafter as may be necessary to reflect significant changes in rates, there shall be reported for each heading or subheading in the Harmonized Tariff Schedule of the United States Annotated for Statistical Reporting Purposes, the ad valorem or ad valorem equivalent rate of duty which would have been required to be imposed on dutiable imports under that heading or subheading, if the United States customs values of such imports were based on the United States port of entry value (as reported in accordance with the first sentence of subsection (e)) in order to collect the same amount of duties on imports under that heading or subheading as are currently collected.

(g) Shippers' Export Declarations (or any successor document), wherever located, shall be exempt from public disclosure unless the Secretary determines that such exemption would be contrary to the national interest.

(h) The Secretary is authorized to require by regulation the filing of Shippers' Export Declarations under this chapter through an automated and electronic system for the filing of export information established by the Department of the Treasury.

(Added Pub. L. 87-826, §2, Oct. 15, 1962, 76 Stat. 951; amended Pub. L. 93-618, title VI, §609(a), Jan. 3, 1975, 88 Stat. 2074; Pub. L. 96-39, title XI, §1108(a), July 26, 1979, 93 Stat. 313; Pub. L. 96-275, §1, June 17, 1980, 94 Stat. 539; Pub. L. 100-418, title I, §§1214(a)(2), 1931(a), 1932, Aug. 23, 1988, 102 Stat. 1155, 1320; Pub. L. 106-113, div. B, §1000(a)(7) [div. B, title XII, §1252(a)], Nov. 29, 1999, 113 Stat. 1536, 1501A-506.)

#### REFERENCES IN TEXT

The Harmonized Tariff Schedule of the United States, referred to in subsecs. (b), (e), and (f), is not set out in the Code. See Publication of Harmonized Tariff Schedule note set out under section 1202 of Title 19, Customs Duties.

The Agricultural Trade Development and Assistance Act of 1954, referred to in subsecs. (c)(1), (d)(1), is act July 10, 1954, ch. 649, 68 Stat. 454, as amended, which is classified generally to chapter 41 (§1691 et seq.) of Title 7, Agriculture. For complete classification of this Act to the Code, see Short Title note set out under section 1691 of Title 7 and Tables.

The Foreign Assistance Act of 1961, referred to in subsecs. (c)(2), (d)(2), is Pub. L. 87-195, Sept. 4, 1961, 75 Stat. 424, as amended, which is classified principally to chapter 32 (§2151 et seq.) of Title 22, Foreign Relations and Intercourse. For complete classification of this Act to the Code, see Short Title note set out under section 2151 of Title 22 and Tables.

#### AMENDMENTS

1999—Subsec. (h). Pub. L. 106-113 added subsec. (h).

1988—Subsec. (b). Pub. L. 100-418, §1214(a)(2)(A), substituted "Harmonized Tariff Schedule of the United States Annotated for Statistical Reporting Purposes and general statistical note 1 thereof" for "Tariff Schedules of the United States Annotated and general statistical headnote 1 thereof".

Subsec. (e). Pub. L. 100-418, §1932, inserted at end “The information required to be reported under this subsection shall be reported in a form that is adjusted for economic inflation or deflation (on a constant dollar basis consistent with the reporting of the National Income and Product Accounts), and in a form that is not so adjusted.”

Pub. L. 100-418, §1931(a), struck out at end “The values and balance of trade required to be reported by this subsection shall be released no later than 48 hours before the release of any other government statistics concerning values of United States imports or United States balance of trade, or statistics from which such values or balance may be derived.”

Pub. L. 100-418, §1214(a)(2)(B), substituted “heading or subheading in the Harmonized Tariff Schedule of the United States Annotated for Statistical Reporting Purposes” for “item in the Tariff Schedules of the United States Annotated” in first sentence.

Subsec. (f). Pub. L. 100-418, §1214(a)(2)(C), substituted “heading or subheading in the Harmonized Tariff Schedule of the United States Annotated for Statistical Reporting Purposes” for “item of the Tariff Schedules of the United States Annotated” and “under that heading or subheading” for “under that item”, in two places.

1980—Subsec. (g). Pub. L. 96-275 added subsec. (g).

1979—Subsecs. (e), (f). Pub. L. 96-39 added subsecs. (e) and (f).

1975—Pub. L. 93-618 designated existing provisions as subsec. (a) and added subsecs. (b) to (d).

#### EFFECTIVE DATE OF 1999 AMENDMENT

Pub. L. 106-113, div. B, §1000(a)(7) [div. B, title XII, §1252(c)], Nov. 29, 1999, 113 Stat. 1536, 1501A-506, provided that: “The amendment made by subsection (a) [amending this section] shall take effect 270 days after the Secretary of Commerce, the Secretary of the Treasury, and the Director of the National Institute of Standards and Technology jointly provide a certification to the Committee on Foreign Relations of the Senate and the Committee on International Relations of the House of Representatives that a secure Automated Export System available through the Internet that is capable of handling the expected volume of information required to be filed under subsection (b) [set out below], plus the anticipated volume from voluntary use of the Automated Export System, has been successfully implemented and tested and is fully functional with respect to reporting all items on the United States Munitions List, including their quantities and destinations.” [The Automated Export System Certification Report was submitted to the Committee on Foreign Relations of the Senate on June 11, 2001, and to the Committee on International Relations of the House of Representatives on May 31, 2001. See 66 F.R. 39006.]

#### EFFECTIVE DATE OF 1988 AMENDMENT

Amendment by section 1214(a)(2) of Pub. L. 100-418 effective Jan. 1, 1989, and applicable with respect to articles entered on or after such date, see section 1217(b)(1) of Pub. L. 100-418, set out as an Effective Date note under section 3001 of Title 19, Customs Duties.

#### EFFECTIVE DATE OF 1980 AMENDMENT

Section 4 of Pub. L. 96-275 provided that:

“(a) Except as provided in subsection (b), this Act, and the amendments made by this Act [amending this section and enacting provisions set out as a note under this section], shall become effective on the later of July 1, 1980, or the date of enactment of this Act [June 17, 1980].

“(b) The amendment made by section 2 [amending section 93 of former Title 46, Shipping] shall become effective on the date which is forty-five days after the date of enactment of this Act [June 17, 1980].”

#### EFFECTIVE DATE OF 1979 AMENDMENT

Section 1108(b) of Pub. L. 96-39 provided that: “The amendment made by subsection (a) [amending this sec-

tion] shall apply to reports made after December 31, 1979.”

#### EFFECTIVE DATE OF 1975 AMENDMENT

Section 609(b) of Pub. L. 93-618 provided that: “The amendments made by subsection (a) [amending this section] shall take effect on January 1, 1975.”

#### EFFECTIVE DATE

Section 4 of Pub. L. 87-826 provided that: “The provisions of this Act [enacting section 301 et seq. of this title and repealing sections 173, 174, 177, 179, 181, 184 to 187, and 193 of Title 15, Commerce and Trade, sections 92 and 95 of former Title 46, Shipping, and section 1486 of Title 48, Territories and Insular Possessions] shall take effect one hundred and eighty days after approval [Oct. 15, 1962], except that the last sentence of section 337, “Fifth” of the Revised Statutes [section 174 of Title 15], and the requirement for oaths as found in section 4200 of the Revised Statutes [section 92 of former Title 46] shall be repealed effective on the date this Act is approved [Oct. 15, 1962].”

#### REGULATIONS

Pub. L. 106-113, div. B, §1000(a)(7) [div. B, title XII, §1252(b)], Nov. 29, 1999, 113 Stat. 1536, 1501A-506, provided that:

“(1) IN GENERAL.—The Secretary of Commerce, with the concurrence of the Secretary of State, shall publish regulations in the Federal Register to require that, upon the effective date of those regulations, exporters (or their agents) who are required to file Shippers’ Export Declarations under chapter 9 of title 13, United States Code, file such Declarations through the Automated Export System with respect to exports of items on the United States Munitions List or the Commerce Control List.

“(2) ELEMENTS OF THE REGULATIONS.—The regulations referred to in paragraph (1) shall include at a minimum—

“(A) provision by the Department of Commerce for the establishment of on-line assistance services to be available for those individuals who must use the Automated Export System;

“(B) provision by the Department of Commerce for ensuring that an individual who is required to use the Automated Export System is able to print out from the System a validated record of the individual’s submission, including the date of the submission and a serial number or other unique identifier, where appropriate, for the export transaction; and

“(C) a requirement that the Department of Commerce print out and maintain on file a paper copy or other acceptable back-up record of the individual’s submission at a location selected by the Secretary of Commerce.”

#### IMPROVEMENTS TO THE AUTOMATED EXPORT SYSTEM

Pub. L. 107-228, div. B, title XIV, §1404(a)-(c), Sept. 30, 2002, 116 Stat. 1454, provided that:

“(a) CONTRIBUTION TO THE AUTOMATED EXPORT SYSTEM.—Of the amount provided under section 1402 of this Act [116 Stat. 1453], \$250,000 is authorized to be available for the purpose of—

“(1) providing the Department [of State] with full access to the Automated Export System;

“(2) ensuring that the system is modified to meet the needs of the Department [of State], if such modifications are consistent with the needs of other United States Government agencies; and

“(3) providing operational support.

“(b) MANDATORY FILING.—The Secretary of Commerce, with the concurrence of the Secretary of State and the Secretary of [the] Treasury, shall publish regulations in the Federal Register to require, upon the effective date of those regulations, that all persons who are required to file export information under chapter 9 of title 13, United States Code, file such information through the Automated Export System.

“(c) REQUIREMENT FOR INFORMATION SHARING.—The Secretary [of State] shall conclude an information-sharing arrangement with the heads of the United States Customs Service and the Census Bureau—

“(1) to allow the Department [of State] to access information on controlled exports made through the United States Postal Service; and

“(2) to adjust the Automated Export System to parallel information currently collected by the Department.”

[For transfer of functions, personnel, assets, and liabilities of the United States Customs Service of the Department of the Treasury, including functions of the Secretary of the Treasury relating thereto, to the Secretary of Homeland Security, and for treatment of related references, see sections 203(1), 551(d), 552(d), and 557 of Title 6, Domestic Security, and the Department of Homeland Security Reorganization Plan of November 25, 2002, as modified, set out as a note under section 542 of Title 6.]

#### VOLUMETRIC INDEX

Section 1931(b) of Pub. L. 100-418 provided that:

“(1) The Director of the Census, in consultation with the Director of the Bureau of Economic Analysis and the Commissioner of Labor Statistics, shall conduct a study to determine the feasibility of developing, and of publishing, an index that measures the real volume of merchandise trade on a monthly basis, which would be reported simultaneously with the balance of merchandise trade for the United States.

“(2) The Director of the Census shall submit to the Committee on Finance of the Senate and the Committee on Ways and Means of the House of Representatives a report on the study conducted under paragraph (1) by no later than the date that is one year after the date of enactment of this Act [Aug. 23, 1988].”

#### CONGRESSIONAL ACCESS TO INFORMATION

Section 3 of Pub. L. 96-275 provided that: “Nothing in this Act [enacting subsec. (g) of this section, amending section 93 of former Title 46, Shipping, and enacting provisions set out as notes under this section] shall be construed as authorizing the withholding of information from Congress.”

#### DEFINITIONS

Pub. L. 106-113, div. B, §1000(a)(7) [div. B, title XII, subtitle E, §1256], Nov. 29, 1999, 113 Stat. 1536, 1501A-507, provided that: “In this subtitle [amending this section and enacting provisions set out as notes above]:

“(1) AUTOMATED EXPORT SYSTEM.—The term ‘Automated Export System’ means the automated and electronic system for filing export information established under chapter 9 of title 13, United States Code, on June 19, 1995 (60 Federal Register 32040).

“(2) COMMERCE CONTROL LIST.—The term ‘Commerce Control List’ has the meaning given the term in section 774.1 of title 15, Code of Federal Regulations.

“(3) SHIPPERS’ EXPORT DECLARATION.—The term ‘Shippers’ Export Declaration’ means the export information filed under chapter 9 of title 13, United States Code, as described in part 30 of title 15, Code of Federal Regulations.

“(4) UNITED STATES MUNITIONS LIST.—The term ‘United States Munitions List’ means the list of items controlled under section 38 of the Arms Export Control Act (22 U.S.C. 2778).”

### § 302. Rules, regulations, and orders

The Secretary may make such rules, regulations, and orders as he deems necessary or appropriate to carry out the provisions of this chapter. Any rules, regulations, or orders issued pursuant to this authority may be established in such form or manner, may contain such classifications or differentiations, and may provide for such adjustments and reasonable exceptions

as in the judgment of the Secretary are necessary or proper to effectuate the purpose of this chapter, or to prevent circumvention or evasion of any rule, regulation, or order issued hereunder. The Secretary may also provide by rule or regulation, for such confidentiality, publication, or disclosure, of information collected hereunder as he may deem necessary or appropriate in the public interest. Rules, regulations, and orders, or amendments thereto shall have the concurrence of the Secretary of the Treasury prior to promulgation.

(Added Pub. L. 87-826, §2, Oct. 15, 1962, 76 Stat. 951.)

### § 303. Secretary of Treasury functions

To assist the Secretary to carry out the provisions of this chapter, the Secretary of the Treasury shall collect information in the form and manner prescribed by the regulations issued pursuant to this chapter from persons engaged in foreign commerce or trade and from the owners or operators of carriers.

(Added Pub. L. 87-826, §2, Oct. 15, 1962, 76 Stat. 951; amended Pub. L. 107-228, div. B, title XIV, §1404(d), Sept. 30, 2002, 116 Stat. 1454.)

#### AMENDMENTS

2002—Pub. L. 107-228 struck out “, other than by mail,” after “foreign commerce or trade”.

### § 304. Filing export information, delayed filings, penalties for failure to file

(a) The information or reports in connection with the exportation or transportation of cargo required to be filed by carriers with the Secretary of the Treasury under any rule, regulation, or order issued pursuant to this chapter may be filed after the departure of such carrier from the port or place of exportation or transportation, whether such departing carrier is destined directly to a foreign port or place or to a noncontiguous area, or proceeds by way of other ports or places of the United States, provided that a bond in an approved form in a penal sum of \$10,000 is filed with the Secretary of the Treasury. The Secretary of Commerce may, by a rule, regulation, or order issued in conformity herewith, prescribe a maximum period after such departure during which the required information or reports may be filed. In the event any such information or report is not filed within such prescribed period, a penalty not to exceed \$1,000 for each day’s delinquency beyond the prescribed period, but not more than \$10,000 per violation shall be exacted. Civil suit may be instituted in the name of the United States against the principal and surety for the recovery of any penalties that may accrue and be exacted in accordance with the terms of the bond.

(b) Any person, other than a person described in subsection (a), required to submit export information, shall file such information in accordance with any rule, regulation, or order issued pursuant to this chapter. In the event any such information or reports are not filed within such prescribed period, the Secretary of Commerce (and officers of the Department of Commerce specifically designated by the Secretary) may impose a civil penalty not to exceed \$1,000 for

each day's delinquency beyond the prescribed period, but not more than \$10,000 per violation.

(c) The Secretary may remit or mitigate any penalty incurred for violations of this section and regulations issued pursuant thereto if, in his opinion, they were incurred without willful negligence or fraud, or other circumstances justify a remission or mitigation.

(Added Pub. L. 87-826, §2, Oct. 15, 1962, 76 Stat. 952; amended Pub. L. 107-228, div. B, title XIV, §1404(e), Sept. 30, 2002, 116 Stat. 1454.)

#### AMENDMENTS

2002—Subsec. (a). Pub. L. 107-228, §1404(e)(1), substituted “a penal sum of \$10,000” for “the penal sum of \$1,000” in first sentence and “a penalty not to exceed \$1,000 for each day's delinquency beyond the prescribed period, but not more than \$10,000 per violation” for “a penalty not to exceed \$100 for each day's delinquency beyond the prescribed period, but not more than \$1,000,” in third sentence.

Subsecs. (b), (c). Pub. L. 107-228, §1404(e)(2), (3), added subsec. (b) and redesignated former subsec. (b) as (c).

### § 305. Penalties for unlawful export information activities

#### (a) CRIMINAL PENALTIES.—

(1) FAILURE TO FILE; SUBMISSION OF FALSE OR MISLEADING INFORMATION.—Any person who knowingly fails to file or knowingly submits false or misleading export information through the Shippers Export Declaration (SED) (or any successor document) or the Automated Export System (AES) shall be subject to a fine not to exceed \$10,000 per violation or imprisonment for not more than 5 years, or both.

(2) FURTHERANCE OF ILLEGAL ACTIVITIES.—Any person who knowingly reports any information on or uses the SED or the AES to further any illegal activity shall be subject to a fine not to exceed \$10,000 per violation or imprisonment for not more than 5 years, or both.

(3) FORFEITURE PENALTIES.—Any person who is convicted under this subsection shall, in addition to any other penalty, be subject to forfeiting to the United States—

(A) any of that person's interest in, security of, claim against, or property or contractual rights of any kind in the goods or tangible items that were the subject of the violation;

(B) any of that person's interest in, security of, claim against, or property or contractual rights of any kind in tangible property that was used in the export or attempt to export that was the subject of the violation; and

(C) any of that person's property constituting, or derived from, any proceeds obtained directly or indirectly as a result of the violation.

(b) CIVIL PENALTIES.—The Secretary (and officers of the Department of Commerce specifically designated by the Secretary) may impose a civil penalty not to exceed \$10,000 per violation on any person violating the provisions of this chapter or any rule, regulation, or order issued thereunder, except as provided in section 304. Such penalty may be in addition to any other penalty imposed by law.

#### (c) CIVIL PENALTY PROCEDURE.—

(1) IN GENERAL.—Whenever a civil penalty is sought for a violation of this section or of section 304, the charged party is entitled to receive a formal complaint specifying the charges and, at his or her request, to contest the charges in a hearing before an administrative law judge. Any such hearing shall be conducted in accordance with sections 556 and 557 of title 5, United States Code.

(2) COMMENCEMENT OF CIVIL ACTIONS.—If any person fails to pay a civil penalty imposed under this chapter, the Secretary may request the Attorney General to commence a civil action in an appropriate district court of the United States to recover the amount imposed (plus interest at currently prevailing rates from the date of the final order). No such action may be commenced more than 5 years after the date the order imposing the civil penalty becomes final. In such action, the validity, amount, and appropriateness of such penalty shall not be subject to review.

(3) REMISSION OR MITIGATION OF PENALTIES.—The Secretary may remit or mitigate any penalties imposed under paragraph (1) if, in the Secretary's opinion—

(A) the penalties were incurred without willful negligence or fraud; or

(B) other circumstances exist that justify a remission or mitigation.

(4) APPLICABLE LAW FOR DELEGATED FUNCTIONS.—If, pursuant to section 306, the Secretary delegates functions under this section to another agency, the provisions of law of that agency relating to penalty assessment, remission or mitigation of such penalties, collection of such penalties, and limitations of actions and compromise of claims, shall apply.

(5) DEPOSIT OF PAYMENTS IN GENERAL FUND OF THE TREASURY.—Any amount paid in satisfaction of a civil penalty imposed under this section or section 304 shall be deposited into the general fund of the Treasury and credited as miscellaneous receipts.

#### (d) ENFORCEMENT.—

(1) BY THE SECRETARY OF COMMERCE.—The Secretary of Commerce may designate officers or employees of the Office of Export Enforcement to conduct investigations pursuant to this chapter. In conducting such investigations, those officers or employees may, to the extent necessary or appropriate to the enforcement of this chapter, exercise such authorities as are conferred upon them by other laws of the United States, subject to policies and procedures approved by the Attorney General.

(2) BY THE COMMISSIONER OF CUSTOMS.—The Commissioner of Customs may designate officers or employees of the Customs Service to enforce the provisions of this chapter, or to conduct investigations pursuant to this chapter.

(e) REGULATIONS.—The Secretary of Commerce shall promulgate regulations for the implementation and enforcement of this section.

(f) EXEMPTION.—The criminal fines provided for in this section are exempt from the provisions of section 3571 of title 18, United States Code.

(Added Pub. L. 87–826, §2, Oct. 15, 1962, 76 Stat. 952; amended Pub. L. 107–228, div. B, title XIV, §1404(f)(1), Sept. 30, 2002, 116 Stat. 1455.)

#### AMENDMENTS

2002—Pub. L. 107–228 substituted “Penalties for unlawful export information activities” for “Violations, penalties” in section catchline and amended text generally. Prior to amendment, text read as follows: “Any person, including the owners or operators of carriers, violating the provisions of this chapter, or any rule, regulation, or order issued thereunder, except as provided in section 304 above, shall be liable to a penalty not to exceed \$1,000 in addition to any other penalty imposed by law. The amount of any such penalty shall be payable into the Treasury of the United States and shall be recoverable in a civil suit in the name of the United States.”

#### TRANSFER OF FUNCTIONS

For transfer of functions, personnel, assets, and liabilities of the United States Customs Service of the Department of the Treasury, including functions of the Secretary of the Treasury relating thereto, to the Secretary of Homeland Security, and for treatment of related references, see sections 203(1), 551(d), 552(d), and 557 of Title 6, Domestic Security, and the Department of Homeland Security Reorganization Plan of November 25, 2002, as modified, set out as a note under section 542 of Title 6.

### § 306. Delegation of functions

Subject to the concurrence of the head of the department or agency concerned, the Secretary may make such provisions as he shall deem appropriate, authorizing the performance by any officer, agency, or employee of the United States Government departments or offices, or the governments of any areas over which the United States exercises sovereignty, jurisdiction, or control, of any function of the Secretary, contained in this chapter.

(Added Pub. L. 87–826, §2, Oct. 15, 1962, 76 Stat. 952.)

### § 307. Relationship to general census law

The following sections only, 1, 2, 3, 4, 5, 6, 7, 11, 21, 22, 23, 24, 211, 212, 213, and 214, of chapters 1 through 7 of this title are applicable to this chapter.

(Added Pub. L. 87–826, §2, Oct. 15, 1962, 76 Stat. 952.)

## CHAPTER 10—EXCHANGE OF CENSUS INFORMATION

Sec.	
401.	Exchange of census information with Bureau of Economic Analysis.
402.	Providing business data to Designated Statistical Agencies.

#### AMENDMENTS

2002—Pub. L. 107–347, title V, §526(b)(2), Dec. 17, 2002, 116 Stat. 2970, added item 402.

### § 401. Exchange of census information with Bureau of Economic Analysis

(a) EXCHANGE OF INFORMATION.—The Bureau of the Census shall exchange with the Bureau of

Economic Analysis of the Department of Commerce information collected under this title, and under the International Investment and Trade in Services Survey Act, that pertains to any business enterprise that is operating in the United States, if the Secretary of Commerce determines such information is appropriate to augment and improve the quality of data collected under the International Investment and Trade in Services Survey Act. Information provided to the Bureau of Economic Analysis by the Bureau of the Census shall be only those data collected directly from respondents by the Bureau of the Census.

(b) REQUESTS FOR INFORMATION.—The Director of the Bureau requesting information under this section shall make the request in writing and shall certify that the information will be used only for statistical activities performed to improve the quality of data collected under the authority of title 13, United States Code, and the International Investment and Trade in Services Survey Act.

(c) DEFINITION.—As used in subsection (a), the terms “business enterprise” and “United States” have the meanings given those terms in section 3 of the International Investment and Trade in Services Survey Act.

(Added Pub. L. 101–533, §5(a), Nov. 7, 1990, 104 Stat. 2347.)

#### REFERENCES IN TEXT

The International Investment and Trade in Services Survey Act, referred to in text, is Pub. L. 94–472, Oct. 11, 1976, 90 Stat. 2059, as amended, which is classified generally to chapter 46 (§3101 et seq.) of Title 22, Foreign Relations and Intercourse. Section 3 of the Act is classified to section 3102 of Title 22. For complete classification of this Act to the Code, see Short Title note set out under section 3101 of Title 22 and Tables.

### § 402. Providing business data to Designated Statistical Agencies

The Bureau of the Census may provide business data to the Bureau of Economic Analysis and the Bureau of Labor Statistics (“Designated Statistical Agencies”) if such information is required for an authorized statistical purpose and the provision is the subject of a written agreement with that Designated Statistical Agency, or their successors, as defined in the Confidential Information Protection and Statistical Efficiency Act of 2002.

(Added Pub. L. 107–347, title V, §526(b)(1), Dec. 17, 2002, 116 Stat. 2969.)

#### REFERENCES IN TEXT

The Confidential Information Protection and Statistical Efficiency Act of 2002, referred to in text, is title V of Pub. L. 107–347, Dec. 17, 2002, 116 Stat. 2962, which enacted this section, amended section 176a of Title 15, Commerce and Trade, and enacted provisions set out as a note under section 3501 of Title 44, Public Printing and Documents. Provisions defining “Designated Statistical Agency” are contained in section 522 of the Act, which is set out in a note under section 3501 of Title 44.

## Appendix C

# 2020 Census Local Update of Census Addresses Operation (LUCA) Information Guide

Issued December 2016  
D-2101

## What Is LUCA?

The Local Update of Census Addresses Operation (LUCA) is a voluntary decennial census operation. LUCA is the only opportunity prior to the 2020 Census for tribal, state, and local governments (including the District of Columbia and Puerto Rico) to review and update the U.S. Census Bureau's residential address list for their jurisdiction. The Census Bureau relies on a complete and accurate address list to reach every living quarters and associated population for inclusion in the census. The Census Address List Improvement Act of 1994 (Public Law 103-430) authorizes LUCA.

Active, functioning, legal governments are eligible to participate in LUCA, including:

- Federally recognized tribes with a reservation and/or off reservation trust lands.
- States.
- Counties.
- Cities (incorporated places).
- Townships (minor civil divisions).

If your government lacks the resources to participate in LUCA, you can arrange for a higher level of government, such as a county; or an organization, such as a regional planning agency or council of governments, to conduct your address review.

## Why Participate in LUCA?

The accuracy and completeness of the address list is critical to the accuracy and completeness of the decennial census. Participating in LUCA can help ensure an accurate census for your community.

Although the primary purpose of the decennial census is to apportion seats in the U.S. House of Representatives, census data are used to:

- Distribute federal funds for over 1,000 programs administered by 26 federal agencies to tribal, state, and local governments.
- Provide statistical support for grant applications that fund community and regional development, education, agriculture, energy, and environmental programs, as well as other needed community improvements and enhancements.
- Help your community plan for future needs.

## What Is New for LUCA?

- Pre-LUCA activities, such as the on-going Geographic Support System (GSS) Partnership Program, provide more opportunities to submit address information and receive non-Title 13 feedback.
- New streamlined participation through the full address list review.
- Online viewing availability for the Census Bureau housing unit counts by census block for your jurisdiction starting in January 2017.
- Ease of use with standard data formats for viewing the Census Bureau's digital address list (Excel [.xlsx] and Comma Delimited Text [.csv]).
- Availability of the Census Bureau Geographic Update Partnership Software, a self-contained Geographic Information System (GIS) tool.
- Access to comprehensive data that include residential structure latitude/longitude coordinates and ungeocoded census residential addresses.
- Digital participants may submit residential structure coordinates as part of their address updates.

## LUCA Schedule

2020 Census LUCA Operation Schedule	
Timeframe	Activity
January 2017	Advance notice mailed to Highest Elected Officials (HEOs), Tribal Chairs (TCs), Governors, and other LUCA contacts.
March 2017	LUCA promotional workshops begin.
July 2017	LUCA invitation and registration materials mailed to HEOs, TCs, and Governors.
October 2017	LUCA training workshops begin.
February–April 2018	Participants review and update the Census Bureau’s address list.
February–September 2018	Census Bureau processes LUCA submissions.

## LUCA Preparation Checklist

- ✓ Participate in the GSS.
- ✓ Review your boundaries and respond to the 2017 Boundary and Annexation Survey (BAS).
- ✓ Complete and return the *Contact Information Update Form*.
- ✓ Attend a LUCA promotional workshop or access information at the LUCA Web site.
- ✓ Access the Census Address Count List for your jurisdiction online.
- ✓ Determine and assemble local address sources.
- ✓ Update your address list with information needed for LUCA:
  - Unit designations for multiunit housing (e.g., Apt 1, Apt 2, Unit A, Unit B, etc.) (required).
  - Residential address status (required, the LUCA Operation only accepts residential addresses).
  - ZIP Codes for mailing addresses desired.
- ✓ Geocode your local address list using the online Census Geocoder (digital address list required).
- ✓ Determine your LUCA materials format.
- ✓ Develop your address review strategy.
- ✓ Highest Elected Official (HEO), Tribal Chair (TC), or Governor registers for LUCA.
- ✓ Attend a training workshop or Webinar.
- ✓ Review and update LUCA materials.
- ✓ Receive address feedback.

## **Participate in the GSS.**

Pre-LUCA activities provide more opportunities to submit address information and receive non-Title 13 feedback through the continuous GSS Partnership Program.

## **Review your boundaries and respond to the 2017 BAS.**

The 2017 BAS is the last opportunity to ensure that your boundaries are correct before LUCA begins. Because LUCA participants receive only addresses inside their jurisdictional boundaries for review and update, you may not be able to view your entire address list if your boundaries are incorrect. The 2017 BAS starts in December 2016. For more information, visit the BAS Web site at <[www.census.gov/geo/partnerships/bas.html](http://www.census.gov/geo/partnerships/bas.html)>.

## **Complete and return the *Contact Information Update Form*.**

In January 2017, the HEO, TC, Governor, and other contacts that the Census Bureau has associated with each government will receive a LUCA notification package. The package includes information about LUCA and a *Contact Information*

*Update Form*. Complete the form and return it using the postage-paid envelope. If you prefer, you may scan it and return it via e-mail to <[GEO.2020.LUCA@census.gov](mailto:GEO.2020.LUCA@census.gov)>.

## **Attend a LUCA promotional workshop or access information on the LUCA Web site.**

Plan to attend a LUCA promotional workshop or Webinar to obtain additional information about participating in LUCA. You may also obtain additional information by accessing the LUCA Web site at <[www.census.gov/geo/partnerships/luca.html](http://www.census.gov/geo/partnerships/luca.html)>.

## **Access the Census Address Count List for your jurisdiction online.**

Your government's Address Count List, which contains the Census Bureau's count of residential addresses for each census block within your jurisdiction, is available on the LUCA Web site. Compare the census counts to your counts to help focus your participation efforts. Each census block record is at least 12 characters in length and contains seven fields of information <[www.census.gov/geo/maps-data/data/geocoder.html](http://www.census.gov/geo/maps-data/data/geocoder.html)>.

**Digital Address Count List**

<b>Maximum character length</b>	<b>Field name</b>	<b>Description</b>
12	Entity ID	Unique code assigned by the Census Bureau to each entity.
2	State code	2-digit current state code.
3	County code	3-digit current county code.
6	Census tract number	6-digit current census tract number, with an implied decimal point between the fourth and fifth digit.
4	Census block number	4-digit current census block number.
7	Count of housing unit addresses	Census Bureau's most recent count of housing unit addresses.
7	Count of group quarters addresses	Census Bureau's most recent count of group quarters addresses.

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### ✔ Determine and assemble local address sources.

Potential local address sources for compiling your residential address list include:

- E-911 address files.
- New housing construction or building permits.
- Housing inspection records.
- Planning and zoning records.
- Local utility records.
- School enrollment records.
- Driver license files.
- Annexation records.
- Assessment or tax files (residential units).
- Voter registration files.

### ✔ Update your Address List with information needed for LUCA.

**Unit Designation:** LUCA **requires** that each record include unit identifiers (e.g., Apt 1, Apt 2, Unit A, Unit B). Basic street address and the individual unit designation should be provided for multiunit buildings.

**Residential Status:** LUCA accepts only **residential** address updates.

**ZIP Code:** A ZIP Code in a mailing address is useful to the Census Bureau.

### ✔ Geocode your local address list using the online Census Geocoder (digital address list required).

The Census Bureau defines geocoding as assigning a state, county, census tract, and census block number to an address. Used in conjunction with the Address Count List, the Census Geocoder allows you to compare your digital address list to the Census Bureau's count of addresses by census block. You can focus your address review on the census blocks with the greatest address count differences between your address list and the Census Bureau's. For more information, see <[www.census.gov/geo/maps-data/data/geocoder.html](http://www.census.gov/geo/maps-data/data/geocoder.html)>.

### ✔ Determine your LUCA materials format.

The LUCA address lists and maps are available in digital or paper formats. The digital format requires the use of spreadsheet or database software, such as Excel (.xlsx) or Comma Delimited Text (.csv). The paper format is available only to governments with 6,000 or fewer addresses.

Example: Available LUCA materials formats  
Copy provided for reference only; do NOT return this form.

<b>PRODUCT PREFERENCE FORM</b> <b>2020 CENSUS LOCAL UPDATE OF CENSUS ADDRESSES OPERATION (LUCA)</b>		Entity ID <hr/> Government Name <hr/>		
<p><b>Please mark (X) to select a product preference format (Choose #1 OR #2 below)</b></p> <p>1. <input type="checkbox"/> <b>GUPS</b> – The Census Bureau’s Geographic Update Partnership Software (GUPS) is a self-contained Geographic Information System (GIS) tool. It includes the Census Bureau’s address list, address count list by census block, and partnership shapefiles. GUPS allows you to add external geospatial data (shapefiles, geodatabases, and imagery) for comparison and update purposes. GUPS functions on Windows XP, Vista, and Windows 7, 8, and 10, and Apple Mac OS X with additional bridge software.</p> <p style="text-align: center;"><b>OR</b></p> <p>2. <input type="checkbox"/> Select <b>one</b> address list format in <b>Section A</b> and <b>one</b> map format in <b>Section B</b>.</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top; padding: 5px;"> <p><b>A. Address List – Select Digital or Paper</b></p> <p><input type="checkbox"/> <b>Digital</b> – Requires the use of a spreadsheet or database software. We will provide the files in Excel (.xlsx) and Comma Delimited Text (.csv) format.</p> <p style="text-align: center;"><b>OR</b></p> <p><input type="checkbox"/> <b>Paper</b> – Available only to governments with 6,000 or fewer addresses. Each 8 1/2" X 14" page contains six (6) addresses (1,000 pages maximum). Choose <b>one</b> address sort preference below:</p> <p><input type="checkbox"/> Census Tract#/Block#/Street Name/House#/Unit#</p> <p><input type="checkbox"/> Street Name/House#/Unit#/Census Tract#/Census Block# (alphanumeric sort)</p> <p><i>Current number of residential housing units on file for your jurisdiction as of date X.</i></p> </td> <td style="width: 50%; vertical-align: top; padding: 5px;"> <p><b>B. Maps – Select Digital or Paper</b></p> <p><input type="checkbox"/> <b>Digital</b> – Partnership shapefiles that require the use of GIS software. Address structure points are <b>not</b> included in the partnership shapefiles but can be created from the lat/long coordinates included on the digital address list.</p> <p style="text-align: center;"><b>OR</b></p> <p><input type="checkbox"/> <b>Paper</b> – Large format paper map(s) (42" X 36") with one or more sheets. This includes a DVD of small format (8 1/2" X 14") block maps in Adobe PDF format that contain address structure coordinates showing the location of residential addresses.</p> <p><b>Note: The shapefiles do NOT contain address points. If you choose a paper address list and digital maps, you will not see map spots in the digital environment. You will have to use the block PDF maps.</b></p> </td> </tr> </table>			<p><b>A. Address List – Select Digital or Paper</b></p> <p><input type="checkbox"/> <b>Digital</b> – Requires the use of a spreadsheet or database software. We will provide the files in Excel (.xlsx) and Comma Delimited Text (.csv) format.</p> <p style="text-align: center;"><b>OR</b></p> <p><input type="checkbox"/> <b>Paper</b> – Available only to governments with 6,000 or fewer addresses. Each 8 1/2" X 14" page contains six (6) addresses (1,000 pages maximum). Choose <b>one</b> address sort preference below:</p> <p><input type="checkbox"/> Census Tract#/Block#/Street Name/House#/Unit#</p> <p><input type="checkbox"/> Street Name/House#/Unit#/Census Tract#/Census Block# (alphanumeric sort)</p> <p><i>Current number of residential housing units on file for your jurisdiction as of date X.</i></p>	<p><b>B. Maps – Select Digital or Paper</b></p> <p><input type="checkbox"/> <b>Digital</b> – Partnership shapefiles that require the use of GIS software. Address structure points are <b>not</b> included in the partnership shapefiles but can be created from the lat/long coordinates included on the digital address list.</p> <p style="text-align: center;"><b>OR</b></p> <p><input type="checkbox"/> <b>Paper</b> – Large format paper map(s) (42" X 36") with one or more sheets. This includes a DVD of small format (8 1/2" X 14") block maps in Adobe PDF format that contain address structure coordinates showing the location of residential addresses.</p> <p><b>Note: The shapefiles do NOT contain address points. If you choose a paper address list and digital maps, you will not see map spots in the digital environment. You will have to use the block PDF maps.</b></p>
<p><b>A. Address List – Select Digital or Paper</b></p> <p><input type="checkbox"/> <b>Digital</b> – Requires the use of a spreadsheet or database software. We will provide the files in Excel (.xlsx) and Comma Delimited Text (.csv) format.</p> <p style="text-align: center;"><b>OR</b></p> <p><input type="checkbox"/> <b>Paper</b> – Available only to governments with 6,000 or fewer addresses. Each 8 1/2" X 14" page contains six (6) addresses (1,000 pages maximum). Choose <b>one</b> address sort preference below:</p> <p><input type="checkbox"/> Census Tract#/Block#/Street Name/House#/Unit#</p> <p><input type="checkbox"/> Street Name/House#/Unit#/Census Tract#/Census Block# (alphanumeric sort)</p> <p><i>Current number of residential housing units on file for your jurisdiction as of date X.</i></p>	<p><b>B. Maps – Select Digital or Paper</b></p> <p><input type="checkbox"/> <b>Digital</b> – Partnership shapefiles that require the use of GIS software. Address structure points are <b>not</b> included in the partnership shapefiles but can be created from the lat/long coordinates included on the digital address list.</p> <p style="text-align: center;"><b>OR</b></p> <p><input type="checkbox"/> <b>Paper</b> – Large format paper map(s) (42" X 36") with one or more sheets. This includes a DVD of small format (8 1/2" X 14") block maps in Adobe PDF format that contain address structure coordinates showing the location of residential addresses.</p> <p><b>Note: The shapefiles do NOT contain address points. If you choose a paper address list and digital maps, you will not see map spots in the digital environment. You will have to use the block PDF maps.</b></p>			

### **Develop your address review strategy.**

To conduct your address review, consider your time, staff, and available local address information. If a complete review is not possible, focus your review on these areas:

- Group quarters (e.g., college dorms, nursing homes, correctional facilities, etc.).
- Areas of new construction.
- E-911 address conversion areas.
- Single-family homes converted to multifamily homes, and vice versa.

- Warehouses converted to residential units.
- New mobile homes.
- Apartment buildings with irregular or missing numbering schemes for the individual units.
- Annexed land.
- Areas along governmental boundaries.
- Blocks with the greatest count differences between the Census Bureau’s address block count and your address block count.

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 **Highest Elected Official (HEO), Tribal Chair (TC), or Governor registers for LUCA.**

In July 2017, the Census Bureau will mail the invitation letter and registration form to your HEO, TC, or Governor. This invitation package will include information about LUCA and a registration form for the HEO, TC, Governor, and the LUCA liaison (designated by the HEO, TC, or Governor) to complete and return to the Census Bureau for participation in LUCA.

 **Attend a LUCA training workshop or Webinar.**

Training workshops will offer “hands-on” experience using the LUCA materials. Self-training aids and Webinars will be available online at the LUCA Web site. In addition, the *2020 Census Local Update of Census Addresses Operation (LUCA) Respondent Guide* contains detailed instructions and examples for conducting your address and map review.

 **Review and update LUCA materials.**

You have 120 calendar days from the receipt of your materials to conduct your address review and return your updates to the Census Bureau. We estimate that it will take between 16 to 672 hours to complete your address review and submit your updates, depending on your jurisdiction's size and number of changes.

 **Receive address feedback.**

After validating LUCA submissions, the Census Bureau will provide address feedback on your LUCA updates.

 **Questions**

For more information about LUCA, call 844-344-0169, e-mail us at <GEO.2020.LUCA@census.gov>, or visit our Web site at <[www.census.gov/geo/partnerships/luca.html](http://www.census.gov/geo/partnerships/luca.html)>.

## Digital Address List Record Layout

The information contained on each census address record includes census state and county codes, census tract and block numbers, and group quarters flag. The character length for each record may vary.

Maximum character length	Field name	Description
7	Line number	Sequential number for each address record in the file.
9	MAFID	Unique control number assigned to each MAF address.
12	Entity ID code	Unique number assigned by the Census Bureau to each entity.
1	Action code	Entered by the participant to indicate an action to be taken on the address.
2	State code	2-digit Current State Code.
3	County code	3-digit Current County Code.
6	Census tract number	6-digit current census tract number, with an implied decimal point between the fourth and fifth digit (e.g., 123401 and 000300).
4	Census block number	4-digit Census Block Number.
15	Geo ID	15-digit combination of State Code, County Code, census tract, and census block numbers.
1	Group quarters flag	Displays a 'Y' if the address is a group quarters.
35	Complete address number	Housing unit or group quarter's assigned address number, alone or with an address number prefix and/or address number suffix, that identifies a location along a thoroughfare or within a community.
100	Complete street name	Full street or road name.  The official name of a thoroughfare as assigned by a governing authority, or an alternate (alias) name that is used and recognized.
65	Apartment/unit number	Within structure descriptor or identifier, such as APT 5 or 1st FL FRN.
5	City-style mailing ZIP Code	5-digit ZIP Code for city-style mailing address.
100	Group quarters name	Name of group quarter (e.g., Dobbs Hall).
100	Facility name	Name of group quarter facility (e.g., University of Illinois).
100	Location description	Description of the location and physical characteristics of a living quarters (e.g., red ranch w/white shutters).
50	Noncity-style mail delivery address (RR#, HCR#, or PO Box #)	Rural Route and Box number, Highway Contract Route number, or Post Office Box number.
5	Noncity-style mailing ZIP Code	5-digit ZIP Code for noncity-style mailing address.
4	Map spot ID	Unique number assigned by the Census Bureau for each map spot within a block. Numbering starts over in each block.
1	Address use	A value entered by the participant indicating if the address is used for M) mailing purposes, L) location purposes, including emergency services, B) both mailing and location purposes.
11	Structure latitude	Address structure latitude, populated only if the Census Bureau has captured an address structure point for the address, otherwise blank. If blank, participants can populate this field.
12	Structure longitude	Address structure longitude, populated only if the Census Bureau has captured an address structure point for the address, otherwise blank. If blank, participants can populate this field.
1	City-style address flag	Displays "Y" if city-style address, an "N" if noncity-style address.

## Paper Address List

The information contained in the paper address list includes state and county codes, census tract and block numbers, address information, and group quarters flag. The paper address list is available only to governments with 6,000 or fewer addresses. Each 8 1/2" x 14" page contains six addresses (1,000 pages maximum). You may choose one of two sort preferences: Census Tract#/Block#/Street Name/House#/Unit# or Street Name/House #/Unit#/Census Tract#/ Census Block#.

*Example sort: Census Tract/Block*  
*Example sort: Street Name/House#/Unit#/Census Tract#/Census Block#*

U.S. DEPARTMENT OF COMMERCE ECONOMICS AND STATISTICS ADMINISTRATION U.S. CENSUS BUREAU													
Form D-2007 (06-XX-XXXX) OMB Control No. XXXX-XXXX													
2020 LOCAL UPDATE OF CENSUS ADDRESSES OPERATION (LUCA)													
ADDRESS LIST													
DISCLOSURE PROHIBITED BY TITLE 13, U.S.C.													
Entity: Winter County CO88009													
Sort: Tract/Block													
Page: 17 of 20 Date: 01/04/2018													
1 Line Number	2 MAFID	3 Action Code	4 Census Geographic Location of Address			6 City Style Mail Delivery Address or E-911 Address or Physical Location Description and Road Name			7 Noncity-Style Mail Delivery Address (RR Number, HCR Number, PO Box Number) (7a) Noncity-Style Mailing ZIP Code	8 Map Spot Number	9 City-Style Address Flag	10 Map Spot ID Coordinates (10a) Latitude (10b) Longitude	
			(4a) State County Code	(4b) Census Tract	(4c) Census Block	(5) GQ Flag	(6a) Complete Address Number	(6b) Complete Street Name					(6c) Group Quarters Name
102	999999993		88009	0054.00	2001	Y	5503	JEFFRAS DR			21	Y	40.361373 -73.543799
103	999999994		88009	0054.00	2001		5507	SUNSET ASSISTED LIVING COMMUNITY			20	Y	40.361377 -73.543799
104	999999995		88009	0054.00	2001		5507	JEFFRAS DR			20	Y	40.361381 -73.543799
105	999999996		88009	0054.00	2001		5509	JEFFRAS DR			19	Y	40.361785 -73.543799
106	999999997		88009	0054.00	2001			REDWOOD RAMBLER W/LONG FRNT PORCH, ON LAKE			18		40.361791 -73.543799
107	XXXXXXXXXX		88009	0054.00	2002		XXXXXX	***NO KNOWN ADDRESS IN THIS BLOCK***	XXXXXXXXXX	XXXX		X	XXXXXXXXXX XXXXXXXXXX

**FICTITIOUS INFORMATION –FOR EXAMPLE ONLY**

**Action Codes**  
C – Correction to this address    D – Delete this address    J – Address is not in this Jurisdiction    N – Address is Nonresidential

ADDRESS LIST  
2020 LOCAL UPDATE OF CENSUS ADDRESSES OPERATION (LUCA)

Sort: Street Name/House Number  
Entity: Winter County CO88009

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

Page: 5 of 20  
Date: 01/04/2018

1 Line Number	2 MAFD	3 Action Code	4 Census Geographic Location of Address			5 GQ Flag	6 City Style Mail Delivery Address or E-911 Address or Physical Location Description and Road Name				7 Noncity-Style Mail Delivery Address (RR Number, HCR Number, PO Box Number) (7a) Noncity-Style Mailing ZIP Code	8 Map Spot Number	9 City-Style Address Flag	10 Map Spot ID Coordinates (10a) Latitude (10b) Longitude
			(4a) State County Code	(4b) Census Tract	(4c) Census Block		(6a) Complete Address Number	(6b) Complete Street Name (6c) Group Quarters Name (6d) Facility Name or Physical Location Description	(6e) Apt/ Unit Number	(6f) City- Style ZIP Code				
25	999999993		88009	0045.00	1055		4007	AMPHORA ST			99997	3	Y	40.361373 -73.543799
26	999999994		88009	0045.00	1055		4009	AMPHORA ST			99997	4	Y	40.361377 -73.543799
27	999999995		88009	0045.00	1058		5001	AMPHORA ST			99997	1	Y	40.361381 -73.543799
28	999999996		88009	0045.00	1058		5003	AMPHORA ST			99997	2	Y	40.3613785 -73.543799
29	999999997		88009	0045.00	1065		402	W CAMERON AVE			99997	11	Y	40.3613791 -73.543799
30	999999999		88009	0045.00	1065		404	W CAMERON AVE			99997	12	Y	40.3613796 -73.543799

FICTITIOUS INFORMATION --FOR EXAMPLE ONLY

Action Codes  
C -- Correction to this address    D -- Delete this address    J -- Address is not in this Jurisdiction    N -- Address is Nonresidential

Paper Address List Add Page

Participants selecting the paper address list can add residential city-style addresses that do not appear on the Census Bureau’s address list using the Address List Add Page.

Example: Address List Add Page

Form D-2001  
(XX-XX-XXXX)  
OMB Control No. XXXX-XXXX

U.S. DEPARTMENT OF COMMERCE  
ECONOMIC AND STATISTICS ADMINISTRATION  
U.S. CENSUS BUREAU

PAGE \_\_\_\_\_ OF \_\_\_\_\_ PAGES  
Name of Preparer: \_\_\_\_\_  
(Print Name)  
Date Completed: \_\_\_\_\_  
(MM/DD/YYYY)

ADDRESS LIST ADD PAGE  
2020 CENSUS LOCAL UPDATE OF CENSUS ADDRESSES OPERATION (LUCA)

Add Page For: \_\_\_\_\_  
(Entity Name)

Entity ID Code: \_\_\_\_\_  
(Copy from Address List Page)

1 Line #	2 Census Geographic Location of Address				3 Enter "Y" if this is a Group Quarters	4a Complete Address Number	4 Residential Address		4e Apt/ Unit #	4f City-Style Mailing ZIP Code	5 Unique Map Spot #	6 Address Use, if known M=Mailing L=Location B=Both	
	(2a) State Code #	(2b) County Code #	(2c) Census Tract #	(2d) Census Block #			(4b)						
							Complete Street Name						
							(4c) Group Quarters Name						
							(4d) Facility Name						

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

## Paper Address Count List

The LUCA address count list contains the count of housing unit and group quarters addresses for each census block within your jurisdiction. The list contains 90 census blocks per page. This list is for reference only.

*Example: Address Count List*

Form D-2009 (XX-XX-XXXX) OMB Control No. XXXX-XXXX				ADDRESS COUNT LIST 2020 CENSUS LOCAL UPDATE OF CENSUS ADDRESSES OPERATION (LUCA)				U.S. DEPARTMENT OF COMMERCE ECONOMICS AND STATISTICS ADMINISTRATION U.S. CENSUS BUREAU			
ST/CO: 52 / 003								Page: 1 of 1			
Entity: ANY TOWN PL5212345								Date: 12/02/2017			
Census Tract Number	Census Block Number	Count of Housing Unit Addresses	Count of Group Quarters Addresses	Census Tract Number	Census Block Number	Count of Housing Unit Addresses	Count of Group Quarters Addresses	Census Tract Number	Census Block Number	Count of Housing Unit Addresses	Count of Group Quarters Addresses
9708.01	2345	9	1	9708.03	1100	9					
9708.01	2346	11		9708.03	1101	4					
9708.01	2347	3		9708.03	1102	4					
9708.01	2348	9		9708.03	1103	6					
9708.01	2349	12		9708.03	1104	6					
9708.01	2350	12		9708.03	1105	5					
9708.01	2351	14		TOTAL	36	217	2				
9708.01	2352	6									
9708.01	2353	15	1								
9708.01	2354	12									
9708.01	3301	6									
9708.01	3302	8									
9708.01	3303	5									
9708.01	3304	12									
9708.02	3305	13									
9708.02	3306	5									
9708.02	3307	7									
9708.02	3309	6									
9708.02	3310	6									

**LEGEND**

SYMBOL	NAME STYLE
*****	INTERNATIONAL
*****	AIR (FEDERAL)
*****	Trust Land / Home Land
*****	AMERICAN INDIAN TRIBAL SUBDIVISION
*****	AMIC
*****	STATE (or politically equivalent entity)
*****	COUNTY (or politically equivalent entity)
*****	MINOR CIVIL DIVISION (MCD)
*****	Incorporated City
*****	CENSUS TRACT
*****	Outside Subject Area

**ABBREVIATION REFERENCE:** AIR = American Indian Reservation; Trust Land = CR Reservation Trust Land; Home Land = Hawaiian Home Land; AMIC = Alaska Native Regional Corporation.

**FEATURES**

- International Boundary
- Airport
- Railroad
- State Road
- Federal Road
- County Road
- Local Road
- Water Body
- Waterway
- Water Feature
- Water Structure
- Water Use
- Water Feature
- Water Structure
- Water Use
- Water Feature
- Water Structure
- Water Use

**Scale:** 1 inch = 1 mile  
1:62,500

**Sheet Location within Fayette**

**Key to Adjacent Sheets**

6	7	8
11	12	13
15	16	17

SHEET 12 OF 18 PARENT SHEETS

Entity Type: County  
ST: Pennsylvania (42)  
COU: Fayette (051)

**Paper**—Large format paper map(s) (42" x 36") with one or more sheets. This includes a DVD of small format (8 1/2" x 14") block maps in Adobe PDF format that contain address structure coordinates showing the location of residential addresses. For a full-color paper map example, visit our Web site at [www.census.gov/geo/partnerships/luca.html](http://www.census.gov/geo/partnerships/luca.html).

**Digital**—Topologically Integrated Geographic Encoding and Referencing (TIGER) Partnership shapefiles that require the use of GIS software. Address structure points are not included in the partnership shapefiles but can be created from the latitude/longitude coordinates included on the digital address list.

## Appendix D

## Quick Start—Digital Address Materials

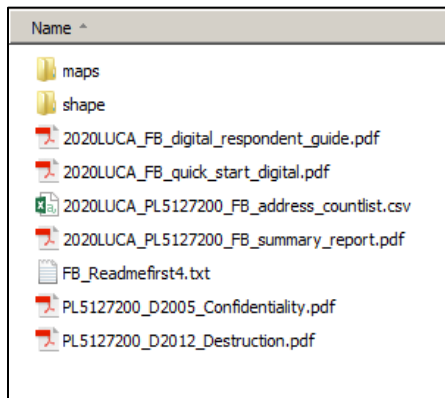
### 2020 Census Local Update of Census Addresses Operation (LUCA) Feedback Phase

#### Getting Started

Open (or print) the *2020 Census Local Update of Census Addresses Operation (LUCA) Feedback and Appeals Respondent Guide* located on the enclosed DVD(s). Refer to the *Confidentiality and Security Guidelines*, included as an appendix in the respondent guide, to ensure the protection of the U.S. Census Bureau's Title 13 U.S.C. information.

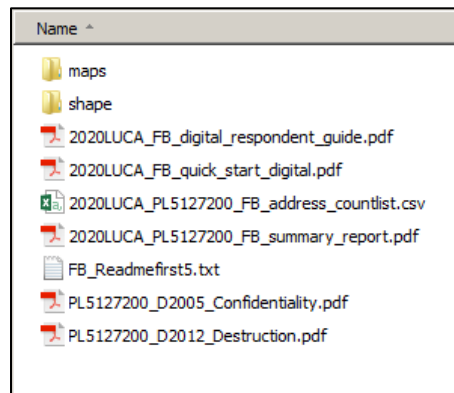
1. First, create a new folder (or new directory) on a computer that meets the requirements outlined in the *Confidentiality and Security Guidelines*.
2. Insert the **Title 13 Data Disc DVD** into the CD/DVD drive of the computer. Contents vary depending on the final format of the LUCA Review Phase materials, but one of the following three windows (e.g., **Figure 1**, **Figure 2**, or **Figure 3**) will open.

#### Digital Address List and Large Format Paper Maps (No PDF Maps)



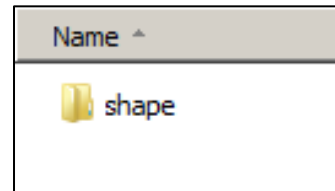
**Figure 1: Title 13 Data Disc DVD for Digital Address List and Large Format Paper Maps participants** (refer to Section I to proceed with setup)

#### Digital Address List and Large Format Paper/PDF Maps



**Figure 2: Title 13 Data Disc DVD for Digital Address List and Large Format Paper/PDF Maps participants** (refer to Sections I and II to proceed with setup)

#### Digital Address List and Digital Maps

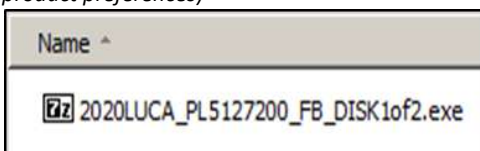


**Figure 3: Title 13 Data Disc DVD for Digital Address List and Digital Maps participants** (refer to Sections I and III to proceed with setup)

3. If there are files or folders in addition to the “**shape**” folder, copy them into the new folder created earlier. **IMPORTANT:** Do not copy the “**shape**” folder from this DVD.
4. Double-click on the “**shape**” folder from the DVD. Right-click on the file named **2020LUCA\_<EntityID>\_FB\_DISK1of2.exe** and select **Copy**.
5. Open the new folder created in Step 1, right-click, and select **Paste**.
6. Remove the **Title 13 Data Disc DVD** and proceed to **Section I** for instructions to extract the *Detailed Feedback Address List*.

The LUCA Feedback Phase package for some participants may include a printed insert (D-2282) that explains the absence of records on their *Detailed Feedback Address List*. If this occurs, a corresponding file (**2020LUCA\_FB\_insert.pdf**) will be present on their DVD(s). This file is absent from the images included in this quick start guide because it is not present for all participants.

#### I. Extracting the PDF Maps (instructions for all three product preferences)



**Figure 4: 2020LUCA\_<EntityID>\_FB\_DISK1of2.exe on the hard drive**

1. Open the new folder created earlier and double-click on the file named **2020LUCA\_<EntityID>\_FB\_DISK1of2.exe** shown in **Figure 4**.
2. A command prompt window opens. Enter the password the Census Bureau mailed separately from the LUCA Feedback Phase materials. This password differs from the password used during the Review Phase. **The password does not appear on-screen as it is typed.** The command prompt window shows the progress of file extraction and closes upon completion of the file extraction. If the password is misplaced or the password letter was not received, please call (844) 344-0169 or email [GEO.2020.LUCA@census.gov](mailto:GEO.2020.LUCA@census.gov) for assistance.
3. The Census Bureau's comma-delimited *Detailed Feedback Address List* text file extracts into the new folder. The file name is **2020LUCA\_<EntityID>\_FB\_detailed\_address\_list.csv**. This is Title 13 U.S.C. material. Protect it accordingly.
4. For instructions on converting comma-delimited files, refer to **Chapter 1** in the respondent guide.

## II. Extracting the PDF Maps (instructions for the Digital Address List and Large Format Paper/PDF Maps product preference)

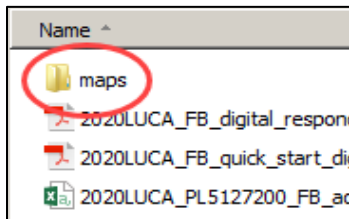


Figure 5: The “maps” folder

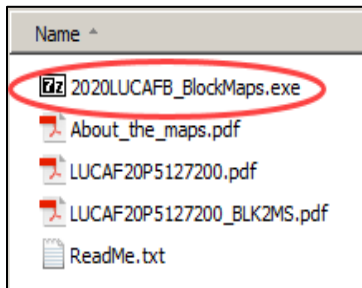


Figure 6: The “maps” folder contents

In addition to large format paper maps, participants who chose the Digital Address List and Large Format Paper/PDF Maps product preference receive the Census Bureau’s small format block maps as Portable Document Format (.pdf). These are Title 13 U.S.C. material. Protect them accordingly.

1. From the new folder created earlier, double-click on the “maps” folder shown in **Figure 5** and a list of files opens as shown in **Figure 6**.
2. To extract the PDF small format block maps, double-click on the file named **2020LUCAFB\_BlockMaps.exe** as shown in **Figure 6**.
3. A command prompt window opens. Enter the same password used to extract the *Detailed Feedback Address List*. **As with the earlier extraction, the password does not appear on-screen as it is typed.** The window closes upon completion of the file extraction.
4. Once extracted, a list of files opens, including all of the PDF small format block maps for the participant’s jurisdiction as shown in **Figure 7**.
5. To use and print the PDF small format block maps, refer to **Chapter 2** in the respondent guide.

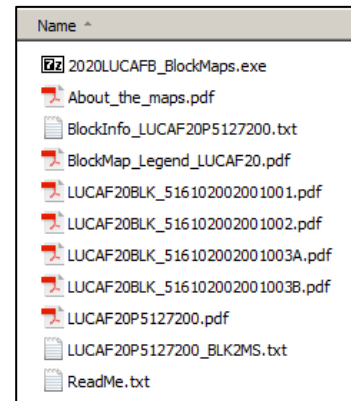


Figure 7: The extracted “maps” folder

## III. Extracting the Digital Maps (instructions for the Digital Address List and Digital Maps product preference)

In addition to a **Title 13 Data Disc** containing the *Detailed Feedback Address List* and a **Non-Title 13 Data Disc** containing the *shapefiles* and *Feedback Address Count List*, participants who chose the Digital Address List and Digital Maps product preference receive a software installer disc containing the Geographic Update Partnership Software (GUPS). The respondent guide and quick start guide for GUPS are included on the **Non-Title 13 Data Disc** DVD should participants choose to use GUPS for their LUCA Feedback Phase review.

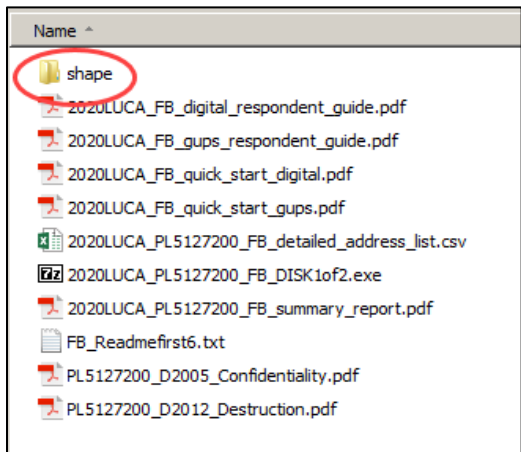


Figure 8: After copying Non-Title 13 Data Disc DVD to the hard drive

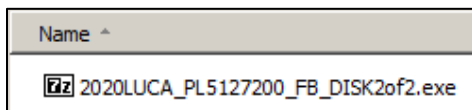


Figure 9: The “shape” folder contents

1. Insert the **Non-Title 13 Data Disc** DVD into the CD/DVD drive of the computer.
2. When the window opens showing the DVD contents, **Copy** and **Paste** all of the contents into the new folder created earlier, including the “shape” folder. Remove the **Non-Title 13 Data Disc** DVD.
3. From the new folder, double-click on the folder named “shape” as shown in **Figure 8**.
4. Double-click on **2020LUCA\_<EntityID>\_FB\_DISK2of2.exe** as shown in **Figure 9**.
5. A command prompt window opens showing the progress of the file extraction and closes upon completion. Unlike the **DISK1of2.exe** file extraction, this one does not require a password.
6. The digital maps (*shapefiles*) and the *Feedback Address Count List*, **2020LUCA\_<EntityID>\_FB\_address\_countlist.csv**, extract into the “shape” folder.
7. As shown in **Figure 10**, the shapefiles extract into individual folders for the state and each county in which the participant’s jurisdiction is located.
8. To use the shapefiles, refer to **Chapter 2** in the respondent guide.

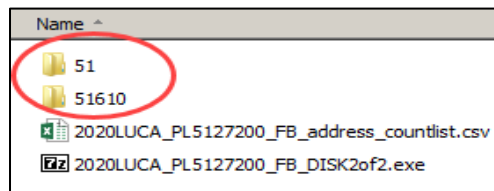


Figure 10: After extracting 2020LUCA\_&lt;EntityID&gt;\_FB\_DISK2of2.exe

If questions remain regarding Getting Started, consult the respondent guide first, and then call or email the LUCA Help Desk staff at (844) 344-0169 or [GEO.2020.LUCA@census.gov](mailto:GEO.2020.LUCA@census.gov). Locate the 2020 Census LUCA Appeals Office contact information on the LUCA website at <https://www.census.gov/programs-surveys/decennial-census/about/luca.html>.

## Appendix E

# 2020 Census Local Update of Census Addresses Operation (LUCA) Feedback and Appeals Respondent Guide

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*Instructions for Digital Address List Participants*



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## TABLE OF CONTENTS

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<b>Background .....</b>	<b>vi</b>
A. General Information .....	vi
B. Census Bureau Processing of LUCA submissions.....	vi
C. Confidentiality and Security.....	vi
D. Entity Identification Codes.....	vii
E. Respondent Guide Organization.....	viii
F. Training and Support .....	viii
<b>Chapter 1 2020 Census LUCA Feedback and Appeals Introduction .....</b>	<b>9</b>
1.1 Feedback Materials.....	9
1.2 Feedback Materials File Names and DVD Structure.....	10
1.2.1 Digital Address List and Large Format Paper Maps (No PDF Maps) .....	10
1.2.2 Digital Address List and Large Format Paper/PDF Maps .....	11
1.2.3 Digital Address List and Digital Maps .....	13
1.3 Creating Working Copies of the LUCA Digital Files.....	14
1.4 Converting Comma Delimited Text Files .....	15
<b>Chapter 2 Reviewing the 2020 Census LUCA Feedback Materials and Processing Codes.....</b>	<b>17</b>
2.1 Feedback Address Update Summary Report.....	17
2.2 Detailed Feedback Address List .....	18
2.2.1 Understanding the Feedback Processing Codes .....	21
2.2.2 Feedback Processing Code Examples.....	22
2.3 Feedback Address Count List .....	24
2.4 Paper Maps, PDF maps, and Shapefiles.....	26
<b>Chapter 3 How to File An Appeal .....</b>	<b>29</b>
3.1 Background .....	29
3.2 Deadline for Filing an Appeal.....	29
3.3 Procedures for Filing an Appeal.....	29
3.4 Supporting Documentation .....	30
3.5 Preparing and Submitting Appeals Material to the 2020 Census LUCA Appeals Office	32
3.5.1 Preparing Appeals Material for Submission.....	32
3.5.2 SWIM Instructions for Submitting Appeals Material .....	34
3.5.3 Shipping Instructions for Submitting Appeals Material .....	42

<b>Chapter 4</b>	<b>2020 Census LUCA Closeout .....</b>	<b>43</b>
<b>Appendix A</b>	<b>Confidentiality and Security Guidelines .....</b>	<b>A-1</b>
A1	Introduction .....	A-1
A2	Title 13, U.S. Code.....	A-1
A3	The Confidentiality Agreement.....	A-1
A4	Security Guidelines .....	A-2
A4.1	Protecting Digital Title 13 Materials .....	A-2
A4.2	Protecting Paper Title 13 Materials .....	A-3
A4.3	Reporting an Incident.....	A-3
A4.4	On-site Visits.....	A-4
A4.5	Destruction of Census Bureau Confidential Materials.....	A-4
A4.6	Returning Census Bureau Title 13 Materials.....	A-5
<b>Appendix B</b>	<b>Confidentiality Agreement Form .....</b>	<b>B-1</b>
<b>Appendix C</b>	<b>Destruction or Return of Title 13 U.S.C. Materials Form .....</b>	<b>C-1</b>
<b>Appendix D</b>	<b>Glossary .....</b>	<b>D-1</b>

## LIST OF TABLES

---

Table 1: Entity Identification Codes .....	vii
Table 2: Entity Types and Entity Codes on Map Materials .....	viii
Table 3: Detailed Feedback Address List Field Names and Descriptions .....	19
Table 4: Feedback Processing Codes .....	21
Table 5: Feedback Address Count List Field Names and Descriptions .....	25
Table 6: SWIM Submission.....	35

## LIST OF FIGURES

---

Figure 1. Digital Address List and Digital Map Participants - New Folder Example on Local Computer .....	15
Figure 2. Feedback Address Update Summary Report (D-2201) Example .....	18
Figure 3. LUCA Feedback Small Format Block Map Example .....	27
Figure 4. LUCA Feedback Small Format Block Map Example - Zoomed Section .....	28
Figure 5. Example of Folder with Appeals files for a Digital Address List and Digital Map Participant.....	33
Figure 6. Mailing Envelope Examples for Return of Title 13 U.S.C. Materials.....	A-5

## BACKGROUND

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### A. General Information

The 2020 Census Local Update of Census Addresses Operation (LUCA) is a voluntary decennial census operation. LUCA is the only opportunity prior to the 2020 Census for tribal, state, and local governments (including the District of Columbia and Puerto Rico) to review and update the Census Bureau's residential address list for their jurisdiction. The Census Bureau relies on a complete and accurate address list to reach every living quarters and associated population for inclusion in the census. The Census Address List Improvement Act of 1994 (Public Law 103-430) authorizes the LUCA operation. Refer to <https://www.census.gov/programs-surveys/decennial-census/about/luca/act-1994.html> for more information.

In accordance with the law, the LUCA Feedback Phase provides participating governments with detailed feedback materials that document which local address updates the Census Bureau processed. LUCA participants may dispute the processing results of certain addresses, only if those addresses meet certain eligibility criteria. Participants must file their Appeal within 45 calendar days after the receipt of the feedback materials. Appeals filed after the deadline will be denied. Filing an Appeal is optional and is not a requirement of LUCA.

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**IMPORTANT:** The final *Federal Register* notice is included with the feedback materials and is available on the LUCA website, <https://www.census.gov/programs-surveys/decennial-census/about/luca.html>, for participants to consult before beginning their review.

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### B. Census Bureau Processing of LUCA submissions

The Census Bureau reviewed all addresses submitted by LUCA participants during the LUCA Review Phase and processed those meeting the defined criteria. In addition, the Census Bureau made necessary corrections and updates to the census maps from the LUCA Review Phase submissions.

### C. Confidentiality and Security

All of the requirements and guidelines for protecting the Census Bureau's confidential Title 13, United States Code (U.S.C.) materials followed for the LUCA Review Phase are applicable to the LUCA Feedback Phase materials.<sup>1</sup> All participants are required to sign a *Confidentiality Agreement Form* in accordance with Title 13, U.S.C. to maintain the confidentiality of the census address information they received from the Census Bureau for review. Participants are required to have the means to secure the Census Address List containing Title 13 information.

Persons who signed the *D-2005 – Confidentiality Agreement Form* for the LUCA Review Phase are not required to sign the form again. However, anyone who will review or have access to the confidential Title 13 feedback materials and has not already signed form *D-2005* must read and agree to abide by the *Confidentiality and Security Guidelines*, included as [Appendix A](#), and must sign the *Confidentiality Agreement Form* before reviewing the materials. A blank *D-2005 – Confidentiality Agreement Form* is included in this respondent guide as [Appendix B](#). This form is

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<sup>1</sup> Title 13, U.S.C provides for the confidential treatment of census-related information, including individual addresses and map spots. Title 13 requires that all liaisons, reviewers, and anyone with access to Title 13 materials abide by the *Confidentiality and Security Guidelines*. Title 13 also requires that the Census Bureau maintain the confidentiality for all of the information that it collects.

also available on the LUCA website at <https://www.census.gov/programs-surveys/decennial-census/about/luca.html>.

The *Detailed Feedback Address List* and the *small format block maps* are the Title 13 protected materials included in the feedback materials that require a password to decrypt and open. This case-sensitive password, different from the password used during the Review Phase, arrives separately and prior to receiving the feedback materials. Keep the password letter (D-2280) secure for use in opening the materials as discussed in [Section 1.3](#) and preparing any Appeals materials for submission as discussed in [Section 3.5.1](#).

Following the LUCA Feedback Phase or a possible Appeal, at the conclusion of the 2020 Census LUCA operation, the LUCA liaison must verify the destruction (preferred) or return to the Census Bureau all Title 13 materials and copies by signing and returning the *D-2012 – Destruction or Return of Title 13, U.S.C. Materials Form*. A blank form is included as [Appendix C](#) and is available online on the LUCA website at <https://www.census.gov/programs-surveys/decennial-census/about/luca.html>. Additional information or assistance is available, toll-free, by phone at (844) 344-0169 or by email at [GEO.2020.LUCA@census.gov](mailto:GEO.2020.LUCA@census.gov).

## D. Entity Identification Codes

All local government entity codes, also known as the “EntityID,” appearing in the feedback materials have a two-letter code identifying the type of entity. County, place, and minor civil division codes include the state two-digit Federal Information Processing Series (FIPS) numeric code. Minor civil divisions also include the county three-digit FIPS numeric code. See [Table 1](#) for information regarding the entity identification codes.

**Table 1: Entity Identification Codes**

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

Below are four examples showing the “EntityID” for local government entities.

- State: ST01 (state of Alabama).
- County: CO42085 (Mercer County, Pennsylvania).
- Place: PL0100124 (Abbeville city, Alabama).
- Minor Civil Division: MC4208567472 (Salem Township, Mercer County, Pennsylvania).

Tribal government entity codes contain a unique 12-character alphanumeric identification code assigned by the Census Bureau that identifies the tribe and its associated geographic area. An example of a 12-character tribal identification code, TR0013TA0185, where **TR0013** is the six-character tribal code that represents the Utu Utu Gwaitu Paiute Tribe of the Benton Paiute Reservation and **TA0185** is the six-character tribal geographic area code that represents Benton Paiute Reservation, the geographic area associated with the Utu Utu Gwaitu Paiute Tribe. This

12-character code is the “EntityID” for tribal governments.

All map related materials included in digital format on the participant DVDs have special codes that differ from the “EntityID.” The abbreviation for the special map related coding is “<EntType><EntCode>.” See [Table 2](#) for information on the <EntType><EntCode>.

**Table 2: Entity Types and Entity Codes on Map Materials**

<EntType> is entity type:	<EntCode> is entity code
C = County	County = SSSCC
CS = Municipio (Puerto Rico)	Municipio = SSSCC
M = Minor civil division (MCD)	MCD = SSSCCMMMMM
P = Incorporated Place	Place = SSPPPPP
R = American Indian Reservation (AIR)	AIR = RRRR
	<i>Where, SS = State FIPS code; CCC = County FIPS code; MMMMM = MCD FIPS code; RRRR = AIR Census code.</i>

Below are several map examples showing use of the “<EntType><EntCode>” for LUCA Feedback Phase materials.

- LUCAF20C48003.pdf – large format bundled .pdf map for a county.
- LUCAF20CS72035.pdf – large format bundled .pdf map for a municipio.
- LUCAF20M2717317918.pdf – large format bundled .pdf map for a MCD.
- LUCAF20P2302060.pdf – large format bundled .pdf map for a place.
- LUCAF20R0010.pdf – large format bundled .pdf map for an AIR.

[Section 1.2](#) provides more detail on these materials and their location on the DVDs.

## E. Respondent Guide Organization

Use this respondent guide, the *D-2232*, in conjunction with the *2020 Census Local Update of Census Addresses Operation (LUCA) Respondent Guide; Digital Address List Format (D-2032)*. The respondent guides do not repeat information between the phases (Review and Feedback). [Hyperlinks](#) appear as underlined, light blue text. Cross-reference links to other sections within the document appear as **bold blue text**.

## F. Training and Support

There are no workshops scheduled for the Feedback Phase; however, the LUCA website at <https://www.census.gov/programs-surveys/decennial-census/about/luca.html> offers information regarding the use of the Geographic Update Partnership Software (GUPS) as well as other information that may assist with reviewing the feedback materials. In addition, the Census Bureau’s LUCA Help Desk can assist with feedback related questions. The 2020 Census LUCA Appeals Office, established as a separate, temporary federal entity by the Office of Management and Budget (OMB), handles the Appeals process and all Appeal-related questions. Contact the LUCA Help Desk, toll-free, at (844) 344-0169 or email them at [GEO.2020.LUCA@census.gov](mailto:GEO.2020.LUCA@census.gov). Contact the Appeals Office, toll-free, at (888) 222-9907. Their email address is located on the aforementioned LUCA website.

# CHAPTER 1 2020 CENSUS LUCA FEEDBACK AND APPEALS

## INTRODUCTION

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This chapter provides introductory information on the materials participants receive as part of the LUCA Feedback Phase, the file naming details, and the receipt of materials. It discusses the set-up of a local computer and the proper way to open the address material without corrupting its content.

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**IMPORTANT:** For participants needing visuals and detailed examples, the *2020 Census Local Update of Census Addresses Operation (LUCA) Respondent Guide; Digital Address List Format (D-2032)* distributed during the LUCA Review Phase includes additional graphics and information. Locate the respondent guide on the LUCA website, <https://www.census.gov/programs-surveys/decennial-census/about/luca.html>, and use it to supplement instructions in this material.

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### 1.1 Feedback Materials

The Census Bureau will provide LUCA Feedback Phase materials to eligible governments beginning in July 2019 and ending in September 2019. Unless a participant declined feedback, the Census Bureau will provide LUCA Feedback Phase materials for jurisdictions that submitted address updates after reviewing and applying each properly formatted address update to the Census Address List and adding any new addresses not already included. The Census Bureau will verify the participant suggested address updates (additions, corrections, deletions, etc.) to ensure that all address updates and additions exist and that they are in the correct census block. Participants that reviewed the Census Address List, agreed with its contents during the LUCA Review Phase, and asked to receive feedback will also receive LUCA Feedback Phase materials.

The Census Bureau provides feedback materials according to the final format that the participant selected for the LUCA Review Phase. For digital address list participants, the materials include:<sup>2</sup>

- *Feedback Address Update Summary Report* — displays the tallies of actions taken by the Census Bureau for all the address updates submitted by an entity.
- *Detailed Feedback Address List* — shows all processed (i.e., properly formatted) address record updates submitted by the participant and a feedback processing code identifying a specific action taken by the Census Bureau on that address record. This address list also identifies any address records not commented on and deleted from the original Census Address List by a different census operation or another level of government participating in LUCA.
- *Feedback Address Count List* — contains the number of residential housing unit and group quarters addresses on the LUCA Review Phase Census Address List and the current number of

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<sup>2</sup> For participants that either told us “no changes” on the *D-2079* or *D-2084* and had no records deleted by other LUCA participants or other census operations OR for those that submitted a file that could not be processed and had no records deleted by other LUCA participants or other census operations, there are no addresses to review or Appeal. These participants receive a paper insert, the *D-2282*, that notifies them their *Detailed Feedback Address List* will be blank and explains why. A corresponding a portable document format (PDF) file, *2020LUCA\_FB\_insert.pdf*, will be present on their DVD(s).

residential housing unit and group quarters addresses for each Census block within the participant's jurisdiction.

- *Feedback Block to Map Sheet Relationship List* — identifies the large format parent map sheet(s) or inset sheet(s) on which each census block is located. This product is for participants that selected either paper or paper/Portable Document Format (PDF) maps. The sort for this product is by census tract number and census block number in ascending order.
- *Feedback Maps* — may include feature updates provided by the submitting entity, other LUCA participants, and/or other updates found by the Census Bureau during other census operations. The Census Bureau provides maps or shapefiles in the final format selected for the LUCA Review Phase materials.
  - *Large format paper maps* — large format (36"x32") paper maps that may include one or more sheets, for participants that selected the paper or paper/PDF maps. A bundled PDF of the large format paper maps is included for paper/PDF map participants. Refer to *the 2020 Census Local Update of Census Addresses Operation (LUCA) Respondent Guide; Digital Address List Format (D-2032)* for details on these materials.
  - *PDF maps* — files provided on a DVD that contain legal-size (8.5"x14") small format block maps including Title 13 map spots (address structure coordinates showing the location of residential addresses) for participants that selected the paper/PDF maps.
  - *Shapefiles* — created from the Master Address File (MAF)/Topologically Integrated Geographic Encoding and Referencing (TIGER) System (MAF/TIGER) for participants that selected digital maps or Geographic Update Partnership Software (GUPS). These are also known as TIGER Partnership shapefiles.
- *Reference/instructional materials* — include the Feedback Respondent Guide(s), Quick Start Guide(s), Feedback Address Update Summary Report, various forms, and readme file(s). For digital participants, the various materials are included in digital format on DVD and on the LUCA website at <https://www.census.gov/programs-surveys/decennial-census/about/luca.html>. In addition to being included in digital format on the DVD, the Feedback Address Update Summary Report and the Quick Start Guides are included as hard copies.

## 1.2 Feedback Materials File Names and DVD Structure

The digital feedback materials arrive on DVD according to the final format used for the LUCA Review Phase.<sup>3</sup> One DVD is the "Title 13 Data Disc" that contains the *Detailed Feedback Address List*, and the second (if applicable) is the "Non-Title 13 Data Disc." The following three sections describe the information contained on each disc for the three digital address list and map product formats. Details of the materials are in [Chapter 2](#).

### 1.2.1 Digital Address List and Large Format Paper Maps (No PDF Maps)

Participants who selected the digital address list and large format paper maps product preference for the LUCA Review Phase receive one Title 13 Data Disc DVD. This DVD contains copies of the large format maps along with other large format map information in the "**maps**" folder and includes the Census Bureau's Title 13 *Detailed Feedback Address List* in the "**shape**" folder. The DVD also has files in the root directory.

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<sup>3</sup> Some participants may have trouble with the extraction of the data disc materials due to administrative rights, application blockers, or antivirus/security programs. Participants are encouraged to contact their own Information Technology staff first, and then contact the LUCA Help Desk if problems persist.

- The “maps” folder contains:
  - **ReadMe.txt** – contains a statement regarding use of Adobe Reader® or Acrobat Professional to properly open and view the .pdf maps. Download the free portable document format (PDF) software at <https://acrobat.adobe.com/us/en/acrobat/pdf-reader.html>.
  - **About\_the\_maps.pdf** – contains tips for using the small format block maps and includes a brief description of the map types and supplemental files. This also includes tips for printing the small format block maps.
  - **LUCAF20<EntityType><EntCode>.pdf** – contains bundled .pdf file of the large format paper maps.
  - **LUCAF20<EntityType><EntCode>\_BLK2MS.txt** – contains a list of all the blocks within the participant’s jurisdiction and sheet or grid number(s) that identify the large format parent sheet where the block is located. This file is in a semicolon text format.
- The “shape” folder contains:
  - **2020LUCA\_<EntityID>\_FB\_DISK1of2.exe**. Use the password provided separately from the feedback materials to open this zipped, encrypted file. This password differs from the password provided with the LUCA Review Phase materials.
    - It becomes the **2020LUCA\_<EntityID>\_FB\_detailed\_address\_list.csv** (*Detailed Feedback Address List*) once extracted successfully.
- The root directory contains non-Title 13 materials:
  - **FB\_Readmefirst4.txt** – this provides detailed explanations of folders and files on the disc.
  - **2020LUCA\_<EntityID>\_FB\_address\_countlist.csv** – this is the *Feedback Address Count List*.
  - **2020LUCA\_<EntityID>\_FB\_summary\_report.pdf** – this is a portable document format (PDF) file of the printed *Feedback Address Update Summary Report* that summarizes the Census Bureau processing performed on the address records submitted by participants during the LUCA Review Phase.
  - **2020LUCA\_FB\_digital\_respondent\_guide.pdf** – this is a portable document format (PDF) file of this document, the *2020 Census Local Update of Census Addresses Operation (LUCA) Feedback and Appeals Respondent Guide; Instructions for Digital Address List Participants*.
  - **2020LUCA\_FB\_quick\_start\_digital.pdf** – this is the *2020 Census LUCA Feedback Digital Quick Start Guide*. It includes high-level information regarding the DVDs and use of the files included on the DVDs and serves as a quick summary for getting started with the materials.
  - **<EntityID>\_D2005\_Confidentiality.pdf** – this is the *Confidentiality Agreement Form (D-2005)* to use if updating reviewers or the liaison.
  - **<EntityID>\_D2012\_Destruction.pdf** – this is the *Destruction or Return of Title 13 Materials Form (D-2012)* to use to confirm destruction (preferred) or return of all Title 13 materials as required by law after 2020 Census LUCA concludes.

## 1.2.2 Digital Address List and Large Format Paper/PDF Maps

Participants who selected the digital address list and large format paper/PDF maps product preference receive one DVD, the Title 13 Data Disc. This DVD contains copies of the large format maps along with other large format map information and the small format block maps along with other small format block map related information in the “maps” folder and includes the Census Bureau’s Title 13 *Detailed Feedback Address List* in the “shape” folder. The DVD also has files in the root directory.

- The “maps” folder contains:

- **2020LUCAFB\_BlockMaps.exe.** It requires the same password used for extracting the *Detailed Feedback Address List* to open and unzip this file.
  - It extracts, **LUCAF20BLK\_<FullBlockCode>.pdf** (LUCA feedback small format block maps, bundled pdfs) once extracted successfully. These are the current, 2010 tabulation blocks within the participant's entity.
  - It extracts, **BlockInfo\_LUCAF20<EntityType><EntCode>.txt** – this is an entity based, semicolon delimited text file that includes basic information for each block in the participant's entity.
  - It extracts, **BlockMap\_Legend\_LUCAF20.pdf** – this is the small format block map legend.
- **ReadMe.txt** – contains a statement regarding use of Adobe Reader or Acrobat Professional properly open and view the .pdf maps. Download the free portable document format (PDF) software at <https://acrobat.adobe.com/us/en/acrobat/pdf-reader.html>.
- **About\_the\_maps.pdf** – contains tips for using the small format block maps and includes a brief description of the map types and supplemental files. This also includes tips for printing the small format block maps.
- **LUCAF20<EntityType><EntCode>.pdf** – contains bundled .pdf file of the large format paper maps.
- **LUCAF20<EntityType><EntCode>\_BLK2MS.txt** – contains a list of all the blocks within the participant's jurisdiction and sheet or grid number(s) that identify the large format parent sheet where the block is located. This file is in a semicolon text format.
- The “shape” folder contains:
  - **2020LUCA\_<EntityID>\_FB\_DISK1of2.exe.** Use the password provided separately from the feedback materials to open this zipped, encrypted file.
    - It becomes the **2020LUCA\_<EntityID>\_FB\_detailed\_address\_list.csv** once extracted successfully.
- The root directory contains non-Title 13 materials:
  - **FB\_Readmefirst5.txt** – this provides detailed explanations of folders and files on the disc.
  - **2020LUCA\_<EntityID>\_FB\_address\_countlist.csv** – this is the *Feedback Address Count List*.
  - **2020LUCA\_<EntityID>\_FB\_summary\_report.pdf** – this is a portable document format (PDF) file of the printed *Feedback Address Update Summary Report* that summarizes the Census Bureau processing performed on the address records submitted by participants during the LUCA Review Phase.
  - **2020LUCA\_FB\_digital\_respondent\_guide.pdf** – this is a portable document format (PDF) file of this document, the *2020 Census Local Update of Census Addresses Operation (LUCA) Feedback and Appeals Respondent Guide; Instructions for Digital Address List Participants*.
  - **2020LUCA\_FB\_quick\_start\_digital.pdf** – this is the *2020 Census LUCA Feedback Digital Quick Start Guide*. It includes high-level information regarding the DVDs and use of the files included on the DVDs and serves as a quick summary for getting started with the materials.
  - **<EntityID>\_D2005\_Confidentiality.pdf** – this is the *Confidentiality Agreement Form (D-2005)* to use if updating reviewers or the liaison.
  - **<EntityID>\_D2012\_Destruction.pdf** – this is the *Destruction or Return of Title 13 Materials Form (D-2012)* to use to confirm destruction (preferred) or return of all Title 13 materials as required by law after 2020 Census LUCA concludes.

### 1.2.3 Digital Address List and Digital Maps

Participants who selected the digital address list and the digital maps product preference receive two data discs, the Title 13 Data Disc and Non-Title 13 Data Disc, and a software installation disc for the Geographic Update Partnership Software (GUPS).

The Title 13 Data Disc DVD contains the Census Bureau's Title 13 *Detailed Feedback Address List* in the “**shape**” folder.

- The “**shape**” folder contains:
  - **2020LUCA\_<EntityID>\_FB\_DISK1of2.exe**. Use the password provided separately from materials to open this zipped, encrypted file.
    - It becomes the **2020LUCA\_<EntityID>\_FB\_detailed\_address\_list.csv** once extracted successfully.

The Non-Title 13 Data Disc DVD contains the shapefiles and *Feedback Address Count List* in the “**shape**” folder and supplemental materials in the root directory.

- The “**shape**” folder contains:
  - **2020LUCA\_<EntityID>\_FB\_DISK2of2.exe**. No password is required to extract this file.
    - It extracts the shapefiles, one folder for the state and one for the county, or counties, in which your jurisdiction is located.
    - It extracts the **2020LUCA\_<EntityID>\_FB\_address\_countlist.csv** – this is the *Feedback Address Count List*.
- The root directory contains:
  - **FB\_Readmefirst6.txt** – this provides detailed explanations of folders and files on both DVDs.
  - **2020LUCA\_<EntityID>\_FB\_summary\_report.pdf** – this is a portable document format (PDF) file of the printed *Feedback Address Update Summary Report* that summarizes the Census Bureau processing performed on the address records submitted by participants during the LUCA Review Phase.
  - **2020LUCA\_FB\_digital\_respondent\_guide.pdf** – this is a portable document format (PDF) file of this document, the *2020 Census Local Update of Census Addresses Operation (LUCA) Feedback and Appeals Respondent Guide; Instructions for Digital Address List Participants*.
  - **2020LUCA\_FB\_gups\_respondent\_guide.pdf** – this is the *2020 Census Local Update of Census Addresses Operation (LUCA) Feedback and Appeals Respondent Guide; Instructions for Geographic Update Partnership Software (GUPS) Participants*.
  - **2020LUCA\_FB\_quick\_start\_digital.pdf** – this is the *2020 Census LUCA Feedback Digital Quick Start Guide*. It includes high-level information regarding the DVDs and use of the files included on the DVDs and serves as a quick summary for getting started with the materials.
  - **2020LUCA\_FB\_quick\_start\_gups.pdf** – this is the *2020 Census LUCA Feedback GUPS Quick Start Guide*. It includes high-level information regarding the use of the files included on the DVDs. It serves as a quick summary for getting started with the GUPS software.
  - **<EntityID>\_D2005\_Confidentiality.pdf** – this is the *Confidentiality Agreement Form (D-2005)* to use if updating reviewers or the liaison.
  - **<EntityID>\_D2012\_Destruction.pdf** – this is the *Destruction or Return of Title 13 Materials Form (D-2012)* to use to confirm destruction (preferred) or return of all Title 13 materials as required by law after 2020 Census LUCA concludes.

### 1.3 Creating Working Copies of the LUCA Digital Files

If participants have not already followed the instructions in the *2020 Census LUCA Feedback Digital Quick Start Guide (D-2240)*, please follow the instructions in this section to begin the review of the LUCA Feedback Phase materials. The Census Bureau recommends making a copy of each of the files on the DVD(s) and placing them on the hard drive of a local computer that complies with the *Confidentiality and Security Guidelines*. To keep work organized, create a new folder, or new directory, on the hard drive of that locally compliant computer. [Figure 1](#) displays an example of the newly created folder for a Digital Address List and Digital Map participant. Until 2020 Census LUCA concludes, retain the DVD materials in a secure location in the event reinstallation is necessary.

#### Title 13 Address Materials (all digital address participants)

- Insert the Title 13 Data Disc DVD.
- If there are files in the root directory of the DVD in addition to the “**shape**” folder, copy those files into the new folder on the local computer.<sup>4</sup>
- Double-click on the folder named “**shape**.”
- After the folder opens, right click on the file named **2020LUCA\_<EntityID>\_FB\_DISK1of2.exe** and select **Copy**.
- Open the new folder on the local computer. Right click and select **Paste**.
- In the new folder, double-click the 2020LUCA\_<Entity ID>\_FB\_DISK1of2.exe.
- A command prompt window opens. Enter the feedback password the Census Bureau sent separately from the materials. **The password does not appear on-screen as it is typed.** Upon successful entry of the correct password, the window shows the progress of extraction and closes upon completion. Please note, if your jurisdiction did not receive its password letter, or if the password is misplaced, please call (844) 344-0169 or email [GEO.2020.LUCA@census.gov](mailto:GEO.2020.LUCA@census.gov) for assistance.
- The Title 13 *Detailed Feedback Address List* extracts into the new folder with the file name **2020LUCA\_<EntityID>\_FB\_detailed\_address\_list.csv**.
- To open the *Detailed Feedback Address List* properly, review [Section 1.4](#), in this chapter.

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**IMPORTANT:** Do not double-click the .csv file. Doing so corrupts various fields within the file.

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#### Title 13 Map Materials (for digital address list and large format paper/PDF maps participants)

- With the Title 13 Data Disc DVD still in the computer, **Copy** and **Paste** the “**maps**” folder into the new folder on the local computer.
- Open the new folder. Double-click the **2020LUCAFB\_BlockMaps.exe**.
- A command prompt window opens. Enter the same password used to extract the *Detailed Feedback Address List*. **As with the earlier extraction of the *Detailed Feedback Address List*, the password does not appear on-screen as it is typed.** Upon successful entry of the correct password, the window shows the progress of extraction and closes upon completion.
- The Title 13 PDF small format block maps extract into the new folder with files named **LUCAF20BLK\_<FullBlockCode>.pdf**.

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<sup>4</sup> The root directory materials on the Title 13 Data Disc DVD exist only for participants receiving paper maps and PDF maps because they only receive one DVD with their Feedback Phase materials. The specific materials are listed in Sections 1.2.1 and 1.2.2.

### Non-Title 13 Materials (for digital address list and digital map participants)

- Remove the Title 13 Data Disc DVD and insert the Non-Title 13 Data Disc DVD.
- **Copy** and **Paste** the “**shape**” folder and all the files within the root directory of the DVD into the new folder on the local computer.
- Open the “**shape**” folder within the new folder on the local computer and double-click the **2020LUCA\_<Entity ID>\_FB\_DISK2of2.exe**.
- A command prompt window opens that shows the progress of the file extraction and closes upon completion. A password is unnecessary to extract this file.
  - The digital maps (shapefiles) and the *Feedback Address Count List*, **2020LUCA\_<EntityID>\_FB\_address\_countlist.csv**, extract with the execution of this file. The shapefiles extract into the appropriate state and county folders.

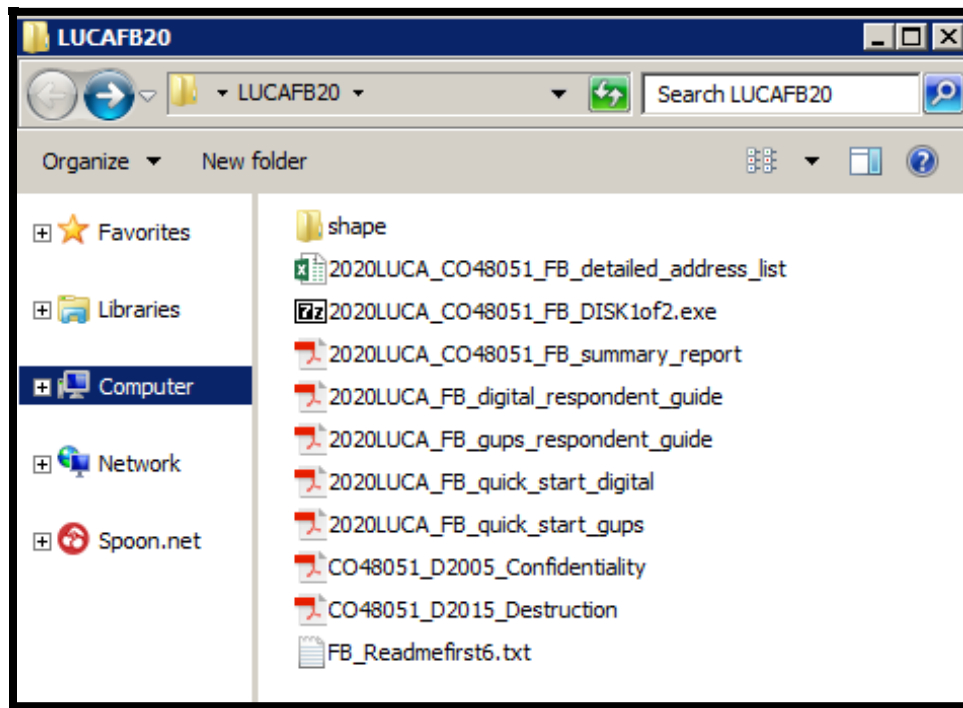


Figure 1. Digital Address List and Digital Map Participants - New Folder Example on Local Computer

## 1.4 Converting Comma Delimited Text Files

The .csv files described above are comma-delimited text files. Most commercial spreadsheet and database programs can open the .csv files (e.g., Microsoft Excel®, Microsoft Access®, etc.).<sup>5</sup> However, in order to read the file contents properly, **participants must import the file rather than opening it**. The following set of bullets use Excel 2016 to describe the proper way to open the .csv files.<sup>6</sup>

- Open a new Excel spreadsheet.
- Select the “**Data**” tab. Click on “**Get External Data.**” Select “**From Text.**”

<sup>5</sup> The Census Bureau does not endorse or recommend the use of any specific software to view its files. The program names included here are only examples of programs that are able to read digital files.

<sup>6</sup> Please note that instructions for importing the .csv files differs based on operating system and version of software used. Slight variations likely exist between these instructions and other versions of Microsoft Excel. Consult the user manual for instructions.

- Navigate to the folder on the local computer containing the *Detailed Feedback Address List* and click on the file.
- When the file highlights, select **“Import”** at the bottom of the screen.
- The **“Text Import Wizard – Step 1 of 3”** window opens in Excel, check the **“My data has headers”** box and select **“Next.”**
- In **Step 2 of 3**, select **“Comma”** for Delimiters. From the **“Text qualifier”** drop-down menu, select **“{none}.”** Select **“Next”** at the bottom of the screen.
- In **Step 3 of 3**, hold the **“Shift”** key and scroll to the end of the columns. The columns will highlight black.
- Select the **“Text”** radio button. Define all field types as Text, including numeric fields such as census tract number, census block number, GEOID, ZIP Code, and so forth to account for leading zeros that are important for accurate geocoding.
- Click **“Finish”** at the bottom of the window.

Once the .csv opens, follow the record layout in [Table 3](#) to name and define the sizes of the fields within the *Detailed Feedback Address List*.

## CHAPTER 2 REVIEWING THE 2020 CENSUS LUCA FEEDBACK MATERIALS AND PROCESSING CODES

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This chapter provides information on the content within each feedback material and lays the foundation for conducting a review of the materials. It devotes a section to describing the detailed feedback processing codes and identifying which records are eligible for Appeal based on their feedback processing code.

### 2.1 Feedback Address Update Summary Report

The Census Bureau provides a printed copy of the *Feedback Address Update Summary Report (D-2201)* to participants with their feedback materials package and includes a digital copy, in the form of a portable document format (PDF), on DVD. The report summarizes the Census Bureau processing performed on the address records submitted by participants during the LUCA Review Phase. This report displays the tallies of actions taken by the Census Bureau for all of the address updates that the participant submitted and the total number of address records on the original Census address list that were deleted by a different census operation or another level of government participating in LUCA. See [Figure 2](#) for an example of the report.

Section “A” of the report contains the total number of address records submitted to the Census Bureau for the LUCA Review Phase, the total number of address records submitted that were processed, and the total number of address records submitted without required information and were not processed. Unprocessed addresses include those with blank or invalid action codes, addresses submitted without geographic information such as the census tract and block numbers or the latitude and longitude coordinates, or non-city style addresses without a map spot or latitude and longitude coordinates. The total number of participant address records submitted for processing (e.g., 100) equals the total number of address records processed (e.g., 91) and the total number of address records not processed (e.g., 9).

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**IMPORTANT:** The total number of submitted address records processed by the Census Bureau (e.g., 91 records in the case of [Figure 2](#)) equates to the number of records that appear in the *Detailed Feedback Address List*.

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Section “B” of the report displays the tallies of actions taken by the Census Bureau for all the processed address records submitted with valid action codes and map spot/coordinates (or geocodes). The total number of address records accepted as requested (e.g., 61) and the total number of address records not accepted as requested (e.g., 30), equals the total number of address records submitted and processed (e.g., 91) as shown in Section “A” of the report.

Section “C” of the report contains address records not commented on, but deleted from the original Census Address List by a different census operation or another level of government participating in LUCA. Review [Section 2.2.1](#) for information on these deleted records.

2020 CENSUS LOCAL UPDATE OF CENSUS ADDRESSES OPERATION (LUCA)  
FEEDBACK ADDRESS UPDATE SUMMARY REPORT

Entity ID: C088009

Entity Name: Winter County **FICTITIOUS ENTITY**

Date: 07/01/2019

**A. SUBMITTED ADDRESSES**

- 100 Total number of address records submitted to the Census Bureau.
- 91 Total number of submitted address records processed by the Census Bureau.
- 9 Total number of submitted address records not processed by the Census Bureau.<sup>1</sup>

**B. ADDRESS RECORDS PROCESSED**

**Participant Action(s) Accepted**

- 36 Number of added (A) address records submitted and added to the Census Address List.
- 12 Number of corrected (C) address records submitted and corrected in the Census Address List.
- 10 Number of deleted (D) address records submitted and deleted from the Census Address List.
- 2 Number of out of jurisdiction (J) address records submitted and removed from your jurisdiction's portion of the Census Address List.
- 1 Number of nonresidential (N) address records submitted and removed from the residential portion of the Census Address List.
- 61 Total number of submitted address records accepted by the Census Bureau as requested.

**Participant Action(s) Not Accepted**

- 2 Number of added (A) address records submitted, but not added to the Census Address List.
- 3 Number of corrected (C) address records submitted, but not corrected in the Census Address List.
- 5 Number of deleted (D) address records submitted, but not deleted from the Census Address List.
- 12 Number of out of jurisdiction (J) address records submitted, but not removed from your jurisdiction's portion of the Census Address List.
- 8 Number of nonresidential (N) address records submitted, but not removed from the residential portion of the Census Address List.
- 30 Total number of submitted address records not accepted by the Census Bureau as requested.

**C. OTHER ADDRESS RECORDS**

- 2 Number of address records without action taken during the LUCA Review Phase that were deleted from the Census Address List by another LUCA participant or a different census operation. This number corresponds to the number of X01 records on your Detailed Feedback Address List.

<sup>1</sup> Participant address records were not processed if they did not meet the minimum requirements. Some examples of records that were not processed include the following: addresses submitted with blank or invalid action codes, added records submitted without geospatial information, added records submitted with 9-digit numeric MAFIDs, action codes other than "A" used on records without MAFIDs, and non-city style addresses submitted without map spots or latitude and longitude coordinates.

Figure 2. Feedback Address Update Summary Report (D-2201) Example

## 2.2 Detailed Feedback Address List

The Census Bureau provides the *Detailed Feedback Address List* to participants as part of their feedback materials in order to see the disposition of each submitted address record processed

by the Census Bureau. Participants use the *Detailed Feedback Address List* to determine which address records are eligible for Appeal and denote them accordingly. This material shows all usable address record updates submitted by the participant, processed by the Census Bureau, and a feedback processing code identifying a specific action taken on that address record. In addition, the list contains any addresses that were on the participant's Census Address List during the LUCA Review Phase, but subsequently deleted by a different census operation or another level of government participating in LUCA.

Each address record has a maximum length of 657 characters and contains 26 fields of information. **Table 3** shows the maximum character length of each field, the field name, and a description of the field.

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**IMPORTANT:** The *Detailed Feedback Address List* is the only editable material for the LUCA Feedback Phase and the “**APPEAL\_FLAG**” field in the *Detailed Feedback Address List* is the only editable field.

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During the LUCA Review Phase, if participants determined the Census Address List was correct, had no address updates, and returned either form *D-2079 – No Updates or Changes to Addresses Form* or *D-2084 – Submission Deadline Form* indicating that they wanted to receive the LUCA Feedback Phase materials, their *Detailed Feedback Address List* file contains only the addresses deleted by a different census operation or another level of government participating in LUCA. If there were no addresses deleted since the LUCA Review Phase, the *Detailed Feedback Address List* file will be blank. A paper insert (*D-2282*), mentioned as the footnote in Section 1.1, explains the blank file and notifies them that they do not have any addresses eligible for Appeal.

**Table 3: Detailed Feedback Address List Field Names and Descriptions**

Field Number	Max Character Length	Field Name	Field Description
1	7	LINE_NUMBER	Number assigned for each address record present in the processed submission.
2	9	MAFID	Unique control number assigned by the Census Bureau to each address in the MAF. This value will match the LINE_NUMBER value for R03, Appeal-eligible, records. This allows for the tracking of records that do not have a MAFID assigned.
3	1	APPEAL_FLAG	Blank field for participant to flag an address for Appeal by assigning a “Y.” <b>This is the only editable field in the file.</b>
4	1	LUCA_ACTION	Action code submitted by the participant, during the LUCA Review Phase, to update an address: <b>A, C, D, J, N.</b>
5	3	FEEDBACK_CODE	Feedback processing code that identifies the specific action taken by the Census Bureau on each address update submitted by the participant: <b>X01, R03, A01, A02, A03, R01, and R02.</b>
6	12	ENTITY	Unique number assigned by the Census Bureau to each entity.

Field Number	Max Character Length	Field Name	Field Description
7	2	STATEFP	Two-digit current state FIPS code.
8	3	COUNTYFP	Three-digit current county FIPS code.
9	7	TRACT	Consists of a six-digit code with a decimal between the fourth and fifth digit, contains a four-digit base number, including leading zeroes, plus a two-digit number suffix, with trailing zeroes. For example, 1234.01 and 0003.00.
10	4	BLOCK	Four-digit 2010 Census tabulation block number. Census tabulation blocks are numbered uniquely from 0000 to 9999 within a census tract, which nest within a county and a state. The first digit of the census block number identifies the block group.
11	15	GEOID	15-digit combination of STATEFP, COUNTYFP, TRACT, and BLOCK, e.g. 010090054001009.
12	1	GQ_TL_FLAG	Displays a 'G' if the address is a group quarters, a 'T' if the address is a transitory location, and is blank if the address is a housing unit.
13	35	HOUSENUMBER	Housing unit or group quarters assigned address number, alone or with an address number prefix and/or address number suffix that identifies a location along a thoroughfare or within a community.
14	100	STREETNAME	Full street or road name. The official name of a thoroughfare as assigned by a governing authority, or a used and recognized alternate (alias) name.
15	65	APARTMENT_UNIT	Within structure descriptor or identifier, such as APT 5 or 1st FL FRN.
16	5	ZIP	Five-digit United States Postal Service (USPS) ZIP Code for city style mailing address.
17	100	GQ_TL_NAME	Name of group quarter (Dobbs Hall) or name of transitory location (Mermaid's Marina).
18	100	FACILITY_NAME	Name of group quarter facility (University of Illinois).
19	100	LOCATION_DESCRIPTION	Description of the location and physical characteristics of a living quarters (RED RANCH W/WHITE SHUTTERS).
20	50	NONCITYSTYLE_ADDRESS	Rural Route and Box number or Highway Contract Route and Box number.
21	5	NONCITYSTYLE_ZIP	Five-digit USPS ZIP Code for non-city style mailing address.
22	4	MAPSPOT	Unique number assigned by the Census Bureau for each map spot within a block. Numbering starts over in each block.
23	11	LAT	Address structure latitude, populated only if the Census Bureau has captured an address structure point for the address.

Field Number	Max Character Length	Field Name	Field Description
24	12	LONG	Address structure longitude, populated only if the Census Bureau has captured an address structure point for the address.
25	1	CITY_STYLE	Displays “Y” if city style address, an “N” if non-city style address.
26	4	APPEAL_CODE	Blank. Only for Appeals Staff use.

To facilitate the participant’s feedback review, the Census Bureau provides the *Detailed Feedback Address List* file sorted based on the following order of the **FEEDBACK\_CODE** field: X01, R03, A01, A02, A03, R01, and R02. Within each feedback processing code, the **GEOID** field provides another sort level. Performing this dual sort promotes the Appeal-eligible records to the beginning of the file while retaining a geographic organization for the address records.

### 2.2.1 Understanding the Feedback Processing Codes

The feedback processing codes in the *Detailed Feedback Address List* indicate the results of the Census Bureau processing of participants records submitted during the LUCA Review Phase. **Table 4** identifies the feedback processing code assigned to the records submitted by a participant. The second column indicates if the code is eligible for Appeal. The third column gives the Census Bureau’s result of the processing, including information regarding the acceptance or rejection of the participant’s update and a decision to include or exclude the address from the 2020 Census.

**Table 4: Feedback Processing Codes**

Feedback Code	Eligible for Appeal	Description
X01	Yes	<b>Address <u>OUT</u> of the Census:</b> The Census Bureau will exclude this address from the 2020 Census for your jurisdiction. This address was not updated as part of your LUCA review, but has been deleted from the 2020 Census Address List by another level of government participating in LUCA or a different census operation.
R03	Yes	<b>Address <u>OUT</u> of the Census:</b> The Census Bureau will exclude this address from the 2020 Census for your jurisdiction, and rejects your LUCA update.
A01	No	<b>Address <u>IN</u> the Census, Same Block:</b> The Census Bureau will include this address in the 2020 Census for your jurisdiction in the same block, and accepts your LUCA update.
A02	No	<b>Address <u>IN</u> the Census, Different Block:</b> The Census Bureau will include this address in the 2020 Census for your jurisdiction in a different block, and accepts your LUCA update.
A03	No	<b>Address <u>OUT</u> of the Census:</b> The Census Bureau will exclude this address from the 2020 Census for your jurisdiction, and accepts your LUCA update.

Feedback Code	Eligible for Appeal	Description
R01	No	<b>Address <u>IN</u> the Census, Same Block:</b> The Census Bureau will include this address in the 2020 Census for your jurisdiction in the same block, and rejects your LUCA update.
R02	No	<b>Address <u>IN</u> the Census, Different Block:</b> The Census Bureau will include this address in the 2020 Census for your jurisdiction in a different block, and rejects your LUCA update.

The **FEEDBACK\_CODE** field of the *Detailed Feedback Address List* contains a code that specifies if the Census Bureau accepted or rejected the action submitted by the participant. For example, **A01**, **A02**, and **A03** indicates the Census Bureau accepted the address update. These three feedback processing codes are not eligible for Appeal. Both **A01** and **A02** records remain in the 2020 Census enumeration universe and therefore are ineligible for Appeal while the **A03** reflects an accepted update that excludes an address from the 2020 Census enumeration universe (i.e., accepted D, N, and J LUCA actions).

The three “R” feedback processing codes (**R01**, **R02**, and **R03**) indicate the Census Bureau rejected the updated addresses. Only the **R03** is eligible for Appeal. Both **R01** and **R02** records remain in the 2020 Census enumeration universe and therefore are ineligible for Appeal.

In addition to records submitted by a participant, the *Detailed Feedback Address List* may include addresses that were in the Census Address List during the LUCA Review Phase (not commented on by the participant), but deleted by a different census operation or another level of government participating in LUCA. These addresses receive an **X01** feedback processing code and are eligible for Appeal.

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**IMPORTANT:** Only addresses assigned with feedback processing codes of X01 or R03 are eligible for Appeal because they are not part of the 2020 Census enumeration universe.

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## 2.2.2 Feedback Processing Code Examples

This section provides only a few examples for each feedback processing code. It documents some of the most common scenarios encountered during the Census Bureau’s processing of LUCA Review Phase submissions. This list of examples is not a comprehensive list of all the scenarios that lead to the assignment of feedback processing codes.

**X01** – Address removed from the 2020 Census. The Census Bureau will exclude this address from the 2020 Census for the participant’s jurisdiction. A different census operation or another level of government participating in LUCA deleted the address. This address was not updated as part of the participant’s LUCA Review Phase work. (*Appeal eligible.*)

- If a state participant deleted a record that no nesting entity participants (county, minor civil division, place, and American Indian Area) commented on, the nesting entity participants would see this address as an **X01**.
- If a participant did not update the address but an update from a different census operation deleted it, the participant would see the address as an **X01**.

**R03** – Address is not in the 2020 Census. The Census Bureau will exclude this address from the 2020 Census for the participant’s jurisdiction and rejects the LUCA update. *(Appeal eligible.)*

- Participant adds an address (an **A** action) to an area where evidence of housing does not exist, or the Census Bureau processing determines the address is not residential. The Census Bureau rejects the **A** action and excludes it from the 2020 Census enumeration universe. This action would receive an **R03**. The participant can Appeal the address record for inclusion in the 2020 Census enumeration universe.
- A county participant corrects (a **C** action) the geocode of an address, but the place participant marks the same address as non-residential (an **N** action). The Census Bureau accepts the place participant’s action, removes the address record from the 2020 Census enumeration universe, and assigns the place participant’s record an **A03**. The county participant receives an **R03** on their **C** action. The county can Appeal the address record to reinstate it into the 2020 Census enumeration universe.

**A01** – Address is in the 2020 Census in the same block. The Census Bureau will include this address in the 2020 Census for the participant’s jurisdiction in the same block, and accepts the LUCA update. *(Ineligible for Appeal.)*

- Participant adds an address (an **A** action) and the Census Bureau accepts it where the participant says.
- Participant updated a street name or geocode (a **C** action) and the Census Bureau agrees.

**A02** – Address is in the 2020 Census in a different block. The Census Bureau will include this address in the 2020 Census for the participant’s jurisdiction in a different block, and accepts the LUCA update. *(Ineligible for Appeal.)*

- Participant adds an address (an **A** action) and the Census Bureau accepts it in a different block. This action would receive an **A02**.
- Participant submits an address record as an add (an **A** action). The Census Bureau matches to the same address in a different block within the participant’s jurisdiction. This action would receive an **A02**.
- Participant updated a street name or geocode (a **C** action) and the Census Bureau accepts it in a different block. This action would receive an **A02**.

**A03** – Address is not in the 2020 Census. The Census Bureau will exclude this address from the 2020 Census for the participant’s jurisdiction, and accepts the LUCA update. *(Ineligible for Appeal.)*

- Participant submitted an address for deletion (a **D** action) because it no longer exists and the Census Bureau agrees that the address no longer exists. The Census Bureau will exclude this address from the 2020 Census. This action would receive an **A03**.
- Participant submitted that the building was non-residential (an **N** action) and the Census Bureau’s Master Address File (MAF) confirms the record is a commercial record. This action would receive an **A03**.
- Participant submitted the address as out of their jurisdiction (a **J** action), an adjacent jurisdiction added the same record (an **A** action), and the Census Bureau agrees with the **A** action in the adjacent jurisdiction. The **J** action would receive an **A03**. The **A** action would receive either **A01** or **A02**.

**R01** – Address is in the 2020 Census in the same block. The Census Bureau will include this address in the 2020 Census for the participant’s jurisdiction in the same block, and rejects the LUCA update. (*Ineligible for Appeal.*)

- Participant submitted a group quarters address record with an apartment unit number (an **A** action) and the Census Bureau rejects the new address record as invalid. The Census Bureau will enumerate the group quarters at the main address in the same block submitted by the participant.<sup>7</sup> This action would receive an **R01**.<sup>8</sup>
- Participant misused the **C** action to change a house number or a within structure ID (WSID), both un-editable fields. The participant needed to submit these as add/delete combinations rather than changing the house number or WSID. This action would receive an **R01**.
- Participant submitted the address for deletion (a **D** action) and the record is a known, valid residential address from the USPS Delivery Sequence File (DSF). This action would receive an **R01**.
- Participant submitted the address as non-residential (an **N** action) and the record is a known, valid residential address from the USPS DSF. This action would receive an **R01**.
- Participant submitted the address as out of jurisdiction (a **J** action) and the record is a known, valid residential address in their jurisdiction from the USPS DSF. This action would receive an **R01**.

**R02** – Address is in the 2020 Census in a different block. The Census Bureau will include this address in the 2020 Census for the participant’s jurisdiction in a different block, and rejects the LUCA update. (*Ineligible for Appeal.*)

- Participant submitted a geocode change (a **C** action) and the Census Bureau rejects the new geocode keeping the address in the original location. This action would receive an **R02**.
- Participant submitted a geocode change (a **C** action) and the Census Bureau chooses “third block” (meaning the location is not where it was on the LUCA Review Phase materials, NOR where the participant says, but the Census Bureau moved the record to a third block). This action would receive an **R02**.
- This example involves two or more jurisdictions. A state participant submitted a **D** action, but a county participant submitted geocode change (a **C** action) on the same address. The Census Bureau would reject the state’s **D** action and keep the address in the 2020 Census in a different block, the one submitted by the county. The state’s action would receive an **R02**. The county’s action would receive an **A01**.
- Participant submitted the address as non-residential (an **N** action) and the record is valid non-residential address in a different block. This action would receive an **R02**.
- Participant submitted the address as out of jurisdiction (a **J** action) and the record is a valid residential address in a different block within their jurisdiction. This action would receive an **R02**.

## 2.3 Feedback Address Count List

The Census Bureau provides the *Feedback Address Count List* to participants to show the change in residential address block tallies between the LUCA Review Phase and the LUCA

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<sup>7</sup> If the block differed, this record would receive the R02 feedback processing code.

<sup>8</sup> During the LUCA Review Phase, the Census Bureau only requested the main address, group quarters name and facility name (if applicable) of the group quarters records because the group quarters enumeration operations enumerate at the main unit, not each individual unit within the group quarters. Records submitted with additional information, like apartment unit information, are invalid.

Feedback Phase. The file contains the LUCA Review Phase tallies of residential addresses (housing unit and group quarters) that were on the participant's Census Address List and the current number of residential addresses (housing unit and group quarters) in the Census Address List for each census block within the jurisdiction. It is important to realize that tally differences do not indicate lack of coverage. It could indicate a change to geocoding between census blocks in your jurisdiction. The tally differences may also be the result of work performed during other census operations. There is no direct link between change in tallies on the *Feedback Address Count List* and Appeal eligibility for individual address records on the *Detailed Feedback Address List*.

Each record has a maximum length of 59 characters and contains nine fields of information. The length for each record may vary. [Table 5](#) shows the maximum character length of each field, the field name, and a description of the field.

**Table 5: Feedback Address Count List Field Names and Descriptions**

Field Number	Max Character Length	Field Name	Field Description
1	2	STATE	Two-digit state FIPS code.
2	3	COUNTY	Three-digit county FIPS code.
3	7	TRACT	Consists of a six-digit code with a decimal between the fourth and fifth digit, contains a four-digit base number, including leading zeroes, plus a two-digit number suffix, with trailing zeroes. For example, 1234.01 and 0003.00
4	4	BLOCK	Four-digit 2010 Census tabulation block number. Census blocks are numbered uniquely from 0000 to 9999 within census tract, which nest within state and county. The first digit of the census block number identifies the block group within the census tract in which the block falls.
5	15	GEOID	15-digit combination of STATE, COUNTY, TRACT, and BLOCK fields. For example 010090046001002.
6	7	ORIGINAL_COUNT_OF_HUS	Total number of addresses in the census block identified as residential housing units by data in the MAF provided with the participant's original LUCA materials.
7	7	CURRENT_COUNT_OF_HUS	Total number of addresses in the census block identified as residential housing units by data in the MAF after processing the participant's LUCA submission and other census operations.
8	7	ORIGINAL_COUNT_OF_GQS	Total number of addresses in the census block identified as residential group quarters or transitory locations by data in the MAF provided with the participant's original LUCA materials.

Field Number	Max Character Length	Field Name	Field Description
9	7	CURRENT_COUNT_OF_GQS	Total number of addresses in the census block identified as residential group quarters or transitory locations by data in the MAF after processing the participant's LUCA submission and other census operations.

## 2.4 Paper Maps, PDF maps, and Shapefiles

The Census Bureau provides paper maps and/or PDF maps, or shapefiles during the LUCA Feedback Phase, according to the final format that the participant selected for the LUCA Review Phase. Participants use the maps for geocoding reference and for review of any map updates submitted during the LUCA Review Phase. Maps may include feature updates provided by the submitting entity, other LUCA participants, and/or other updates found by the Census Bureau during other census operations. Map legends for both the large format maps and the small format block maps closely resemble the legends used during the LUCA Review Phase, with minor changes made to symbology to reflect Appeal-eligible address records and the two types of residential addresses (housing units and group quarters). Blue circles or blue squares, that represent housing units or group quarters respectively, show the Appeal-eligible records while gray symbols of the same style show records ineligible for Appeal. For examples of a small format block map (e.g., PDF maps) with updated map symbols, see [Figure 3](#) and [Figure 4](#).

To support the use of the large format maps, digital address participants receive a *Feedback Block to Map Sheet Relationship List* text file that includes all the census blocks for the participant's jurisdiction and the map sheet(s) on which each census block is located. The sort is in ascending order, by census tract number and census block number. Participants can open this semicolon delimited text file using a simple text editor such as WordPad or Notepad or import the file into a spreadsheet software such as Microsoft Excel.

Refer to the *2020 Census Local Update of Census Addresses Operation (LUCA) Respondent Guide; Digital Address List Format (D-2032)* included with the original LUCA Review Phase materials for details on the large format maps, small format block maps, shapefiles, and the block to map sheet relationship list.<sup>9</sup> This guide does not repeat all of the map-related information in the *D-2032* since the feedback map materials are reference material for geocoding purposes only. Locate a copy of the *D-2032* on the LUCA website at <https://www.census.gov/programs-surveys/decennial-census/about/luca.html>.

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**IMPORTANT:** Participants may not submit map or shapefile updates during the LUCA Feedback Phase due to 2020 Census operational scheduling.

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<sup>9</sup> Chapter 3, *The LUCA Paper Maps* and Chapter 5, *TIGER Partnership Shapefiles* provide detailed examples and information.



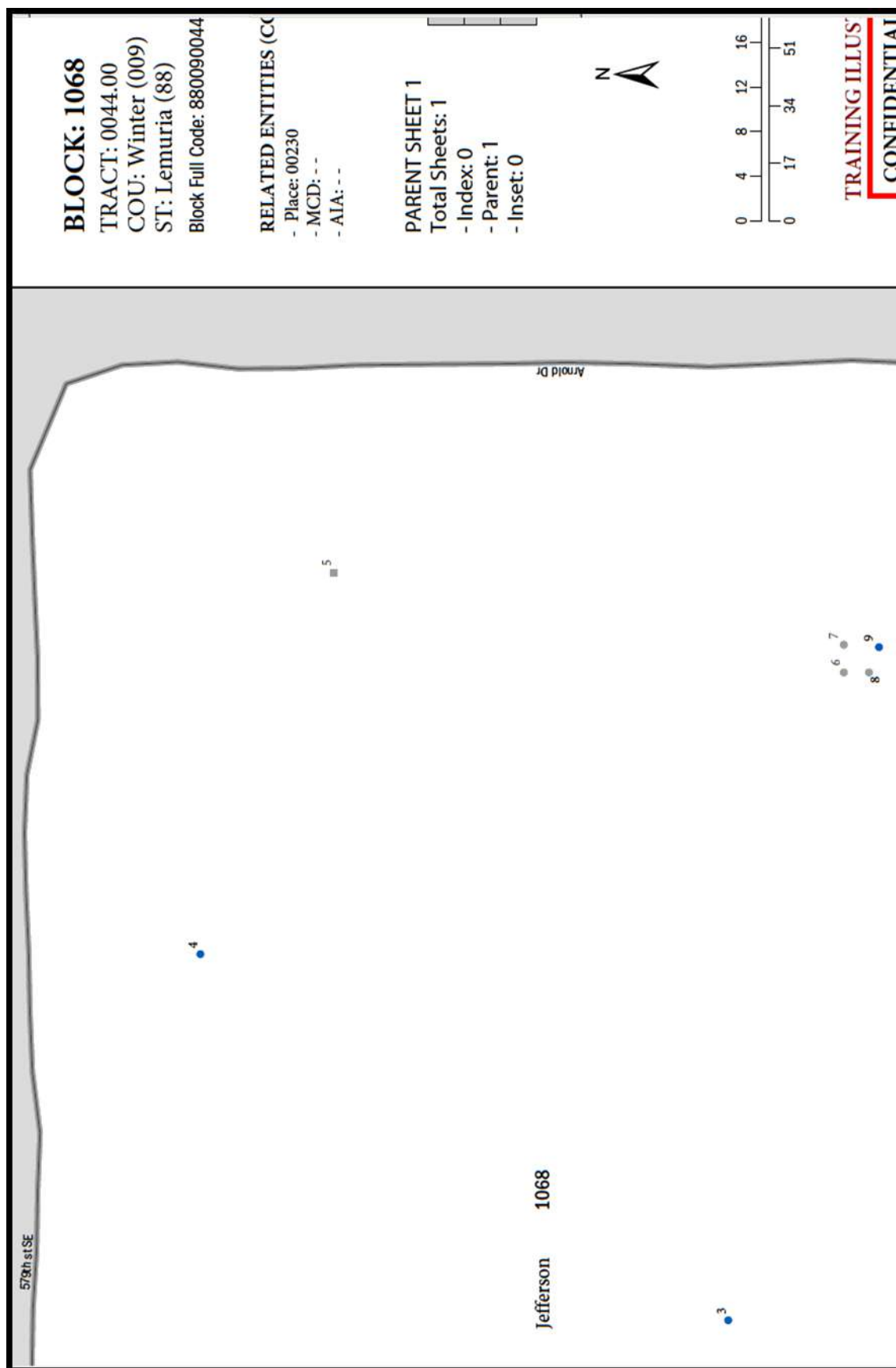


Figure 4. LUCA Feedback Small Format Block Map Example - Zoomed Section

## CHAPTER 3 HOW TO FILE AN APPEAL

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This chapter provides information on the process to Appeal addresses while reviewing the 2020 Census LUCA feedback materials. The *Federal Register* notice on the 2020 Census LUCA Appeals Process forms the basis for much of the content in this chapter. A copy of the *Federal Register* notice is included in the feedback materials package or can be located on LUCA website at <https://www.census.gov/programs-surveys/decennial-census/about/luca.html>.

The 2020 Census LUCA Appeals Office strongly recommends use of the Census Bureau's Geographic Update Partnership Software (GUPS) for filing an Appeal. Use of this tool simplifies the Appeal submission work. Participants may use GUPS for reviewing the feedback materials and appealing addresses even if they did not use it for their LUCA submission during the Review Phase. A GUPS software installer DVD and respondent guide are included in the materials for digital address list participants if a digital participant wishes to use GUPS.

### 3.1 Background

To ensure that tribal, state, and local governments participating in 2020 Census LUCA have a means to Appeal the Census Bureau's determinations, the Census Address List Improvement Act of 1994 requires that the Administrator of OMB's Office of Information and Regulatory Affairs (OIRA), acting through the Chief Statistician and in consultation with the Census Bureau, develop an Appeals Process by establishing a temporary federal entity, the 2020 Census LUCA Appeals Office. This office will resolve any disagreements that may remain after participating governments receive the Census Bureau's LUCA Feedback materials and make a final decision on the inclusion of appealed addresses. Participants must contact staff in the 2020 Census LUCA Appeals Office, not the Census Bureau, for specific Appeal-related questions. Reach the Appeals Staff toll-free, by phone, at (888) 222-9907.

### 3.2 Deadline for Filing an Appeal

The deadline for filing an Appeal is 45 calendar days after the date the participant receives their feedback materials from the Census Bureau. The 2020 Census LUCA Appeals Office defines "receipt" as the delivery date reported to the Census Bureau by the delivery service carrier.

In order to safeguard the confidential address materials covered by Title 13, the transmission of an Appeal to the 2020 Census LUCA Appeals Office must adhere to the Census Bureau's specific guidelines for handling materials supplied with the feedback materials. The participant must transmit its Appeals material to the 2020 Census LUCA Appeals Office following the instructions outlined in [Section 3.5](#), and should keep a record of the date of transmission of these materials in case there are questions about the submission date. The participant may not submit any materials to the 2020 Census LUCA Appeals Office after the 45 calendar day period has elapsed.

Upon receipt of an Appeal, the Appeals Staff will send a confirmation of receipt to the participant. They also will notify the Census Bureau that a participant has filed an Appeal.

### 3.3 Procedures for Filing an Appeal

A participant is eligible to file an Appeal if they returned address additions or corrections to the Census Address List during the LUCA Review Phase, or if they certified, after review, that the

Census Address List was correct and required no updates. A participant may Appeal the following types of addresses:

- Address deletions from the Census Address List by another level of government participating in LUCA or by a different census operation that participants did not comment on during the LUCA Review Phase. The *Detailed Feedback Address List* identifies these addresses with the **X01** feedback processing code in field 5 (**FEEDBACK\_CODE**). The 2020 Census enumeration universe excludes these records.
- Address additions and corrections provided during the LUCA Review Phase that the Census Bureau processed, but denied and excluded in the 2020 Census enumeration universe. The *Detailed Feedback Address List* identifies these addresses with the **R03** feedback processing code in field 5 (**FEEDBACK\_CODE**).

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**IMPORTANT REMINDER:** Only the X01 and R03 address records are eligible for Appeal.

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As mentioned in Section 2.2, to facilitate the participant's feedback review, the Census Bureau provides the *Detailed Feedback Address List* file sorted based on the following order of the **FEEDBACK\_CODE** field: X01, R03, A01, A02, A03, R01, and R02. Within each feedback processing code, the **GEOID** field provides another sort level. Performing this dual sort promotes the Appeal-eligible records to the beginning of the file while retaining a geographic organization for the address records. Participants may perform other sorts (e.g., by street name or by solely by GEOID) of the *Detailed Feedback Address List* to group areas of records together for review.

For each X01 and R03 coded address record on the *Detailed Feedback Address List* that the participant believes should be reinstated in the Census Address List, insert a "Y" in field 3 (**APPEAL\_FLAG**) for that address record.

### 3.4 Supporting Documentation

The 2020 Census LUCA Appeals Office requires eligible participants to provide evidence of existence and the location for appealed addresses. To this end, eligible participants must provide the supporting documentation for all appealed addresses as specified below.

For the 2020 Census LUCA Appeals process, participants may apply the same set of supporting evidence to a group of addresses. For example, participants may wish to supply one set of supporting evidence for related addresses such as those associated with a single housing development or complex if the set of supporting evidence substantiates the existence of the full set of linked addresses. In other cases, a written description of a robust process to review and verify the Appeal-eligible addresses using highly accurate sources may support a set of addresses. Participants must supplement this narrative with a selection of appealed addresses associated with an exact location and proven with one of the evidence types listed below.

Eligible governments must submit the following supporting documentation with their Appeal:

- A written narrative with an explanation of the eligible government's position for why the Appeals Staff should adopt their recommendation.
- A detailed description of the address source(s) that helps to verify the existence of an address or group of addresses. Eligible governments may incorporate the detailed description(s) into the

written narrative or may supply separate address source documentation. For each address source used to support the existence of address(s), the description should include the following:

- Date of the address source.
- Frequency of update of the address source (e.g., daily, monthly, quarterly, yearly, etc.).
- Methods used to update the address source.
- Quality assurance procedure(s) used in maintaining the address source.
- How the eligible government and/or originator of the source uses the information.
- Evidence to support the existence of the appealed address. Participants must link the evidence directly to a particular appealed address or particular set of appealed addresses. Useful types of supporting evidence include:
  - Documentation of on-site inspection and/or interview of residents and/or neighbors.
  - Issuance of recent occupancy permit(s) for unit(s). Building permits are not acceptable, as they do not ensure completed construction of the units.
  - Provision of utilities (electricity, gas, sewer, water, telephone, etc.) to the residence. The utility record must show that this is not a service to a commercial unit, or an additional service to an existing residence (such as a second telephone line).
  - Provision of other governmental services (housing assistance, welfare, etc.) to residents of the unit(s).
  - Photography, including aerial photography or satellite imagery.
  - Land use maps.
  - Local 911 emergency lists, if they distinguish residential from commercial units.
  - Tax assessment records, if they distinguish residential from commercial units.

For each address on the *Detailed Feedback Address List* that the participant is appealing, write/key the **APPEAL\_FLAG** from field 3 and **MAFID** from field 2 on the supporting documentation to show the exact location in the document where the evidence for that address is located. For example, if submitting property tax records that contain 30 tax records per page, print (or key) “**Y161200444**” if the Appeal-eligible record was MAFID 161200444 on the *Detailed Feedback Address List* on the one tax record, among those 30 tax records, that supports the Appeal. Within a geographic information system (GIS) source, the 2020 Census LUCA Appeals Office suggests participants add a field (e.g., AppealFlag) to the attribute table to enter the corresponding “Y” and MAFID information (e.g., “**Y161200444**”), then save/export only the records with a value in that new field. This subset of the entire GIS source becomes the supporting documentary evidence for the records flagged in the *Detailed Feedback Address List*.

Only submit documentation specific to the address records or group of address records being appealed, e.g., one property tax record or one utility record for each appealed address or only those pages of a list with the records for the appealed addresses appropriately marked. Whatever method a participant chooses to associate source material with their appealed records, it is crucial for the Appeals Staff to be able to determine which evidence supports which address records or set of address records in order to process the Appeal.

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**Note:** The LUCA Feedback module of GUPS provides a method for linking documentation for one or more appealed addresses.

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Direct questions on the Appeals process to the 2020 Census LUCA Appeals Office toll-free, by phone, at (888) 222-9907. The LUCA website, <https://www.census.gov/programs-surveys/decennial-census/about/luca.html>, also lists their contact information.

### 3.5 Preparing and Submitting Appeals Material to the 2020 Census LUCA Appeals Office

There are two methods for submitting the Appeals material to the 2020 Census LUCA Appeals Office. Participants may submit the zipped Appeals material through the Secure Web Incoming Module (SWIM), the official web portal for uploading materials, or participants may ship the Appeals material to the 2020 Census LUCA Appeals Office. See [Section 3.5.2](#) for instructions on using SWIM and [Section 3.5.3](#) for instructions on packaging and shipping the Appeals material.

#### 3.5.1 Preparing Appeals Material for Submission

After completing the review of the LUCA Feedback Phase materials and flagging some records for Appeal, return only the records in the *Detailed Feedback Address List* with a “Y” in the **APPEAL\_FLAG** field, field 3. To locate these records, sort the *Detailed Feedback Address List* on the **APPEAL\_FLAG** field and save only the records with a “Y” in that field as their own file. Name the file **Appeal\_2020LUCA\_<EntityID>\_Submission.xxx** (.xlsx, or .csv, or other digital spreadsheet file formats). Save this file, and others mentioned in the next paragraphs, to the new folder created for the working copies described in [Section 1.3](#).

Convert any supporting documentary evidence into digital format, by either scanning or saving if the material is already in digital format. Name the file(s)

**Appeal\_2020LUCA\_<EntityID>\_Evidence.xxx**. This file format (xxx) varies based on the source of the information. If more than one supporting document is included, add a number after “Evidence”; e.g., Evidence1of10, Evidence2of10, etc.

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**IMPORTANT:** Participants using a GIS source as supporting documentation must supply all GIS file components (e.g., .dbf, .shp, .sbn, .sbx, .prj, .cpg, .xml, etc.) from their GIS source with the linked Appeals record(s) annotated. Zip the complete suite of files into a separate file (e.g., **Appeal\_2020LUCA\_<EntityID>\_EvidenceGIS.zip**). For participants using SWIM to submit their Appeal, do not include this “\_EvidenceGIS.zip” file within the Appeals return submission .zip file. SWIM will not accept a .zip file within a .zip file. Refer to [Section 3.5.2](#) for instructions on supplying GIS supporting documentation.

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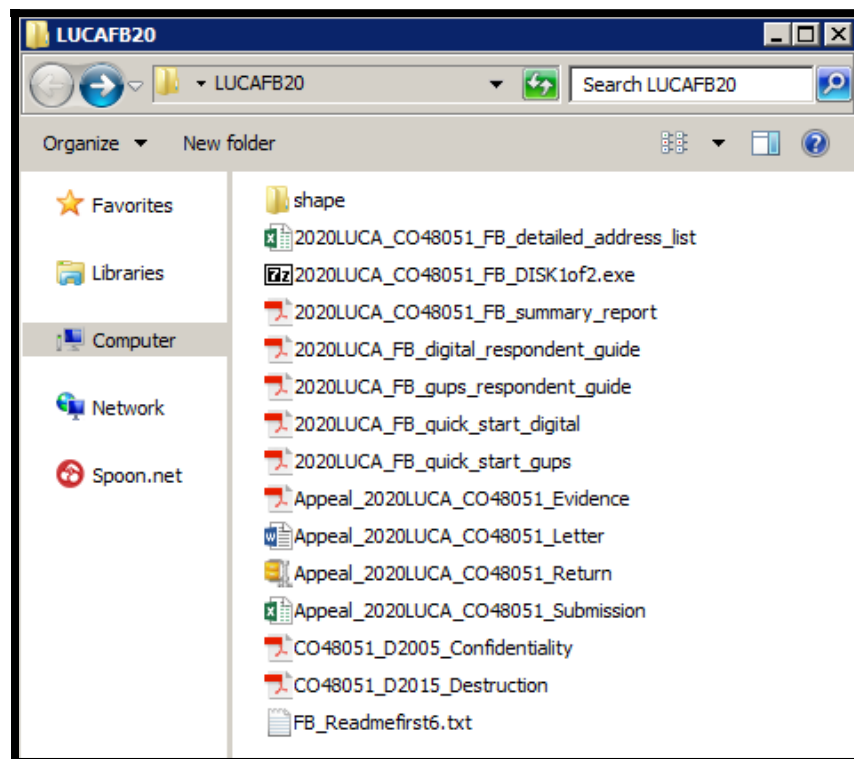
Prepare a written narrative with the explanation of the participant’s Appeal to the 2020 Census LUCA Appeals Office. Name the file **Appeal\_2020LUCA\_<EntityID>\_Letter.xxx**. This file format (xxx) varies based on software used to create it. The narrative should outline the basis of the Appeal and the participant’s position for why the 2020 Census LUCA Appeals Office should adopt the recommendations. The narrative should provide the contact information for the Appeal, including:

- The name of the governmental jurisdiction filing the Appeal.
- The name, mailing address, telephone number, and email address (if any) for the jurisdiction’s contact person for the Appeal. Ensure this person is on the *D-2005 – Confidentiality Agreement Form*.

Should participants not incorporate the source description(s) into the written narrative and prepare separate documentation, the Appeals Office suggests participants name the source description file(s) **Appeal\_2020LUCA\_<EntityID>\_SourceDescription.xxx**. The file format varies based on the source of the information (e.g., Microsoft Word® files, Microsoft Access or Excel files, Notepad files, etc.). If more than one source description document is included, add a number after “SourceDescription”; e.g. SourceDescription1, SourceDescription2, etc.

Zip the appealed records submission (**Appeal\_2020LUCA\_<EntityID>\_Submission.xxx**), the written narrative (**Appeal\_2020LUCA\_<EntityID>\_Letter.xxx**), the source description(s), if not included with the written narrative, (**Appeal\_2020LUCA\_<EntityID>\_SourceDescription.xxx**), and the supporting documentary evidence file(s), except the GIS Evidence files, (**Appeal\_2020LUCA\_<EntityID>\_Evidence.xxx**) into the return .zip file for submission to the 2020 Census LUCA Appeals Office. Name this file **Appeal\_2020LUCA\_<EntityID>\_Return.zip**. See [Figure 5](#) for an example of the folder for a Digital Address List and Digital Map participant with the “Appeals” files included. There is no GIS supporting documentation .zip file shown in Figure 5.

Password protect the **Appeal\_2020LUCA\_<EntityID>\_Return.zip** file using the same case-sensitive password provided with the feedback materials to unencrypt the **2020LUCA\_<EntityID>\_FB\_DISK1of2.exe** file. Contact the LUCA Help Desk at (844) 344-0169 for assistance if this password is misplaced. Save the .zip file to a CD or DVD or stage for submitting using SWIM.



**Figure 5. Example of Folder with Appeals files for a Digital Address List and Digital Map Participant**

**Note:** If a participant intends to ship the Appeals material and not use SWIM, a hard copy narrative, source description(s), and supporting documentary evidence is acceptable. Converting to digital format for burning onto the CD/DVD is not required. Refer to [Section A4](#) in [Appendix A](#), for instruction for protecting the Title 13 material during shipment.

### 3.5.2 SWIM Instructions for Submitting Appeals Material

Participants may use SWIM to upload their Appeals material to the 2020 Census LUCA Appeals Office. The Census Bureau provided one SWIM registration token per LUCA participant with their LUCA Review Phase cover letter. Another token is not included with the feedback materials.

To determine whether an account exists, click “[Forgot your password?](#)” on the main SWIM page and enter the email address to check for account existence. If SWIM does not locate an account associated with the email address, it returns the following message, “*No account registered for this email. Go to Account Registration.*” Choosing the Account Registration link opens a window to establish a SWIM account.

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**Note:** The components of the email and password of SWIM system accounts are case-sensitive. Make note of the case-sensitive format used when establishing the SWIM account (e.g., [jane@anytown.org](#) or [Jane@anytown.org](#) or [JANE@ANYTOWN.ORG](#)). The Census Bureau recommends the use of lowercase characters and recommends safe retention of this information in a secure location for future reference.

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SWIM allows four attempts to login before it temporarily locks the account for 15 minutes. After the 15-minute lock expires, participants may try to login again or reset their password using the “Forgot your password?” link on the login page. Once selected, 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.

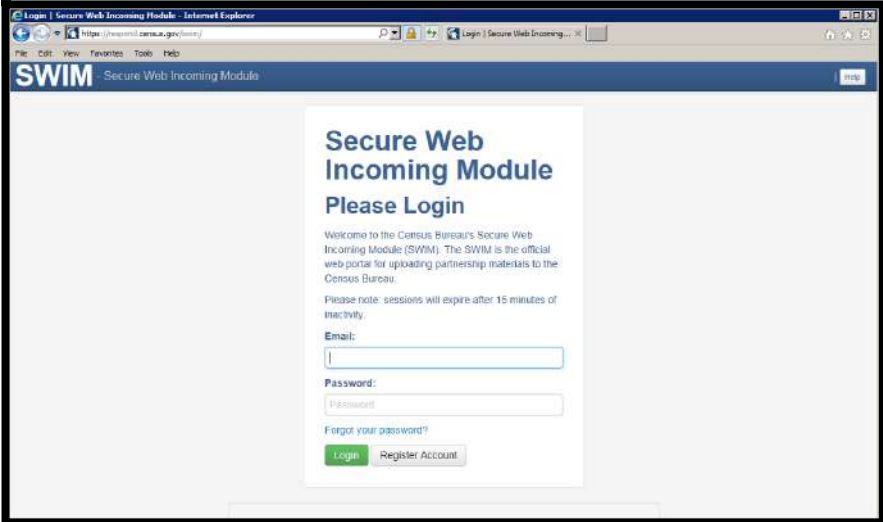
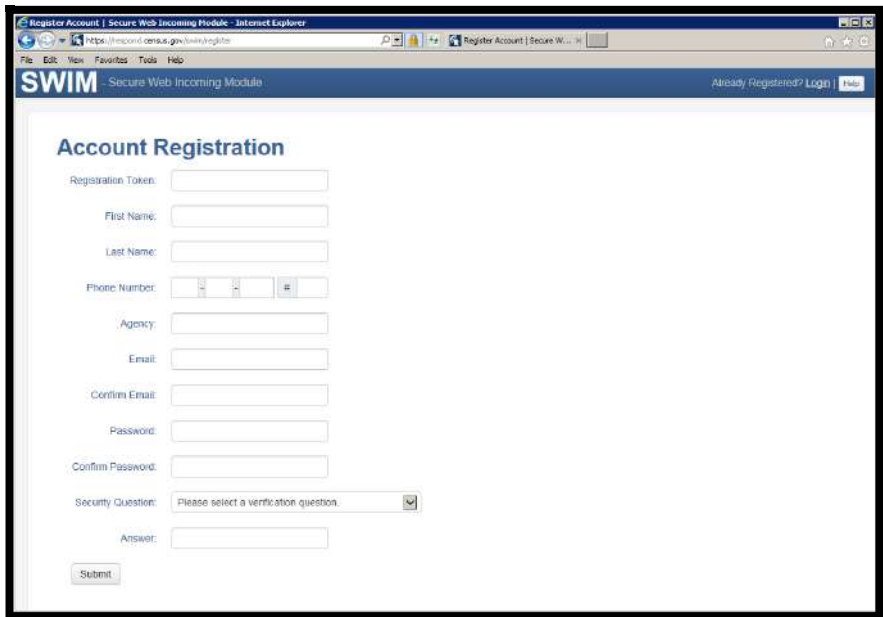

Participants continuing to experience logon issues should confirm use of the current internet browser version (or one previous version). If the browser version is older, upgrade to a newer version. If problems with SWIM still occur, contact the LUCA Help Desk at (844) 344-0169 for assistance. An additional SWIM token may be necessary to create another account.

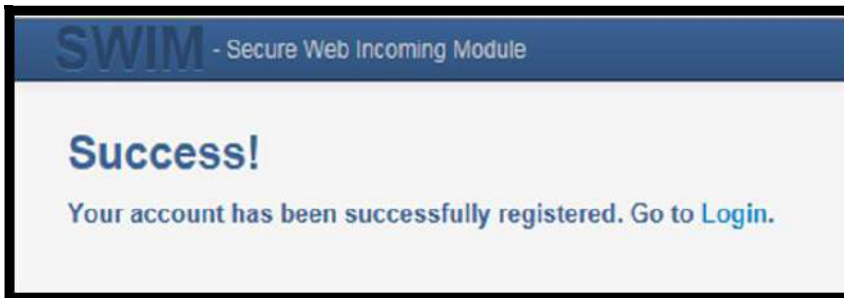
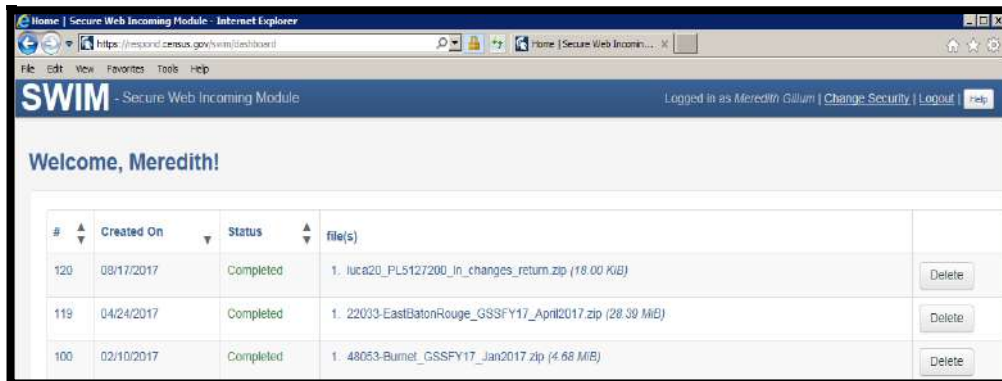
The following list contains the file requirements for using SWIM:


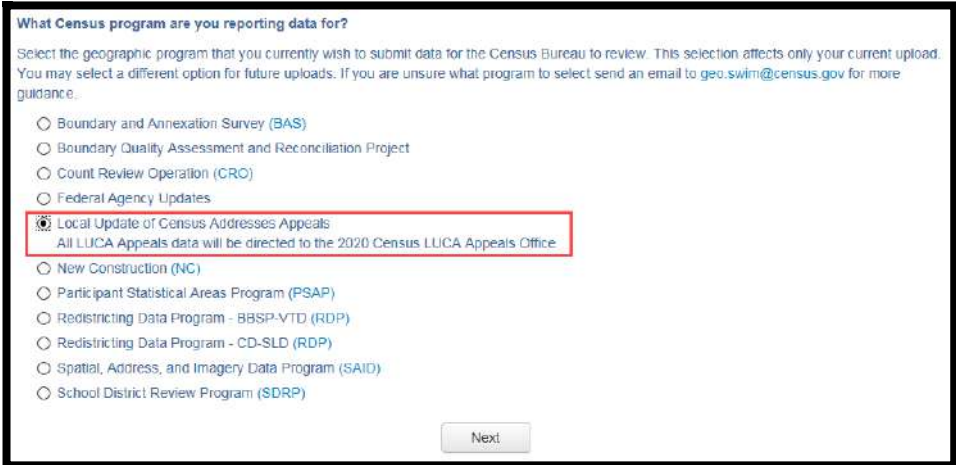
- File to upload must be .zip file format.
- The .zip file may not include another .zip file as a component.
- The .zip file must not be larger than 250 megabytes in size.

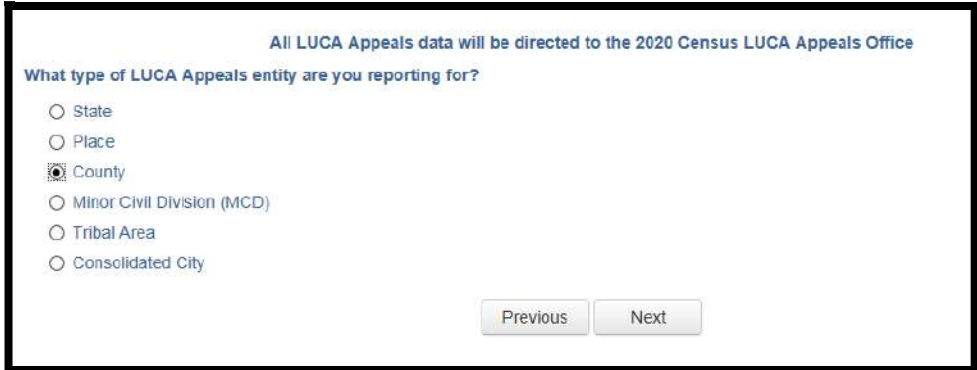
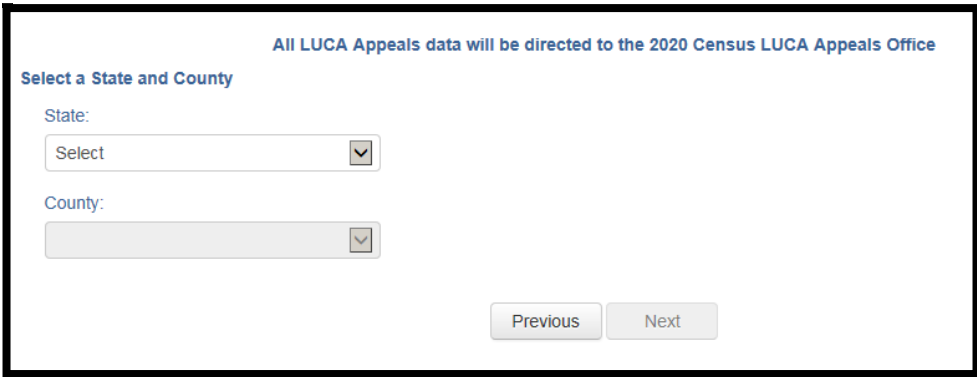
Refer to [Table 6](#) for an example of using SWIM for submitting Appeals material to the 2020 Census LUCA Appeals Office.

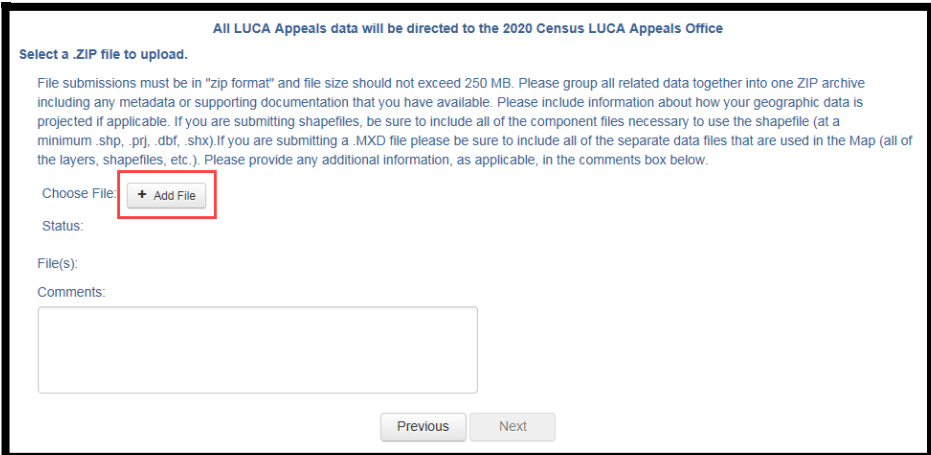
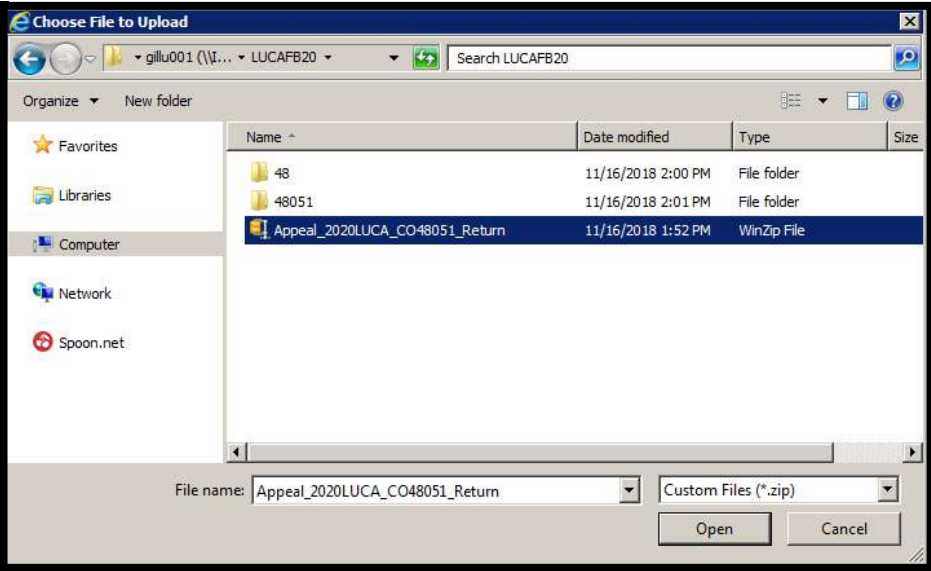
**Table 6: SWIM Submission**

Step	Action and Result
<b>Step 1</b>	<p>Open a new browser window and enter the SWIM URL &lt;<a href="https://respond.census.gov/swim/">https://respond.census.gov/swim/</a>&gt;. The <b>SWIM Please Login</b> screen opens.</p> 
<b>Step 2</b>	<p>For participants with an existing SWIM account, enter the email address and password and then click the <b>Login</b> button. The <b>Welcome</b> screen opens. Go to <b>Step 8</b>.</p>
<b>Step 3</b>	<p>For participants without a SWIM account, have the 12-digit registration token provided by the Census Bureau ready for account registration. Choose the <b>Register Account</b> button after accessing the SWIM URL. The <b>Account Registration</b> screen opens.</p> 
	<p>All fields on the <b>Account Registration</b> screen are required.</p>
<b>Step 4</b>	<p>Enter the registration token, name, phone number, agency or organization, email address in the appropriate fields.</p>


Step	Action and Result
Step 5	<p>Create a password using the following criteria:</p> <ol style="list-style-type: none"><li>1. Must be at least 8-characters in length.</li><li>2. Must have at least one uppercase character.</li><li>3. Must have at least one lowercase character.</li><li>4. Must have at least one number.</li><li>5. Must have at least one special character. Valid choices are as follows: #, !, \$, *, &amp;, ?, and ~.</li></ol> <p><b>Note:</b> The comma shown in the previous list are for spacing purposes only. The comma is not a valid special character for use in the password.</p>
Step 6	<p>Establish a security question. Click arrow to the right of the <b>Security Question</b> field and select a question from the drop-down menu. Enter an answer in the <b>Answer</b> field. Click the <b>Submit</b> button when finished. <i>A Success screen opens to confirm the successful creation of a SWIM account.</i></p> <div></div>
Step 7	<p>On the <b>Success</b> screen, select <b>Login</b> to return to the <b>SWIM Please Login</b> screen (shown in Step 1) to proceed with the login process.</p>
Step 8	<p>Enter the email and password information and click the green <b>Login</b> button to log into SWIM. <i>The Welcome screen opens.</i> If the account has uploaded other files for different geography programs administered by the Census Bureau, <i>a list of files previously uploaded by the SWIM user displays, as shown in the example below.</i> The list includes the creation date of the file upload, the name of the file, and the corresponding size of the .zip file.</p> <div></div>

Step	Action and Result
Step 9	<p>To begin a new upload, click the <b>Start New Upload</b> button at the bottom of the screen.</p> <div>  </div> <p>The <b>“What Census program are you reporting data for?”</b> screen opens. To ensure the Appeals Staff receives the submission, choose the <b>Local Update of Census Addresses Appeals</b> radio button and click the <b>Next</b> button.</p> <div>  </div>

Step	Action and Result
Step 10	<p>The <b><i>“What type of LUCA Appeals entity are you reporting for?”</i></b> screen opens. Participants must select the level of geography that matches the type of entity they represent. County participants (e.g., CO48001) choose the County choice, as shown in the screenshot below. Incorporated Place participants (e.g., PL4800010) choose the Place choice. If a question arises about this choice, please contact the LUCA Help Desk at (844) 344-0169 for assistance.</p> <div>  </div> <p>Click the radio button for the entity type to upload and click the <b>Next</b> button. <i>The choice of County opens the <b>Select a State and County</b> screen.</i></p> <div>  </div>

Step	Action and Result
Step 11	<p>Following the selection of the entity type to upload, the <b>Select a .ZIP file to upload</b> screen opens. Click the <b>+Add File</b> button to launch the <b>Choose File to Upload</b> window and navigate to the folder where the return.zip file resides. Select the file and click <b>Open</b>.</p>   <p><b>IMPORTANT:</b> Participants with GIS supporting documentation must attach their <b>Appeal_2020LUCA_&lt;EntityID&gt;_EvidenceGIS.zip</b> file with their <b>Appeal_2020LUCA_&lt;EntityID&gt;_Return.zip</b> file in order to supply the 2020 Census Appeals Office with all of the documentation needed to review the Appeal. Participants add the "EvidenceGIS.zip" file by repeating the same procedure described in this step. The 'Shift' key does not allow for the selection of multiple files.</p>

Step	Action and Result
Step 12	<p>Once the file upload completes, the <b>Status</b> field shows “<b>Success.</b>” The name of the file appears in the <b>File(s)</b> field. Participants can add comments to the <b>Comment</b> section if they choose. Click the <b>Next</b> button to proceed with the upload.</p> <div> <p>All LUCA Appeals data will be directed to the 2020 Census LUCA Appeals Office</p> <p>Select a .ZIP file to upload.</p> <p>File submissions must be in “zip format” and file size should not exceed 250 MB. Please group all related data together into one ZIP archive including any metadata or supporting documentation that you have available. Please include information about how your geographic data is projected if applicable. If you are submitting shapefiles, be sure to include all of the component files necessary to use the shapefile (at a minimum .shp, .prj, .dbf, .shx). If you are submitting a .MXD file please be sure to include all of the separate data files that are used in the Map (all of the layers, shapefiles, etc.). Please provide any additional information, as applicable, in the comments box below.</p> <p>Choose File: <a href="#">+ Add File</a></p> <p>Status: Success</p> <p>File(s):</p> <ul style="list-style-type: none"> <li>• Appeal_2020LUCA_CO48051_Return.zip</li> </ul> <p>Comments:</p> <div> 2020 Census LUCA Appeals for Burleson Co TX (CO48051).  Submitting 50 records flagged for Appeal, written narrative, source description, and supporting documentation. </div> <p><a href="#">Previous</a> <a href="#">Next</a></p> </div> <p><b>NOTE:</b> If including <b>Appeal_2020LUCA_&lt;EntityID&gt;_EvidenceGIS.zip</b>, it will appear beneath the <b>File(s)</b> section with the <b>Appeal_2020LUCA_&lt;EntityID&gt;_Return.zip</b> file. To assist the 2020 Census LUCA Appeals Office, please include a note about the Appeal itself and use of GIS supporting documentation in the Comments section.</p>
Step 13	<p>The <b>Thank You</b> screen appears. It thanks the participant and indicates a forthcoming email once transfer completes.</p> <div> <h2>Thank You</h2> <p>Thank you for using SWIM. You will receive an email when your file successfully transfers to the 2020 Census LUCA Appeals Office.</p> <p>File: Appeal_2020LUCA_CO48051_Return.zip</p> <p>You may <a href="#">Log Out</a> or return to the <a href="#">upload form</a>, to submit more files.</p> </div>
Step 14	<p>Choose ‘<b>upload form</b>’ in the phrase “<b>You may Log Out or return to the upload form to submit more files</b>” sentence to return to the <b>Welcome</b> screen and begin the upload process again, if the participant is the liaison for more than one jurisdiction. If complete with the upload process, choose <b>Log Out</b>.</p>

Step	Action and Result										
	<p>It is important to mention that SWIM sessions deactivate after 15 minutes of inactivity. Participants taking longer than 15 minutes to upload a file must log back into the system and start again. <i>They receive a message noting the period of inactivity on the Login screen.</i></p> <div><h2>Secure Web Incoming Module</h2><h3>Please Login</h3><p>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.</p><p>Please note: sessions will expire after 15 minutes of inactivity.</p><div>You have been logged out due to inactivity.</div><p>Email:</p><input type="text"/><p>Password:</p><input type="password"/><p><a href="#">Forgot your password?</a></p><div><button>Login</button><button>Register Account</button></div></div> <p>When they reach the <b>Welcome</b> screen, a record listed with a <b>Status</b> of “<b>In progress, Continue?</b>” appears with that day’s date in the <b>Created On</b> field. Participants can choose the “<b>Continue?</b>” link to continue uploading or they can delete the item by choosing the <b>Delete</b> button to the far right of the row.</p> <div><h3>Welcome, Meredith!</h3><table><thead><tr><th>#</th><th>Created On</th><th>Status</th><th>file(s)</th><th></th></tr></thead><tbody><tr><td>1</td><td>10/11/2018</td><td>In Progress. <a href="#">Continue?</a></td><td></td><td><button>Delete</button></td></tr></tbody></table></div>	#	Created On	Status	file(s)		1	10/11/2018	In Progress. <a href="#">Continue?</a>		<button>Delete</button>
#	Created On	Status	file(s)								
1	10/11/2018	In Progress. <a href="#">Continue?</a>		<button>Delete</button>							

### 3.5.3 Shipping Instructions for Submitting Appeals Material

Participants without internet access or those that do not wish to use SWIM may ship their Appeals material to the 2020 Census LUCA Appeals Office. Appeals material may be included on CD/DVD or as hard copy materials. Burn, or copy, the return submission, **Appeal\_2020LUCA\_<EntityID>\_Return.zip** and the GIS supporting documentation, **Appeal\_2020LUCA\_<EntityID>\_EvidenceGIS.zip**, if applicable, to a CD/DVD. As noted in [Section 3.5.1](#), participants can submit hard copy written narrative and source description(s), as well as any hard copy supporting documentation. To assist with recording the receipt of an Appeal package, the 2020 Census Appeals Office requests the inclusion of a hard copy of the written narrative.

Follow these instructions to package and ship materials to the 2020 Census LUCA Appeals Office:

- Double wrap the Appeals material (CD/DVD and/or hard copy materials) using an inner and an outer envelope (or container), one within the other. These should be durable enough to prevent someone from viewing or tampering with the enclosed material.
- Label both sides of the inner envelope (or container) with the notice:
- **“DISCLOSURE PROHIBITED BY TITLE 13, U.S.C.”**
- Place the inner envelope (or container) into the outer envelope.
- Do not label the outer envelope with the disclosure notice.
- Ship using a service that provides tracking information, such as United States Postal Service (USPS) trackable delivery, FedEx, United Parcel Service (UPS), or similar service. Retain the tracking number as proof of delivery.

Ship to the following address for the 2020 Census LUCA Appeals Office:

*2020 Census LUCA Appeals Office  
Attn: LUCA Appeals Staff  
1201 E 10th St  
Jeffersonville IN 47132*

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**IMPORTANT:** Use the address listed above to ensure delivery of the Appeals material to the 2020 Census LUCA Appeals Office, as they operate separately from the Census Bureau.

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## CHAPTER 4 2020 CENSUS LUCA CLOSEOUT

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The Census Bureau must account for all Title 13 materials delivered to participants during both the LUCA Review and Feedback phases, and any copies of those materials, to close out the operation for 2020. It is the responsibility of the LUCA liaison to ensure the proper disposal of the Title 13 materials. The designated liaison is required to verify the destruction or return of any remaining Title 13 materials, both paper and digital (i.e., paper copies, backup files, etc.) by signing and returning to the Census Bureau the *D-2012 – Destruction or Return of Title 13, U.S.C. Materials Form* enclosed with the feedback materials and found in [Appendix C](#). The destruction of materials is the preferred method rather than returning the materials to the Census Bureau.

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**IMPORTANT:** Please await a response from the 2020 Census LUCA Appeals Office on the status of the Appeal prior to destroying or returning the Title 13 material.

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All LUCA reviewers and anyone with access to Title 13 materials (includes all persons who signed the *D-2005 – Confidentiality Agreement Form*) are required to sign and date the *D-2012* form once the LUCA Appeals process concludes. Should any liaison, reviewer, or anyone with access to Title 13 materials leave before the completion of the LUCA operation, they are required to sign out of the program by signing and dating this form. If any liaison or reviewer leaves and fails to sign and date this form, the current liaison can sign out on their behalf.

Participants choosing to destroy their materials must return the *D-2012* as soon as possible after the destruction of materials and must ensure the form contains all appropriate liaison and reviewer signatures to close out 2020 Census LUCA. Use the enclosed, postage-paid envelope to return the *D-2012*. Participants choosing to return their materials, rather than destroy them, must include this form with the materials and must follow the packaging and shipping instructions in [Appendix A](#) to ensure the security of the Title 13 materials.

## APPENDICES

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## APPENDIX A      CONFIDENTIALITY AND SECURITY GUIDELINES

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### A1      Introduction

Federal law, under Title 13 of the United States Code (U.S.C.), requires the U.S. Census Bureau to maintain the confidentiality of the information it collects. The Census Bureau takes this responsibility very seriously. Respondents place their trust in the Census Bureau each time they complete a survey or an interview. This trust in confidentiality is critical to the success of the Census Bureau's mission to collect and report the most accurate data possible. To uphold the law, the Census Bureau requires that any individuals with access to Title 13 materials adhere to the prescribed confidentiality and security guidelines.

### A2      Title 13, U.S. Code

Chapter 1, Section 9 of Title 13, U.S. Code states: "Neither the Secretary, nor any other officer or employee of the Department of Commerce or bureau or agency thereof, or local government census liaison, may, except as provided in section 8 or 16 or chapter 10 of this title:

- 1) Use the information furnished under the provisions of this title for any purpose other than the statistical purposes for which it is supplied; or
- 2) Make any publication whereby the data furnished by any particular establishment or individual under this title can be identified; or
- 3) Permit anyone other than the sworn officers and employees of the Department or bureau or agency thereof to examine the individual reports."

In 1994, under Public Law 103-430, the U.S. Congress amended Chapter 1 of Title 13 to allow the local government census liaison to review and update the Census Bureau's address information for their jurisdiction. Although the amendment allows official local government access, the amendment reaffirmed the confidential nature of the Census Bureau's address information. Census information protected under Title 13 includes:

- Everything on a completed or partially completed questionnaire or any information obtained in a personal or telephone interview.
- Individual addresses maintained by the Census Bureau, including those shared with governments through the 2020 Census Local Update of Census Addresses Operation (LUCA).
- Digital or paper maps with latitude/longitude coordinate data that identify the location of living quarters (structure points).
- The penalty for the wrongful disclosure or release of information protected by Title 13 is a fine of not more than \$250,000 or imprisonment for not more than 5 years, or both, as set by Section 214 of the Code and the Uniform Sentencing Act of 1984.

Title 13 U.S.C. does not apply to generalized address information, such as address range data available in the Census Bureau's digital products or address counts by census block.

### A3      The Confidentiality Agreement

To participate in LUCA, a government must designate a LUCA liaison. The LUCA liaison, LUCA reviewers, and *anyone* with access to Title 13 materials must sign the *Confidentiality Agreement*. The Census Bureau will not deliver LUCA materials to a participant until we have

received the completed and signed *Confidentiality Agreement* and the *Confidentiality and Security Checklist*.

The Census Bureau's Title 13 data, including addresses and latitude/longitude coordinate data (structure points), cannot be used to create, update, nor modify a tribal, state, or local jurisdiction's address list or database.

A signature on the *Confidentiality Agreement* constitutes a legal agreement by each individual to keep confidential Census Bureau Title 13 data and abide by the security guidelines outlined below. While access to Title 13 materials is temporary, the commitment to keep the information confidential is effective for a lifetime.

## **A4 Security Guidelines**

The LUCA liaison accepts the responsibility for protecting and safeguarding the LUCA materials. The liaison must restrict access to the Census Bureau's information covered under Title 13 to those individuals who have signed the *Confidentiality Agreement*.

### **A4.1 Protecting Digital Title 13 Materials**

Operating systems, programs, applications, and data are collectively referred to as Information Technology (IT) systems in this document. Any IT systems used for LUCA participation must be accessible only to those who have signed the *Confidentiality Agreement*. Your IT systems should restrict the read, write, and delete functions to all Title 13 materials.

#### **Digital Guidelines**

- Construct electronic security profiles to allow only the LUCA liaison and the LUCA reviewers to access Title 13 materials. Test your security to ensure that access is restricted.
- Use file encryption and passwords to protect all digital Title 13 materials at all times. Encrypt files using the **Advanced Encryption Standard** (AES) with key length of 256 bits.
- Do not leave computers with Title 13 materials unattended. Log-off computers, lock terminals, and lock the room when not in use.
- Label all digital media and **every** printed page of any paper materials produced from Title 13 digital media with the following:  
  
**"This document contains information, the release of which is prohibited by Title 13, U.S.C., and is for U.S. Census Bureau official use only. Wrongful disclosure or release of information can be punished by fine or imprisonment (Public Law 99-474)."**
- Do not send backup digital media off-site. Store in a secured area. **Do not mix, store, or back-up LUCA data with other data.**
- Clear dedicated digital media containing Title 13 materials before reuse. Overwrite Title 13 digital data minimally three times using a commercial disk utility program.
- Do not disclose precise or even anecdotal information about Census Bureau addresses or locations to anyone who has not signed the *Confidentiality Agreement*.

## Password Guidelines

The IT systems must use logon routines that require a user-ID and password that conform to the following guidelines:

- Unique user-ID and password required for the LUCA liaison, the LUCA reviewers, and anyone who has signed the *Confidentiality Agreement*.
- Must consist of at least twelve, nonblank characters consisting of at least one alphabet letter and either one number or one special character (for example: \$, \*, or &).
- Reject passwords that are the same as the user-ID or that have been used within the last six months.
- Disable passwords after three failed attempts.
- Mask passwords.
- Require password changes every 90 days or immediately, if compromised.
- Require user to change an assigned password to a unique password the first time the user accesses a new account.

### A4.2 Protecting Paper Title 13 Materials

- Do not leave Title 13 materials unattended. Secure all Title 13 materials in a locked room. If possible, store Title 13 materials in locked desks or cabinets.
- Copy only the Title 13 materials necessary to complete the LUCA review. Do not leave the copy machine unattended while making copies. All copied materials containing Title 13 information must bear the statement:

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

- Do not disclose precise or even anecdotal information about Census Bureau addresses or locations to anyone who has not signed the *Confidentiality Agreement*.

### A4.3 Reporting an Incident

If you discover that any Title 13 materials have been viewed by unauthorized persons or are missing from your inventory, you must:

- Contact the Census Bureau through the Census Incident Response Team (CIRT) at (301) 763-3333 **within 24 hours**. You must provide the following information:
  - Jurisdiction Name.
  - Date and time of the incident.
  - Name of the contact person.
  - Phone number of contact person.
  - Site address of incident.
- Immediately secure all remaining materials. Prohibit any further access, by anyone, including the LUCA liaison and anyone who signed the *Confidentiality Agreement*. Census Bureau staff will contact your office within 48 hours with information on how to proceed.

#### A4.4 On-site Visits

The Census Bureau may make an on-site visit to review a participant's security procedures. The Census Bureau will strive not to disrupt office operations. A visit may include a review of:

- Storage and handling of Title 13 materials.
- Employee access to Title 13 materials.
- Physical safeguard of stored Title 13 materials.
- IT Systems, including use of passwords.
- Employee awareness of their responsibilities to Title 13 materials.

#### A4.5 Destruction of Census Bureau Confidential Materials

After the entire LUCA operation has concluded, all Title 13 materials must be destroyed (preferred method) or returned according to the Census Bureau's specific guidelines. The LUCA liaison is required to verify the destruction or return of any Title 13 materials, both paper and digital, including all paper copies, backup files, etc., by signing and returning the *Destruction or Return of Title 13, U.S.C. Materials Form*. In addition, anyone who signed the *Confidentiality Agreement* is required to sign this form once his or her participation in LUCA has ended. Should any liaison, reviewer, or anyone who signed the *Confidentiality Agreement* leave before the completion of LUCA, they must sign and date this form. If any liaison, reviewer, or anyone who signed the *Confidentiality Agreement* is unable to sign and date the form, the current liaison must sign and date on their behalf.

Only individuals who signed the *Confidentiality Agreement* are permitted to destroy Title 13 materials:

- Never deposit Title 13 materials in a trash or recycle container, or dispose of information in a landfill before destruction procedures are completed.
- Destruction must prevent recognition or reconstruction of paper or digital Title 13 materials. Use one of the following methods:
  - Shredding or pulping.
  - Chemical decomposition.
  - Pulverizing (such as, hammer mills, choppers, etc.).
  - Burning (facility approved by the Environmental Protection Agency).
  - Clear dedicated digital media containing Title 13 materials before reuse. Overwrite Title 13 digital data minimally three times using a commercial disk utility program.
  - Clearing or sanitizing all print servers and multi-function printing or scanning devices with stored images or print files containing Title 13 data.
  - Destroying CDs and DVDs using a shredder or other method suitable for rendering them unusable.

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**Note:** Hand tearing is an unacceptable method of Title 13 materials disposal before destruction.

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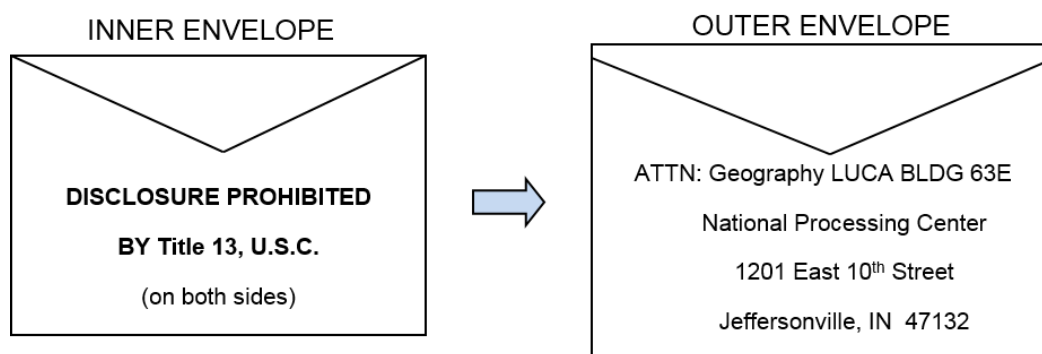
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See the National Institute of Standards and Technology, Special Publication 800-88, Revision 1, [Guidelines for Media Sanitization](http://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.800-88r1.pdf) for further information on acceptable methods for digital media and office equipment sanitization  
<<http://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.800-88r1.pdf>>.

## A4.6 Returning Census Bureau Title 13 Materials

After the entire LUCA operation has concluded, all Title 13 materials must be destroyed (preferred method) or returned according to the Census Bureau's specific guidelines. If you decide to return the Title 13 materials rather than destroying them, follow these guidelines:

- Ship the Title 13 materials, double-wrapping them by using an inner and an outer envelope (or container), one within the other. These should be durable enough to prevent someone from viewing or tampering with the enclosed materials.
- Label both sides of the inner envelope (or container) with the notice:  
**"DISCLOSURE PROHIBITED BY Title 13, U.S.C."**
- Place the inner envelope (or container) into the outer envelope.
- **Use the mailing label that was included in the initial mail-out of materials.** If you have misplaced the mailing label, please contact the Census Bureau to have a replacement label sent to you.
- Include with the returned materials, a signed *D-2012-Destruction or Return of Title 13, U.S.C. Materials Form*. Ensure that all reviewers and anyone with access to the Title 13 LUCA materials signs this form.
- If you do not use the mailing label, ship using a service that provides tracking information, such as U.S. Postal Service trackable delivery, FedEx, United Parcel Service (UPS), or similar service.



**Figure 6. Mailing Envelope Examples for Return of Title 13 U.S.C. Materials**


Ship to the address shown above, and listed below, for the return of all LUCA Title 13 materials:

*ATTN: Geography LUCA BLDG 63E  
National Processing Center  
1201 E 10th St  
Jeffersonville IN 47132*

# APPENDIX B CONFIDENTIALITY AGREEMENT FORM

FORM D-2005 (4-5-2017)

OMB No. 0607-0994: Approval Expires 12/31/2019

	<b>CONFIDENTIALITY AGREEMENT FORM</b> <b>2020 CENSUS LOCAL UPDATE OF CENSUS ADDRESSES OPERATION (LUCA)</b>	U.S. DEPARTMENT OF COMMERCE Economics and Statistics Administration U.S. CENSUS BUREAU
		Entity ID <input style="width: 100%;" type="text"/>
		Government Name <input style="width: 100%;" type="text"/>

**A. TERMS, CONDITIONS, AND RESPONSIBILITIES FOR PARTICIPATING IN THE 2020 CENSUS LUCA OPERATION**

All LUCA liaisons, reviewers, and anyone with access to Title 13, United States Code (U.S.C.) LUCA materials must agree to keep confidential the Title 13 materials to which they have access, including any maps that contain structure points showing the location of living quarters. They may use this information solely for suggesting improvements to the Census Bureau's address list and maps.

All individuals who will review or have access to Census Bureau Title 13 materials must sign below to indicate they have read and understand the Census Bureau's Confidentiality and Security Guidelines for LUCA. In addition, those who sign the agreement swear, under penalty of perjury, to maintain the confidentiality of Census Bureau materials protected under Title 13. Further, a signature indicates recognition that the penalty for wrongful disclosure is a fine of not more than \$250,000 or imprisonment for not more than 5 years, or both. Although access to the data is temporary, this commitment is permanent. You must be at least 18 years of age to sign this agreement.

By signing this agreement, your government agrees to destroy all Census Bureau Title 13 materials or return them to the Census Bureau at the completion of LUCA.

**B. LIAISON INFORMATION**

Liaison's Printed Name  Area code  Telephone number  Ext.

Liaison's Signature  Date Month  Day  Year

Name of LUCA Liaison's Office, Department, or Agency – (Assessor's Office, Planning Department, Regional Planning Agency, etc.) – Please print

Address of LUCA Liaison's Office, Department, or Agency – (House number and street name, RR or HC, and box number) – Please print

City  State  ZIP Code

Email address

**C. INFORMATION FOR REVIEWER(S) and PERSON(S) WITH ACCESS TO TITLE 13, U.S.C. MATERIALS**

Printed name  Area code  Telephone number  Ext.

Signature  Date Month  Day  Year

Address, if different from Liaison – (House number and street name, RR or HC, and box number) – Please print

City  State  ZIP Code

Email address

Printed name  Area code  Telephone number  Ext.

Signature  Date Month  Day  Year

Address, if different from Liaison – (House number and street name, RR or HC, and box number) – Please print

City  State  ZIP Code

E-mail address

**Section C continued on the reverse**

**C. INFORMATION FOR REVIEWER(S) and PERSON(S) WITH ACCESS TO TITLE 13, U.S.C. MATERIALS – Continued**

Printed name	Area code	Telephone number	Ext.
Signature	Date	Year	
	Month Day		
Address, if different from Liaison – (House number and street name, RR or HC, and box number) – Please print			
City	State	ZIP Code	
Email address			

Printed name	Area code	Telephone number	Ext.
Signature	Date	Year	
	Month Day		
Address, if different from Liaison – (House number and street name, RR or HC, and box number) – Please print			
City	State	ZIP Code	
E-mail address			

Printed name	Area code	Telephone number	Ext.
Signature	Date	Year	
	Month Day		
Address, if different from Liaison – (House number and street name, RR or HC, and box number) – Please print			
City	State	ZIP Code	
E-mail address			

Printed name	Area code	Telephone number	Ext.
Signature	Date	Year	
	Month Day		
Address, if different from Liaison – (House number and street name, RR or HC, and box number) – Please print			
City	State	ZIP Code	
E-mail address			

Complete this form and return it along with the completed, signed copies of the Registration Form, Self-Assessment Checklist and the Product Preference Form. Use the enclosed postage-paid envelope addressed to ATTN: Geography LUCA 63-E, National Processing Center, 1201 East 10th St., Jeffersonville IN 47132. Rather than mailing, you may scan your completed forms, including forms with signatures, and email them to us at [GEO.2020.LUCA@census.gov](mailto:GEO.2020.LUCA@census.gov)

FORM D-2005 (4-5-2017)

# APPENDIX C      DESTRUCTION OR RETURN OF TITLE 13 U.S.C. MATERIALS FORM

FORM <b>D-2012</b> (3-8-2017)	OMB No. 0607-0994; Approval Expires 12/31/2019 U.S. DEPARTMENT OF COMMERCE Economics and Statistics Administration U.S. CENSUS BUREAU	Entity ID  Government Name  												
<b>DESTRUCTION OR RETURN OF TITLE 13, UNITED STATES CODE MATERIALS FORM</b> <b>2020 CENSUS LOCAL UPDATE OF CENSUS ADDRESSES OPERATION (LUCA)</b>														
<i>Please complete this form and return it via email to <a href="mailto:GEO.2020.LUCA@census.gov">GEO.2020.LUCA@census.gov</a> or in the enclosed postage paid, preaddressed envelope.</i>														
<i>All LUCA Operation liaisons, reviewers, and anyone with access to Title 13, United States Code LUCA materials must sign and date this form at the conclusion of your government's participation in LUCA. Should any liaison, reviewer, or anyone with access to Title 13, U.S.C. LUCA materials leave before the completion of LUCA, they must sign and date this form. If any liaison, reviewer, or anyone with access to Title 13 LUCA materials are unable to sign and date this form, the current liaison must sign and date on their behalf.</i>														
<b>A. LUCA Liaison Destruction or Return of Title 13 Materials</b>														
I certify by my signature that I have properly destroyed or returned to the U.S. Census Bureau, the original LUCA Title 13 materials and any copies using the security requirements provided to my government by the Census Bureau.  Mark (X) one. <input type="checkbox"/> Destroyed Title 13, LUCA materials (Preferred method) <input type="checkbox"/> Returned Title 13, LUCA materials  Printed Name of the LUCA Liaison <div style="border: 1px solid black; height: 20px; width: 100%;"></div> Signature of the LUCA Liaison <div style="border: 1px solid black; height: 40px; width: 100%;"></div> <div style="float: right; text-align: right;">           Date            Month   Day   Year  <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> </div>														
<b>B. LUCA Reviewers and Anyone With Access to Title 13 Materials</b>														
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**B. LUCA Reviewers and Anyone With Access to Title 13 Materials – Continued**

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## APPENDIX D GLOSSARY

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**Address Count List**—This material was included as part of the Review Phase materials. It identified the number of housing unit addresses and group quarters addresses on the Census Address List for each census block within a jurisdiction.

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

**Block to Map Sheet Relationship List**— This material was included as part of the Review Phase materials. It identified census block numbers and the Census Bureau large format map(s) on which each block is located.

**Boundary**—A line, on a map, either invisible or coincident with a visible feature that identifies the extent of a geographic entity, such as a census tract, city, county, or state. A boundary marks the limits of an area.

**Census Address List**—This material was included as part of the Review Phase materials. The Census Address List, extracted from the Master Address File (MAF) for review and update during 2020 Census LUCA, contains all the residential addresses (city style and non-city style) known to the Census Bureau for your government. It also contains census geographic codes (state, county, census tract, census block) that indicate the location of each address. Many addresses also contain latitude and longitude coordinates depicting the address location.

**Census block**—A census block is an area bounded by visible and/or invisible features shown on Census Bureau maps. A census block is the smallest geographic area created by the Census Bureau for which it collects and tabulates decennial census data. Census blocks are numbered within census tracts and are uniquely numbered within census tracts.

**Census block number**—Census block numbers are a four-digit number. Census blocks are numbered uniquely within each census tract.

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

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

**Census tract**—A small, relatively permanent statistical subdivision of a county or statistically equivalent entity delineated for data presentation. Designed to be relatively homogeneous units with respect to population characteristics, economic status, and living conditions at the time of establishment, census tracts generally contain between 1,000 and 8,000 people, with an optimum size of 4,000 people. Delineated with the intention of being stable over many decades, census tract boundaries generally follow relatively permanent visible features. However, they may follow governmental unit boundaries and other invisible features in some

instances; the boundary of a state or county (or statistically equivalent entity) is always a census tract boundary.

**Census tract number**—Unique numbers to identify census tracts within a county or statistically equivalent entity. Census tract numbers are a four-digit number followed by a decimal point and a two-digit number for suffixed tracts, e.g., 1234.01. For census tracts without a suffix, the number will contain a period with zero fill, e.g., 4567.00. Leading zeros for census tracts, e.g., 0001.00, are not shown on Census Bureau maps. This tract would appear as “1” on the paper maps.

**City style address**—The Census Bureau’s definition of a city style address is an address consisting of a house number and street or road name. For example, 201 Main Street is a city style address. The address may or may not be used for the delivery of mail and may include apartment numbers/designations or similar identifiers.

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

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

**Detailed Feedback Address List**—A comma-delimited text file, in .csv format, showing all properly formatted address record updates submitted by the LUCA participant during the Review Phase and a feedback processing code identifying the specific action taken by the Census Bureau on that address record. This address list also identifies any address records not commented on during the Review Phase that were deleted from the original Census Address List by a different census operation or another level of government participating in LUCA.

**Edges**—All linear features contained in the MAF/TIGER database.

**Edges shapefile**—An Esri® shapefile of the linear features contained in the MAF/TIGER database. During the Review Phase, participants using digital map materials used the edges shapefile to add, delete, or change linear feature attributes. During the Feedback Phase, participants use the edges shapefile for reference only to review updates they made during the Review Phase or other updates made since the Review Phase concluded.

**Enumeration at Transitory Locations (ETL) operation**—Provides coverage for locations where people live in non-traditional housing that is transient or movable in nature. Most census questionnaires are mailed, or hand-delivered by census personnel, to known addresses in the Census Master Address File (MAF). However, due to changes in society, some people no longer maintain a traditional residence (house, apartment, condo, etc.), and have decided to live in boats, motorized recreational vehicles (RVs), trailers that are pulled by car or trucks, or any other type of housing that is movable or mobile, including tents. For operational purposes, we refer to these as “portable housing units.”

The type of Transitory Locations (TLs) that are included in the ETL are:

- Recreational (RV) parks.
- Marinas.
- Campgrounds.

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

**Federal Information Processing Series (FIPS)**—These are codes formerly known as Federal Information Processing Standards codes, until the National Institute of Standards and Technology (NIST) announced its decision in 2005 to remove geographic entity codes from its oversight. The Census Bureau continues to maintain and issue codes for geographic entities covered under FIPS oversight, albeit with a revised meaning for the FIPS acronym. Geographic entities covered under FIPS include states, counties, congressional districts, core based statistical areas, places, county subdivisions, sub-minor civil divisions, consolidated cities, and all types of American Indian, Alaska Native, and Native Hawaiian areas. FIPS codes are assigned alphabetically according to the name of the geographic entity and may change to maintain alphabetic sort when new entities are created or names change. FIPS codes for specific geographic entity types are usually unique within the next highest level of geographic entity with which a nesting relationship exists. For example, FIPS state, congressional district, and core based statistical area codes are unique within nation; FIPS county, place, county subdivision, and sub-minor civil division codes are unique within state. The codes for American Indian, Alaska Native, and Native Hawaiian areas also are unique within state; those areas in multiple states will have different codes for each state.

**Feedback Address Count List**— A comma-delimited text file, in .csv format, containing the number of housing unit and group quarters residential addresses on the LUCA Review Phase Census Address List and the current number of housing units and group quarters residential addresses for each census block within the participant’s jurisdiction. This product accompanies the Feedback Phase materials.

**Feedback Block to Map Sheet Relationship List**—This material is included as part of the Feedback Phase materials. It identifies census block numbers and the Census Bureau large format map(s) on which each block is located.

**Geocodes**—Codes that place an individual address in its correct geographic location, which, in census terms, includes the correct state, county, census tract, and census block codes. Because the Census Bureau counts people where they live, geocodes provide information to Census enumerators for locating an address. Accurate geocoding also ensures the Census Bureau counts housing units, and the people associated with them, in the correct census geography.

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

**Geographic Update Partnership Software (GUPS)**—A self-contained GIS update and processing package provided by the Census Bureau for participation in a variety of Census geography programs, including 2020 Census LUCA. Pre-packaged to include all of the components for 2020 Census LUCA, the GUPS contains the *Detailed Feedback Address List*, *Feedback Address Count List*, and TIGER Partnership shapefiles for the LUCA Feedback Phase. It contained the Census Address List, address count list, and TIGER Partnership shapefiles for use during the LUCA

Review Phase. GUPS allows the participant to add external geospatial data (shapefiles, geodatabases, and imagery) for comparison and update purposes. Delivery of all data (software, address list, address count list and shapefiles) is on DVD.

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

**Group quarters (GQ)**—A place where people live or stay normally owned or managed by an entity or organization providing housing and/or services for the residents. These services may include custodial or medical care as well as other types of assistance, and residency is commonly restricted to those receiving these services. People that live in a group quarters are usually not related. Group quarters include such places as college residence halls, residential treatment centers, skilled nursing facilities, group homes, military barracks, correctional facilities, workers' dormitories, and facilities for people experiencing homelessness.

**Highest elected official (HEO)**—The person most responsible for the governmental activities of a local government. This person receives the LUCA invitation letter, and must designate a LUCA liaison, to participate in the 2020 Census LUCA Operation.

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

**Living quarters**—Any site where people live, stay, or could live. Living quarters are classified as housing units or group quarters. They are usually found in structures intended for residential use, but also may be found in structures intended for non-residential use as well as tents, vans, shelters for people without housing, dormitories, barracks, and so forth, or they might not be associated with a structure at all.

**LUCA liaison**—The main point of contact appointed by the highest elected official (HEO) of each jurisdiction to review the Census Address List and maps against local records to identify differences. This person, also known as the program primary liaison or designated liaison, accepts responsibility for safeguarding Title 13 materials and are ultimately responsible for destroying (or returning) the materials. They must sign out of LUCA and submit the *Destruction or Return of Title 13 Materials Form (D-2012)* after ensuring all LUCA reviewers sign the form as well.

**LUCA reviewer**—Individual(s) selected by the HEO or LUCA liaison to assist with conducting the LUCA review. They accept responsibility for safeguarding Title 13 materials and, like the liaison, must sign out of LUCA and submit the *Destruction or Return of Title 13 Materials Form (D-2012)*.

**Master Address File (MAF)**—The Census Bureau's nationwide database of all addresses and physical/location descriptions known to the Census Bureau used to support many of the Census Bureau's operations. Besides containing mailing addresses and ZIP Codes, a MAF record also contains geographic information about the location of addresses. The Census Bureau's

Geography Division regularly updates the MAF/TIGER database from various sources, including the United States Postal Service (USPS) Delivery Sequence File (DSF) and other sources of updates such as current surveys and locally provided sources.

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

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

**Minor civil division (MCD)**—The primary governmental or administrative division of a county in 29 states and the Island Areas having legal boundaries, names, and descriptions. The MCDs represent many different types of legal entities with a wide variety of characteristics, powers, and functions depending on the state and type of MCD. In some states, some or all of the incorporated places also constitute MCDs. MCDs are identified by a variety of terms, such as town (in eight states), township, and/or district. They include both functioning and nonfunctioning government entities.

**Municipio**— A type of governmental unit that is the primary legal subdivision of Puerto Rico. The Census Bureau treats the municipio as the statistical equivalent of a county.

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

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

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

**Regional Census Center (RCC)**—Temporary offices set up approximately two years prior to the decennial census. The geographic staff from the Regional Offices are assigned to their respective RCC and assist with the execution of various geographic operations as well as provide support for the field operations conducted during the decennial.

**Regional Office (RO)**—One of six permanent Census Bureau offices distributed across the nation. Regional offices are responsible for the Census Bureau’s field operations.

**Shapefile**—Digital representations of geographic features, such as roads and boundaries used to create maps. A shapefile stores non-topological geometry and attribute information for the spatial features in a dataset. The Census Bureau provides county-based shapefiles in Esri shapefile format.

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

**Structure Point (map spot)**—A dot on a Census Bureau map, used to show the location of one or more living quarters. A maximum of four digits plus one alpha character is assigned within a census block to each structure point. Structure points are stored in the TIGER database and are protected by Title 13 U.S.C.

**Topologically Integrated Geographic Encoding and Referencing (TIGER)**—The Census Bureau’s digital map, including the geographic coordinates and names of streets, water features, other linear features, and boundaries for all jurisdictions and statistical areas that provide the geospatial framework for collecting and tabulating census data. TIGER also contains the structure coordinates of address records in the Master Address File (MAF) and address ranges along street features used for geocoding MAF records to census geography.

**Transitory locations (TL)**—Movable or mobile housing, or portable housing units, including boats, motorized recreational vehicles (RVs), tents, trailers that are pulled by cars or trucks, or any other type of portable housing.

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

## Appendix F

# 2020 Census Participant Statistical Areas Program (PSAP) Information Guide

W-100

Issued October 2018

## WHAT IS THE 2020 CENSUS PSAP?

The 2020 Census Participant Statistical Areas Program (PSAP) enables invited participants to review and update selected statistical area boundaries for 2020 Census data tabulation following U.S. Census Bureau guidelines and criteria. The Census Bureau will use the defined statistical areas to tabulate data for the 2020 Census, American Community Survey (ACS), and the Economic Census.

There are two types of statistical geographies eligible for review under the 2020 Census PSAP. The first is standard statistical geography and the second is tribal statistical geography.

Standard statistical geographies include:

- Census tracts.
- Block groups.
- Census designated places (CDPs).
- Census county divisions (CCDs), in selected states.

Tribal statistical geographies include:

- Tribal census tracts (TCTs).
- Tribal block groups (TBGs).
- Census designated places (CDPs).
- Tribal designated statistical areas (TDSAs).
- State designated tribal statistical areas (SDTSAs).
- Alaska Native village statistical areas (ANVSAs).
- Oklahoma tribal statistical areas (OTSAs).
- Statistical tribal subdivisions.

The Census Bureau initially solicits 2020 Census PSAP participation from our 2010 Census PSAP participants. Where no previous partner exists, the Census Bureau attempts to solicit new partners. The Census Bureau strongly recommends 2020 Census PSAP participants seek input from other census data users and stakeholders regarding the delineation of 2020 Census statistical areas.

The Census Bureau may modify, and if necessary, reject statistical geographic areas and/or their boundaries submitted by participants that do not meet established criteria and guidelines.

## WHY PARTICIPATE IN THE 2020 CENSUS PSAP?

The 2020 Census PSAP is the only opportunity prior to the 2020 Census for regional planning agencies (RPAs); councils of governments (COGs); Alaska Native Regional Associations (ANRAs); and tribal, state, county, and local governments (including the District of Columbia and Puerto Rico) to review and update the selected statistical areas. Examples of how these data are used include:

- Prepare grant applications to fund community and regional development, education, agriculture, energy, and environmental programs, as well as other needed community improvements and enhancements.
- Plan for future community needs.

The next opportunity to review and delineate statistical areas is planned for the 2030 Census.

## WHAT IS NEW FOR THE 2020 CENSUS PSAP?

The former Tribal Statistical Areas Program (TSAP) is included as part of the 2020 Census PSAP. Federally recognized tribes and state tribal liaisons are invited to update tribal statistical geographies in the 2020 Census PSAP.

To reduce participant burden, the Census Bureau will create 2020 Census statistical area suggestions for review and update by all 2020 Census PSAP participants. Participants may accept the Census Bureau's 2020 Census proposed statistical areas, update the 2020 Census proposed statistical areas, or use the 2010 Census statistical area geography as a base to make updates.

Participants reviewing standard statistical area geographies are required to use the Census Bureau's Geographic Update Partnership Software (GUPS) to delineate updates. The GUPS runs in QGIS, which is an open source Geographic Information System (GIS). GUPS contains all functionality required to make 2020 Census PSAP updates, executes automated checks for program criteria compliance, and creates standardized data output files for Census Bureau processing. The GUPS is available on DVD or available for download from the Census Bureau's Web site at [www.census.gov/programs-surveys/decennial](http://www.census.gov/programs-surveys/decennial-census/about/psap.html)

[-census/about/psap.html](http://www.census.gov/programs-surveys/decennial-census/about/psap.html) during the 2020 Census PSAP delineation phase.

Tribal participants reviewing tribal block groups, tribal census tracts, or CDPs may elect to use the GUPS or Census Bureau provided paper map products to review and edit tribal statistical geographies.

Participants using the GUPS must use the Secure Web Incoming Module (SWIM) to send their updates. The SWIM is the official Web portal for uploading partnership materials to the Census Bureau and is found at <https://respond.census.gov/swim/>.

Participants reviewing ANVSAs, OTSAs, OTSA tribal subdivisions, TDSAs, or SDTSAs are provided Census Bureau paper map products to review and edit tribal statistical areas.

## 2020 CENSUS PSAP FEDERAL REGISTER NOTICE

The 2020 Census PSAP *Federal Register* notice is available at [www.census.gov/programs-surveys/decennial-census/about/psap.html](http://www.census.gov/programs-surveys/decennial-census/about/psap.html). The *Federal Register* notice includes detailed information on standard and tribal statistical areas geography criteria and guidelines.

## 2020 CENSUS PSAP SCHEDULE

Date	Event
March–May 2018	Contact 2010 Census PSAP participants to inquire about 2020 Census PSAP participation.
July 2018	2020 Census PSAP invitation materials sent to participants.
September 2018	Final criteria for standard statistical areas published.
January 2019	2020 Census PSAP delineation phase begins. Participants have 120 calendar days to submit updates.
January 2019	2020 Census PSAP Webinar trainings begin.
July 2019	2020 Census PSAP participants notified of delineation phase closeout.
January 2020	2020 Census PSAP verification phase begins. Participants have 90 calendar days to review updates.

## 2020 CENSUS PSAP PREPARATION CHECKLIST

- ✓ Review the 2020 Census PSAP schedule and determine staffing and budget needs.
- ✓ Identify the primary 2020 Census PSAP contact for your government or organization.
- ✓ Identify the technical 2020 Census PSAP contact for your government or organization.
- ✓ Review the 2020 Census PSAP criteria and guidelines.
- ✓ Seek 2020 Census PSAP stakeholder input.
- ✓ Establish a meeting schedule for stakeholders during the 2020 Census PSAP delineation phase.
- ✓ Conduct research on local housing unit and population data trends.
- ✓ Identify potential CDPs for delineation during the 2020 Census PSAP.
- ✓ Attend a 2020 Census PSAP Webinar training.
- ✓ Review and update 2020 Census PSAP delineation phase materials.
- ✓ Review and update 2020 Census PSAP verification phase materials.

### Review the 2020 Census PSAP schedule and determine staffing and budget needs.

Plan for the number of staff needed to review and update statistical geographies prior to the start of the delineation phase scheduled for January 2019.

### Identify the primary 2020 Census PSAP contact.

The primary 2020 Census PSAP contact will coordinate the 2020 Census PSAP review and update activities. Past primary PSAP contacts have included planning directors, executive directors, COG presidents, or other persons with decision-making authority.

### Identify the 2020 Census PSAP technical contact.

The technical 2020 Census PSAP contact will conduct the technical review work or manage the technical staff. Consider whether this person will be available for the verification phase of the 2020 Census PSAP.

### Review the 2020 Census PSAP criteria and guidelines.

Review the 2020 Census PSAP criteria and guidelines for census tracts, block groups, CDPs, and, if applicable to your state, CCDs. Tribal participants should review the 2020 Census PSAP criteria and guidelines for tribal statistical geographies for which they are eligible. Criteria and guidelines for all 2020 Census PSAP statistical areas are published in the *Federal Register* at <[www.census.gov/programs-surveys/decennial-census/about/psap.html](http://www.census.gov/programs-surveys/decennial-census/about/psap.html)>.

### Seek 2020 Census PSAP stakeholder input.

Contact local governments and planning organizations in your service area for input into the review and update of statistical areas for the 2020 Census PSAP.

### Establish a meeting schedule for stakeholders during the 2020 Census PSAP delineation phase.

Coordinate stakeholder meetings during the delineation phase to review the Census Bureau's 2020 Census proposed statistical areas, and subsequent updates, to seek consensus among stakeholders.

### Conduct research on local housing unit and population data trends.

Conduct research to determine where housing unit and population growth or decline have occurred since 2010. Determine whether there are areas of future change that may affect the delineation of statistical areas based on housing unit and population criteria beyond the 2020 Census.

### Identify potential CDPs for definition during the 2020 Census PSAP.

Work with local stakeholders to identify potential CDPs. CDPs can be delineated for the 2020 Census PSAP for unincorporated, named places with concentrations of housing units or population.

### Attend a 2020 Census PSAP Webinar training.

Training Webinars will offer “hands-on” experience using the 2020 Census PSAP materials. Self-training aids and Webinars will be available online on the 2020 Census PSAP Web site. In addition, the 2020 Census PSAP Respondent Guides will contain detailed instructions and examples for conducting your statistical area review.

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### **Review and update 2020 Census PSAP delineation phase materials.**

You have 120 calendar days from receipt of materials to conduct your 2020 Census PSAP review and return updates to the Census Bureau. The time it will take to complete your 2020 Census PSAP review and submit your updates depends on the geographic territory and number of changes.

### **QUESTIONS**

For more information about 2020 Census PSAP, call 1-844-788-4921, e-mail us at <GEO.PSAP@census.gov>, or visit our Web site at <[www.census.gov/programs-surveys/decennial-census/about/psap.html](http://www.census.gov/programs-surveys/decennial-census/about/psap.html)>.

### **Review and update 2020 Census PSAP verification phase materials.**

After updating statistical areas based on 2020 Census PSAP participants' submissions, the Census Bureau will provide verification products to participants. You have 90 calendar days from the receipt of your verification materials to conduct the 2020 Census PSAP verification review and respond to the Census Bureau.

Table 1.

**2020 CENSUS PSAP STANDARD STATISTICAL AREAS CRITERIA—Con.**

Statistical area	Primary purpose	Nationwide wall-to-wall coverage	Geography nests within	2020 Census population criteria	2020 Census housing unit criteria
CENSUS TRACTS					
Standard census tract	Boundary continuity. Data comparability.	Yes	County	Optimum: 4,000 Minimum: 1,200 Maximum: 8,000	Optimum: 1,600 Minimum: 480 Maximum: 3,200
Special use	Distinguish areas of little or no population that have a specific type of land use.  Large water bodies.	No	County	Population Threshold = Little/None or must be within the standard census tract threshold.  Employment threshold (suggested): Minimum of 1,200 jobs/workers.  Area Measurement Thresholds: <ul style="list-style-type: none"><li>Should be comparable in land area size to surrounding census tracts</li></ul>	
BLOCK GROUPS					
Standard block group	Form the geographic framework within which census blocks are numbered.  Smallest area for which demographic characteristics are produced from the American Community Survey (ACS).	Yes	Census Tract	Minimum: 600 Maximum: 3,000	Minimum: 240 Maximum: 1,200
Special use	Distinguish areas of little or no population that have a specific type of land use AND are coextensive with a special land use census tract.  Large water bodies.	No	Census Tract	Population Threshold = Little/None or must be within the standard block group threshold.  Employment threshold (suggested): Minimum of 600 jobs/workers.  Area Measurement Thresholds: <ul style="list-style-type: none"><li>Should be comparable in land area size to surrounding block groups</li></ul>	

Table 1.

**2020 CENSUS PSAP STANDARD STATISTICAL AREAS CRITERIA—Con.**

Statistical area	Primary purpose	Nationwide wall-to-wall coverage	Geography nests within	2020 Census population criteria	2020 Census housing unit criteria
<b>Census designated places (CDPs)</b>	Place-level statistics for well-known, closely settled named localities that are not part of an incorporated place.  Mix of residential and commercial areas.	No, CDPs capture distinct communities.	State	Should have population during at least one entire season (at least 3 consecutive months) of the year.	Should have higher housing unit (or population) density than surrounding area.  If less than 10 housing units, Census Bureau will ask for an explanation.
<b>Census county divisions (CCDs)</b>	Provide data for sub-county units that have stable boundaries and recognizable names.  Usually represents one or more communities, economic centers, or major land uses.	Partial—CCDs and minor civil divisions (MCDs) together provide national coverage.  CCDs exist in 21 states. <sup>1</sup>	County	None	None

<sup>1</sup> CCDs exist in the following states:

Alabama	Montana
Alaska (referred to as census subarea)	Nevada
Arizona	New Mexico
California	Oklahoma
Colorado	Oregon
Delaware	South Carolina
Florida	Texas
Georgia	Utah
Hawaii	Washington
Idaho	Wyoming
Kentucky	

Table 2.

**2020 CENSUS PSAP TRIBAL STATISTICAL AREAS CRITERIA—Con.**

Statistical area	Primary purpose	Coverage	Geography nests within	2020 Census population criteria	2020 Census housing unit criteria
<b>TRIBAL CENSUS TRACTS (TCTs)</b>					
<b>TCT</b> <i>(Conceptually similar and equivalent to standard census tract.)</i>	Meet unique statistical needs of federally recognized American Indian reservation (AIR) and/or off-reservation trust land (ORTL).  Tract-level data without the imposition of state or county boundaries.  Data comparability.	Entire land and water area of the AIR and/or ORTL must be covered by one or more TCTs.	Federally recognized AIR or ORTL.  <i>(Identified uniquely to distinguish from standard census tract.)</i>	Optimum: 4,000 Minimum: 1,200 Maximum: 8,000 <i>(Fewer than 2,400 = 1 TCT coextensive with AIR and/or ORTL.)</i>	Optimum: 1,600 Minimum: 480 Maximum: 3,200
<b>Special use</b>	Distinguish areas of little or no population that have a specific type of land use.  Large water bodies.			Population Threshold = Little/None or must be within the standard census tract threshold.  Employment threshold (suggested): Minimum of 1,200 jobs/workers.  Area Measurement Thresholds: <ul style="list-style-type: none"> <li>Should be comparable in land area size to surrounding tribal census tracts.</li> </ul>	

Table 2.

**2020 CENSUS PSAP TRIBAL STATISTICAL AREAS CRITERIA—Con.**

Statistical area	Primary purpose	Coverage	Geography nests within	2020 Census population criteria	2020 Census housing unit criteria
TRIBAL BLOCK GROUPS (TBGs)					
<b>TBG</b> <i>(Conceptually similar and equivalent to standard block group.)</i>	Smallest area for which demographic characteristics are produced from the American Community Survey (ACS).  Maintained separately from standard county-based block groups to meet unique statistical needs of federally recognized AIR and/or ORTL.	Because TCTs must cover the entire area of each AIR and/or ORTL, by definition, TBGs also must cover the entire area of each AIR and/or ORTL.	TCT <i>(Identified uniquely to distinguish from standard block group.)</i>	Minimum: 600 Maximum: 3,000 <i>(Equal to or fewer than 1,200 = 1 TBG coextensive with TCT, AIR, and/or ORTL.)</i>	Minimum: 240 Maximum: 1,200
<b>Special use</b>	Distinguish areas of little or no population that have a specific type of land use AND are coextensive with a special land use tribal census tract.  Large water bodies.			Population Threshold = Little/None or must be within the standard block group threshold.  Employment threshold (suggested): Minimum of 600 jobs/workers.  Area Measurement Thresholds: <ul style="list-style-type: none"><li>Should be comparable in land area size to surrounding tribal block groups.</li></ul>	
OTHER TRIBAL STATISTICAL GEOGRAPHIES					
<b>Census designated places (CDPs)</b>	Place-level statistics for well-known, closely settled named localities that are not part of an incorporated place.  Mix of residential and commercial areas.	CDPs capture distinct communities.	State <i>(Tribes that would like to delineate CDPs for communities partially or completely outside the boundaries of their legal or statistical area should work with the primary participants for those areas.)</i>	Should have population during at least one entire season (at least 3 consecutive months) of the year.	Should have higher housing unit (or population) density than surrounding area.  If less than 10 housing units, Census Bureau will ask for an explanation.

Table 2.

**2020 CENSUS PSAP TRIBAL STATISTICAL AREAS CRITERIA—Con.**

Statistical area	Primary purpose	Coverage	Geography nests within	2020 Census population criteria	2020 Census housing unit criteria
<b>Tribal designated statistical areas (TDSAs)</b>	<p>Provide meaningful statistical data for federally recognized tribes that do not have an AIR or ORTL and are not based in Alaska, Hawaii, or Oklahoma.</p> <p>Enhance the ability for data users to make more meaningful comparisons, over time, between data for both legal and statistical American Indian Areas (AIAs).</p>	Relates to distribution of tribal members and American Indians receiving governmental services from the tribe.	<p>United States—excluding Alaska, Hawaii, and Oklahoma.</p> <p><i>(Can cross state boundaries.)</i></p>	<p>Minimum = 200</p> <p>American Indian population makes up large proportion of population and majority of that population are members of the delineating tribe.</p> <p>Should not include large numbers of people and households not affiliated with the tribe.</p>	<p>Minimum = 480</p> <p>Housing unit density of at least 3 housing units per square mile.</p>
<b>State tribal designated statistical areas (STDSAs)</b>	<p>Provide meaningful statistical data for state-recognized tribes that are not federally recognized, do not have a state-recognized AIR or ORTL, and are not based in Alaska, Hawaii, or Oklahoma.</p> <p>Enhance the ability for data users to make more meaningful comparisons, over time, between data for both legal and statistical AIAs.</p>	Relates to distribution of tribal members and American Indians receiving governmental services from the tribe.	State in which the respective tribe is officially recognized.	<p>Minimum = 200</p> <p>American Indian population makes up large proportion of population and majority of that population are members of the delineating tribe.</p> <p>Should not include large numbers of people and households not affiliated with the tribe.</p>	<p>Minimum = 480</p> <p>Housing unit density of at least 3 housing units per square mile.</p>

Table 2.

**2020 CENSUS PSAP TRIBAL STATISTICAL AREAS CRITERIA—Con.**

Statistical area	Primary purpose	Coverage	Geography nests within	2020 Census population criteria	2020 Census housing unit criteria
<b>Alaska Native village statistical areas (ANVSAs)</b>	Provide meaningful, relevant, and reliable statistical data for Alaska Natives and their Alaska Native villages (ANVs) that are federally recognized by Bureau of Indian Affairs (BIA) or recognized pursuant to Alaska Native Claims Settlement Act (ANCSA) as either a Native Village or Native Group.	State of Alaska—represent relatively densely settled portion of each ANV.	Alaska Native Regional Corporation (ANRC).	Significant proportion of the population during at least one season of the year (at least 3 consecutive months) is Alaska Native and the majority are members of the defining ANV.	Majority of housing units, permanent and/or seasonal, should be for Alaska Natives who are members of or receiving governmental services from the defining ANV.  Should not include large areas that are unpopulated or have no housing units.  Should have housing unit density of at least 3 housing units per square mile.
<b>Oklahoma tribal statistical areas (OTSAs)</b>	Provide a way to obtain data comparable to that provided to federally recognized tribes that currently have an AIR.	Represent the former AIRs that existed in the Indian and Oklahoma territories prior to Oklahoma statehood in 1907.	State of Oklahoma. <i>(Cannot overlap with any other AIA at the same level of the geographic hierarchy.)</i>	Must contain some American Indian population.	Must contain some American Indian housing units.
<b>Statistical tribal subdivisions</b>	Provide a way to obtain data for units of self-government and/or administrations within an OTSA.	Federally recognized tribes in Oklahoma with a defined OTSA.	OTSA	Must contain some American Indian population.	Must contain some American Indian housing units.

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## GLOSSARY OF TERMS

**Alaska Native Regional Associations (ANRAs).** The 12 regional nonprofit associations in Alaska (incorporated under State Law in 1973) whose boundaries became the basis of the for-profit regional corporations (Alaska Native Regional Corporations [ANRC]) pursuant to the Alaska Native Claims Settlement Act (ANCSA) (as amended) (43 U.S.C. 1601 et seq. [2000]). Regional nonprofit associations were created to administer social, education, and health services for Alaska Native people in their region.

**Alaska Native villages (ANVs).** Constitute associations, bands, clans, communities, groups, tribes, or villages recognized pursuant to the Alaska Native Claims Settlement Act of 1971 (Public Law 92-203).

**Alaska Native village statistical areas (ANVSAs).** Statistical geographic entities that represent the more densely settled portions of ANVs.

**American Community Survey (ACS).** An ongoing survey that collects demographic and housing characteristics data, January through December, to provide every community with the information they need to make important decisions. The Census Bureau releases new data every year, in the form of estimates, in a variety of tables, tools, and analytical reports.

**American Indian reservations (AIRs).** Areas that have been set aside by the United States for the use of tribes, the exterior boundaries of which are more particularly defined in the final tribal treaties, agreements, executive orders, federal statutes, secretarial orders, or judicial determinations. The Bureau of Indian Affairs (BIA) maintains a list of all federally recognized tribal governments and makes final determination of the inventory of federal AIRs.

**American Indian tribal subdivisions.** Described as additions, administrative areas, areas, chapters, county districts, communities, districts, or segments and are legal administrative subdivisions of federally recognized AIRs and ORTLs or are statistical subdivisions of OTSAs.

**Block groups.** Statistical geographic divisions of census tracts that generally contain population ranging from 600 to 3,000 and are used to present data and control block numbering within a census tract.

**Census county divisions (CCDs).** Statistical geographic entities in 21 states where MCDs either do not exist or change too frequently for reporting comparable census data over time. The primary goal of the CCD program is to establish and maintain a set of subcounty units that have stable boundaries and recognizable names. In most cases census tracts should nest within CCDs, but in less populated counties CCDs should nest within census tracts.

**Census designated places (CDPs).** Statistical geographic entities representing closely settled, unincorporated communities that are locally recognized and identified by name. CDPs are the statistical equivalents of incorporated places, with the primary differences being the lack of both a legally defined boundary and an active, functioning governmental structure, chartered by the state and administered by elected officials.

**Census tracts.** Small, relatively permanent statistical subdivisions of a county or equivalent entity that provide a stable set of geographic units for the presentation of statistical data. Census tracts generally have a population ranging from 1,200 to 8,000, with an optimum population of 4,000.

**Geographic Information Systems (GIS).** A collection of computer hardware, software, and geographic data for capturing, managing, analyzing, and displaying all forms of geographically referenced information.

**Geographic Update Partnership Software (GUPS).** A customized GIS, based on the open-source platform QGIS, provided by the Census Bureau to facilitate the participation and submission of statistical area updates for the 2020 Census PSAP.

**Master Address File/Topologically Integrated Geographic Encoding and Referencing (MAF/TIGER) System.** A digital (computer-readable) geographic database that automates the mapping and related geographic activities required to support the Census Bureau's census and survey programs.

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**Minor civil divisions (MCDs).** Primary governmental or administrative divisions of a county in many states (parishes in Louisiana) and the county equivalents in Puerto Rico and the Island Areas.

**Off-reservation trust lands (ORTLs).** Areas for which the United States holds title in trust for the benefit of a tribe (tribal trust land) or for an individual American Indian (individual trust land).

**Oklahoma tribal statistical areas (OTSAs).** Statistical entities identified and delineated by the Census Bureau in consultation with federally recognized American Indian tribes that had a former reservation in Oklahoma. OTSAs generally follow the boundaries of former reservations.

**2020 Census Participant Statistical Areas Program (PSAP).** A decennial census program that allows invited participants to review and update selected statistical area boundaries following Census Bureau guidelines and criteria.

**State designated tribal statistical areas (SDTSAs).** Statistical entities for state-recognized American Indian tribes that do not have a state-recognized land base (reservation).

**Tribal block groups (TBGs).** Statistical geographic divisions of tribal census tracts (TCTs) that generally contain population ranging from 600 to 3,000 and are used to present data and control block numbering within a TCT. TBGs are defined independently of the standard county-based block group delineation.

**Tribal census tracts (TCTs).** Small, relatively permanent statistical subdivisions of federally recognized AIRs or ORTLs that provide a stable set of geographic units for the presentation of statistical data. TCTs generally have a population ranging from 1,200 to 8,000, with an optimum population of 4,000. TCTs are defined independently of the standard county-based tract delineation.

**Tribal designated statistical areas (TDSAs).** Statistical entities identified and delineated by federally recognized American Indian tribes that do not currently have a federally recognized land base (reservation or off-reservation trust land).

## Appendix G



## 2020 Census Participant Statistical Areas Program (PSAP)

### Quick Program Guide for Digital Download of the Geographic Update Partnership Software (GUPS)

#### Initial Steps

- 1) Obtain materials from the PSAP website: <https://www.census.gov/programs-surveys/decennial-census/about/psap.html>:
  - 2020 Census Participant Statistical Areas Program (PSAP) GUPS Respondent Guide.
  - 2020 Census PSAP Digital Quick Program Guide.
  - 2020 Census PSAP Quick Reference Guides.
  - Download GUPS – <https://www2.census.gov/geo/pvs/gups/>.
- 2) Review the appropriate GUPS respondent guide and Quick Program Guide before beginning any updates.

#### Download and Install GUPS

- 1) Download the GUPS tool from the website to the computer.
- 2) Unzip the file and extract all contents of the unzipped package to a folder on the computer.
- 3) Click on the file named **Setup-9.0-X.bat** to start the installation.
- 4) 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.
- 5) The **License Agreement** screen will appear. Review the License Agreement and click *I Agree* button to continue the install process.
- 6) The **Choose Install Location** screen will appear. Click the *Browse* button to choose the location where GUPS will be installed. The Census Bureau recommends installation of the application at the default location shown (C:\Program Files\QGIS GUPS). Click *Next* to continue the install process.
- 7) The **Choose Components** screen will appear. Click *Install* to continue.
- 8) The software should take 5 to 10 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.

#### Start New PSAP Project

- 1) Double-click the **QGIS** icon on the desktop [QGIS splash screen appears].
- 2) Click *Close (X)* on QGIS Tips screen [Map Management dialog page opens].
- 3) Use the **Program** drop-down box to select **Participant Statistical Areas Program**.
- 4) Select **User Type**.
  - **Standard statistical area reviewers**, select **County Based Users**, follow step 5.
  - **Tribal statistical area reviewers**, select **Tribal Statistical Review**, skip to step 6
- 5) Use the **State** drop-down box to select the appropriate state.
  - Use the **Working County** drop-down box to select the county for review and update.
  - Do not select any **Adjacent Counties**, highlighted in yellow, unless planning to download the data from Census Web (see step 7 below).
  - Click the **Open** button.
  - Skip to step 7.
- 6) Use the **Entity Type** drop-down box select the entity you represent (Reservation/Trust Land).
  - Use the **Entity Name** drop-down box to select the entity to update.
  - Do not select any **Adjacent Counties**, highlighted in yellow and unchecked, unless planning to download the data from Census Web (see step 7 below).
  - Click the **Open** button.
- 7) Use the **Select Data Folder, Directory or Location** drop-down box to select **Census Web**. The other options are used by participants receiving DVD materials.
  - Suggested option: **Census Web**.
  - If errors are experienced accessing data using the Census Web option, contact the Census Bureau.
  - Files load into GUPS and are ready for updates.
  - If reference to adjacent counties is needed, refer to the *Getting Started with GUPS* chapter of the appropriate 2020 Census PSAP respondent guide.

## Perform Statistical Area Review/Updates

*For County Based Users:*

- Review the 2020 Census proposed statistical areas and compare to the 2010 Census statistical areas, or begin with the 2010 Census statistical areas.
- Update the 2020 Census proposed statistical areas or the 2010 Census statistical areas as necessary.

*For Tribal Reviewers:*

- Review the 2010 Census statistical areas.
- Update the 2010 Census statistical areas as necessary.

## Perform Quality Control

Use the validation tools provided in GUPS to review changes before returning updates to the Census Bureau:

- PSAP/TSR Criteria Review Tool.
- Review Change Polygon Tool.
- Geography Review Tool.

## Create Return Zip Files

- 1) Select **Export to Zip** icon on the PSAP toolbar.
- 2) From the **Select Output Type** dialog box select **Export for Census** button to create a file to return to the Census Bureau. (The file naming convention is as follows: psap20\_<descriptor>\_return.zip).
- 3) Click **OK**. A window opens showing the location of the output file on the local system. This is the file to return to the Census Bureau as described in the next steps.

## Return Updates Using the Secure Web Incoming Module (SWIM)

- 1) Open an internet browser window and enter the **SWIM URL**: <<https://respond.census.gov/swim/>>.
- 2) Participants who already **have** a SWIM account should enter their **email address** and **password**. Skip to step 4 below.
- 3) Participants who **do not** have a SWIM account click **Register Account**:
  - Enter the **12-digit SWIM token** provided by the Census Bureau.
    - If additional SWIM accounts are needed, please contact the Census Bureau.
  - Create a password following the five criteria below:
    - It must be 8 characters in length.
    - It must have at least one upper case character.
    - It must have at least one lower case character.
    - It must have at least one number.
    - It must have at least one special character (valid characters are: #, !, \$, &, ?, ~). Do not use commas.
  - Complete the registration information form.
- 4) Login to SWIM:
  - Select **Start New Upload** button.
  - Select **Participant Statistical Areas Program (PSAP)** radio button.
  - Input information on subsequent SWIM screens using instructions from the SWIM chapter of the appropriate 2020 Census PSAP respondent guide.

**Note:** SWIM email and passwords are case sensitive.

## Contact Information

Please contact the U.S. Census Bureau for questions:

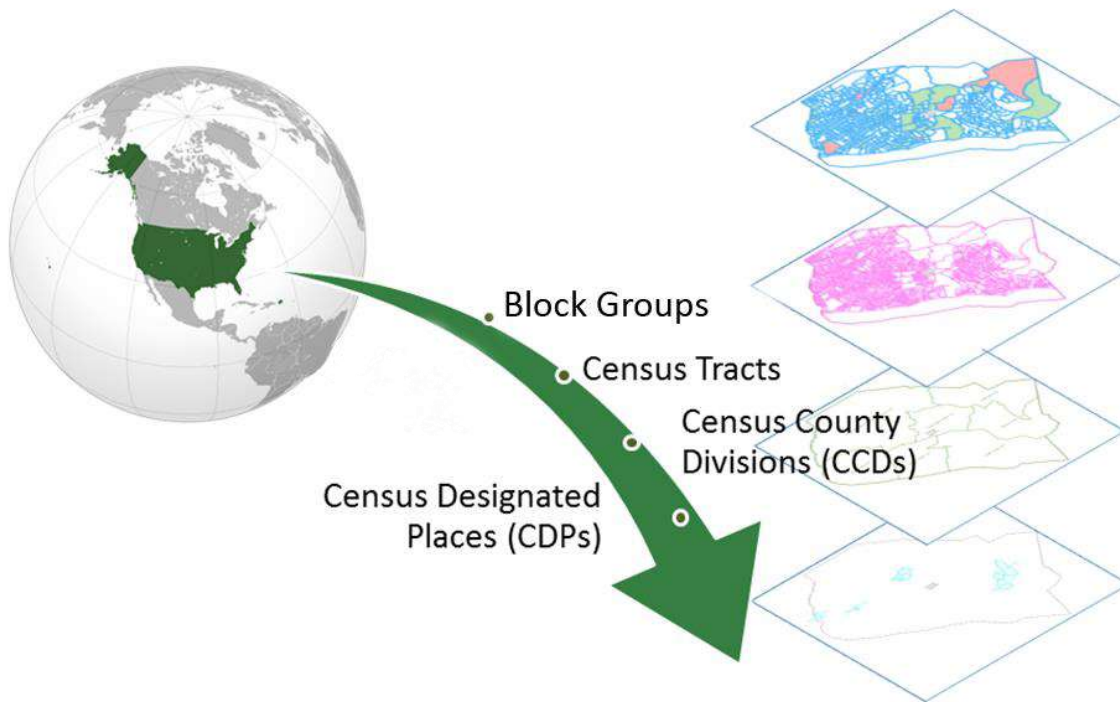
- Email: <[geo.psap@census.gov](mailto:geo.psap@census.gov)>.
- Phone: 1-844-788-4921.
- Website: <<https://www.census.gov/programs-surveys/decennial-census/about/psap.html>>.

## Appendix H

# 2020 Census Participant Statistical Areas Program (PSAP) Standard Respondent Guide

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*Instructions for Using the Geographic Update Partnership Software (GUPS)*  
February 2019





# TABLE OF CONTENTS

<b>Introduction .....</b>	<b>ix</b>
A. General Information .....	ix
B. The 2020 Census Participant Statistical Areas Program (PSAP) .....	ix
C. The Boundary and Annexation Survey (BAS).....	xii
D. 2020 Census PSAP Schedule .....	xii
E. Training and Support .....	xiii
F. Respondent Guide Organization .....	xiii
<b>Part 1 Overview of the 2020 Census PSAP Materials and the Standard Statistical Geographies.....</b>	<b>1</b>
<b>Chapter 1. Delineation Phase Materials for 2020 Census PSAP .....</b>	<b>2</b>
1.1 Informational and Instructional Materials .....	2
1.2 DVD Materials.....	3
1.3 Delineation Phase Postcard.....	3
<b>Chapter 2. Census Tracts.....</b>	<b>5</b>
2.1 Census Tract Threshold Requirements.....	6
2.2 Census Tract Codes and Numeric Identification .....	7
2.3 Census Tract Boundary Requirements .....	7
<b>Chapter 3. Block Groups .....</b>	<b>10</b>
3.1 Block Group Threshold Requirements .....	11
3.2 Block Group Codes and Numeric Identification .....	11
3.3 Block Group Boundary Requirements .....	12
<b>Chapter 4. Census Designated Places (CDPs) .....</b>	<b>13</b>
<b>Chapter 5. Census County Divisions (CCDs).....</b>	<b>14</b>
5.1 Census County Division Name Identification .....	15
<b>Part 2 Introducing GUPS for 2020 Census PSAP .....</b>	<b>16</b>
<b>Chapter 6. System Requirements and Installation .....</b>	<b>17</b>
6.1 System Requirements.....	17
6.2 GUPS Installation .....	17
<b>Chapter 7. Getting Started with GUPS .....</b>	<b>22</b>
7.1 Accessing the Shapefiles for 2020 Census PSAP.....	22
7.2 Open GUPS and Start a New Project .....	22
7.3 Save a Project in GUPS .....	29
7.4 Open a Previous Project in GUPS .....	30
<b>Chapter 8. GUPS Menus and Toolbars .....</b>	<b>32</b>
8.1 GUPS Page Layout .....	32
8.2 Menu Bar .....	34
8.3 Map View and Table of Contents .....	37
8.3.1 Table of Contents Toolbar .....	37
8.3.2 Managing the Map View from the Table of Contents .....	38
8.3.2.1 Manage Layer Visibility .....	38
8.3.2.2 Reorder Data Layers.....	40
8.3.2.3 Expand/Condense Layers or Layer Groups .....	40
8.3.2.4 Add Labels to Layers .....	40

8.3.2.5 Change Layer Scale Visibility .....	42
<b>8.4 Toolbars .....</b>	<b>43</b>
8.4.1 Standard Toolbar .....	43
8.4.2 PSAP Toolbar.....	54
8.4.2.1 Modify Area Feature Button .....	60
8.4.2.2 Geography Review Tool Button .....	68
8.4.2.3 Review Change Polygons Button.....	72
8.4.2.4 PSAP Criteria Review Button .....	75
8.4.2.5 Import County Zip Button .....	78
8.4.2.6 Export to Zip Button .....	80
8.4.2.7 Print Map to File Button.....	81
8.4.2.8 Add Imagery Button .....	82
8.4.3 Manage Layers Toolbar .....	83
8.4.3.1 Add Vector Layer Button.....	84
8.4.3.2 Add WMS/WMTS Layer Button .....	85
8.4.3.3 Add Raster Layer Button .....	86
<b>Part 3 Using GUPS for 2020 Census PSAP .....</b>	<b>87</b>
<b>Chapter 9. Review and Update of PSAP Geographies.....</b>	<b>88</b>
9.1 Review of PSAP Geographies.....	88
9.1.1 Review from the 2020 Proposed Plan .....	89
9.1.2 Review from the 2010 Geographies .....	91
9.2 Update of PSAP Geographies .....	91
9.2.1 Modify Area Feature Tool .....	92
9.3 Census Tract Update Instructions .....	93
9.3.1 Select Census Tracts .....	93
9.3.2 Split Census Tracts by Block Group.....	96
9.3.3 Split Census Tract by Face.....	101
9.3.4 Creating a Special Use Census Tract .....	105
9.3.5 Merge Census Tracts.....	108
9.3.6 Change Census Tract Boundaries.....	114
9.3.6.1 Add Linear Feature.....	118
9.3.6.2 Modify Linear Feature Attributes .....	122
9.3.6.3 Delete/Restore Linear Feature .....	123
9.4 Block Group Update Instructions .....	125
9.4.1 Select Block Group.....	126
9.4.2 Split a Block Group.....	126
9.4.3 Merge Block Groups .....	131
9.4.4 Change Block Group Boundaries .....	135
9.5 Census Designated Places (CDPs) Update Instructions .....	140
9.5.1 Select Census Designated Place (CDP).....	140
9.5.2 Boundary Change – Add Area (CDP) .....	141
9.5.3 Boundary Change – Remove Area (CDP) .....	144
9.5.4 New District – Add Entity (Add a New CDP) .....	148
9.5.5 Boundary Change – Delete Area Feature (Delete an Existing CDP) .....	152
9.5.6 Boundary Change – Change Attributes (CDP).....	155
9.6 Census County Division Update Instructions.....	157
9.6.1 Select Census County Division (CCD) .....	158
9.6.2 Merge Census County Divisions (CCDs) .....	158
9.6.3 Boundary Change – Add Area (CCD).....	162
9.6.4 New District – Add Entity (Add a New CCD) .....	167

9.6.5 Boundary Change – Change Attributes (CCD).....	170
<b>Chapter 10. Validate Data and Prepare Files for Submission .....</b>	<b>173</b>
10.1 PSAP Criteria Review Tool .....	173
10.2 Review Change Polygons Tool .....	175
10.3 Geography Review Tool.....	178
10.4 Export to Zip Button .....	181
10.4.1 Export to Zip – Share with Another Participant.....	181
10.4.2 Export to Zip – Export for Census .....	182
<b>Chapter 11. Secure Web Incoming Module (SWIM) .....</b>	<b>185</b>
11.1 SWIM Background and Requirements .....	185
11.2 SWIM Submission Example .....	186
<b>Part 4 Next Steps for 2020 Census PSAP .....</b>	<b>192</b>
<b>Appendices .....</b>	<b>193</b>
<b>Appendix A Glossary .....</b>	<b>A-1</b>
<b>Appendix B 2020 Census PSAP Criteria .....</b>	<b>B-1</b>
<b>Appendix C PSAP Historical Background .....</b>	<b>C-1</b>
C.1 History of Census Tracts .....	C-1
C.2 History of Block Groups .....	C-2
C.3 History of Census Designated Places (CDPs) .....	C-2
C.4 History of Census County Divisions (CCDs).....	C-3
<b>Appendix D County Subdivisions Map .....</b>	<b>D-1</b>
<b>Appendix E Supplemental Sources for PSAP Review .....</b>	<b>E-1</b>
<b>Appendix F MAF/TIGER Feature Classification Codes.....</b>	<b>F-1</b>
<b>Appendix G Acceptable Linear Features for Statistical Boundaries .....</b>	<b>G-1</b>
<b>Appendix H Standard Street Type Abbreviations .....</b>	<b>H-1</b>
<b>Appendix I Shapefile Names .....</b>	<b>I-1</b>
<b>Appendix J Shapefile Layouts .....</b>	<b>J-1</b>

## LIST OF TABLES

---

Table 1: 2020 Census PSAP Schedule .....	xii
Table 2: Quick Reference, Quick Program, and Respondent Guide Materials .....	2
Table 3: Census Tract Types and Thresholds.....	6
Table 4: Acceptable Minor Civil Division (MCD) and Incorporated Place Boundaries.....	8
Table 5: Block Group Types and Thresholds .....	11
Table 6: GUPS Hardware and Software Requirements .....	17
Table 7: Installation of the GUPS Application .....	18
Table 8: Open GUPS and Start a New Project .....	23
Table 9: Save a GUPS Project.....	29
Table 10: Open a Previous Project in GUPS .....	30
Table 11: GUPS Main Page Elements .....	32
Table 12: Menu Bar Tabs, Drop-down Menus, and Functions/Descriptions .....	34
Table 13: Table of Contents Toolbar Buttons, Names, and Functions/Descriptions .....	37
Table 14: Standard Toolbar Buttons, Names, and Functions/Descriptions .....	44
Table 15: Select Features Using an Expression Button .....	48
Table 16: Measure Button.....	51
Table 17: PSAP Toolbar Buttons, Names, and Functions/Descriptions .....	54
Table 18: Modify Area Feature Button.....	60
Table 19: Modify Area Feature Buttons Detail.....	66
Table 20: Geography Review Tool Button.....	68
Table 21: Review Change Polygons Button .....	73
Table 22: PSAP Criteria Review Button .....	75
Table 23: Import County Zip Button.....	78
Table 24: Export to Zip Button .....	80
Table 25: Print Map to File Button .....	81
Table 26: Add Imagery Button .....	83
Table 27: Manage Layers Toolbar Buttons, Names, and Functions/Descriptions .....	84
Table 28: Add Vector Layer Button .....	84
Table 29: Add WMS/WMTS Layer Button .....	85
Table 30: Add Raster Layer Button.....	86
Table 31: Modify Area Feature Actions by Statistical Geography.....	92
Table 32: Select Census Tracts .....	94

Table 33: Split Census Tracts by Block Group .....	97
Table 34: Split Census Tract by Face .....	101
Table 35: Creating a Special Use Census Tract.....	105
Table 36: Merge Census Tracts .....	109
Table 37: Change Census Tract Boundaries .....	114
Table 38: Add Linear Feature .....	119
Table 39: Modify Linear Feature Attributes .....	122
Table 40: Delete/Restore Linear Feature .....	123
Table 41: Select Block Group.....	126
Table 42: Split Block Group .....	127
Table 43: Merge Block Groups .....	131
Table 44: Change Block Group Boundaries .....	136
Table 45: Select Census Designated Place .....	140
Table 46: Boundary Change – Add Area (CDP).....	141
Table 47: Boundary Change – Remove Area (CDP).....	144
Table 48: New District - Add Entity (Add a New CDP).....	149
Table 49: Boundary Change – Delete Area Feature (Delete an Existing CDP) .....	152
Table 50: Boundary Change – Change Attributes (CDP) .....	156
Table 51: Select Census County Division (CCD) .....	158
Table 52: Merge CCDs .....	158
Table 53: Boundary Change – Add Area (CCD).....	162
Table 54: New District - Add Entity (Add a New CCD).....	167
Table 55: Boundary Change – Change Attributes (CCD) .....	170
Table 56: PSAP Criteria Review Button .....	173
Table 57: Review Change Polygon Button .....	175
Table 58: Geography Review Tool Button.....	178
Table 59: Export a File to Share with Another Participant.....	181
Table 60: Export a File for Submission to the Census Bureau.....	183
Table 61: SWIM Submission .....	186
Table 62: Standard Statistical Geographies and their Population and Housing Criteria .....	B-1
Table 63: Display the TIGERweb Online Map Viewer .....	E-1
Table 64: TIGERweb Tools and Functions .....	E-4
Table 65: MTFCCs, Feature Classes, and Descriptions .....	F-1
Table 66: Acceptable Linear Features for Statistical Boundaries.....	G-1

Table 67: Standard Street Type Abbreviations ..... H-1

Table 68: County Shapefiles Names (PVS\_18\_v2\_).....I-1

Table 69: County Shapefile Names (PVS\_18\_v3\_) .....I-2

Table 70: Edges Shapefile (PVS\_18\_v2\_edges)..... J-1

Table 71: Address Ranges Attribute File (PVS\_18\_v2\_addr) ..... J-2

Table 72: Block Groups Shapefile (PVS\_18\_v2\_bg)..... J-2

Table 73: Census Tracts - Current Shapefile (PVS\_18\_v2\_curtracts)..... J-3

Table 74: Census County Divisions Shapefile (PVS\_18\_v2\_ccd) ..... J-4

Table 75: Census Designated Place Shapefile (PVS\_18\_v2\_cdp) ..... J-4

## LIST OF FIGURES

---

Figure 1. Standard Hierarchy of Census Geographic Entities .....	x
Figure 2. Hierarchy of American Indian, Alaska Native, and Native Hawaiian Areas .....	xi
Figure 3. Types of Special Use Geographies .....	3
Figure 4. GUPS Page Layout .....	32
Figure 5. Table of Contents Toolbar .....	37
Figure 6. Check a Checkbox to Add a Layer .....	39
Figure 7. Uncheck a Checkbox to Remove a Layer .....	39
Figure 8. Highlight Layer and Right Click to Remove .....	40
Figure 9. Layer Properties Menu .....	41
Figure 10. Layer Properties Window – Labels Menu .....	41
Figure 11. Layer Properties Window – Style Menu .....	42
Figure 12. GUPS Toolbars.....	43
Figure 13. Standard Toolbar .....	43
Figure 14. Sub-Toolbar Markers .....	43
Figure 15. PSAP Toolbar .....	54
Figure 16. Modify Area Feature Buttons: Census Tract – Boundary Change .....	66
Figure 17. Manage Layers Toolbar.....	84
Figure 18. 2010 Geographies in the Table of Contents .....	90
Figure 19. Splitting a Census Tract by Block Group Example .....	96
Figure 20. Splitting a Census Tract by Face Example .....	101
Figure 21. Merging Census Tracts within Same Code Series Visual .....	109
Figure 22. Dividing a Block Group into Geometrically Equal Parts Example .....	127
Figure 23. Dividing a Block Group According to Land Use Areas Example .....	127
Figure 24. Windows Explorer Example of County Shapefiles (v2 and v3) .....	I-3

# INTRODUCTION

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## A. General Information

The 2020 Census Participant Statistical Areas Program (PSAP) provides designated participants the opportunity to review and suggest changes to the boundaries and names for statistical geographic areas, based on U.S. Census Bureau criteria and guidelines. Local governments and data users often need data for planning by smaller, statistical geographic areas. The Census Bureau uses these statistical geographies to tabulate and disseminate data for the Decennial Census, Economic Census, and the American Community Survey (ACS).

The Census Bureau establishes and maintains both standard and tribal statistical geographies solely for statistical purposes and does not take into account or attempt to anticipate any non-statistical uses that may be made of their definitions. The Census Bureau will not modify the criteria for, or boundaries of, statistical areas to meet the requirements of any non-statistical program. Subsequent sections of this Respondent Guide detail each statistical geography's criteria, standards, and thresholds. In addition, the *Federal Register Notices* also provide a formal resource for the criteria, standards, and thresholds.

The Census Bureau intends for the PSAP to be a process open to all interested parties and strongly recommends that primary participants seek input from other census data users and stakeholders. Local participants bring an important wealth of knowledge necessary to delineate statistical areas that best meet local needs and development patterns. The primary participant should publicize the process by making the proposed statistical areas available for review by interested data users, or by inviting individuals and agencies to a meeting to discuss the statistical areas proposal. At the time of its submission, the statistical areas must represent the best collective judgment of the local organizations and data users.

The Census Bureau is aware that at times there are conflicting needs or requirements and that it is not always possible to reach a clear consensus. To assist in situations where a data user alleges the process was not open or objects to the final proposed PSAP submission for their area, the Census Bureau suggests that the primary participant maintain documentation that proves they conducted an open review process. Maintaining documentation demonstrates that the delineation of statistical geographies was an open process and provides background on particular outcomes. Such documentation could include names of agencies invited to meetings, meeting attendance, discussion topics and outcomes, copies of newspapers, emails, and other means of communication used to publicize the review process.

## B. The 2020 Census Participant Statistical Areas Program (PSAP)

There are two categories of statistical geographies eligible for review and update during PSAP: standard statistical areas and tribal statistical areas. Standard statistical geography includes the following:

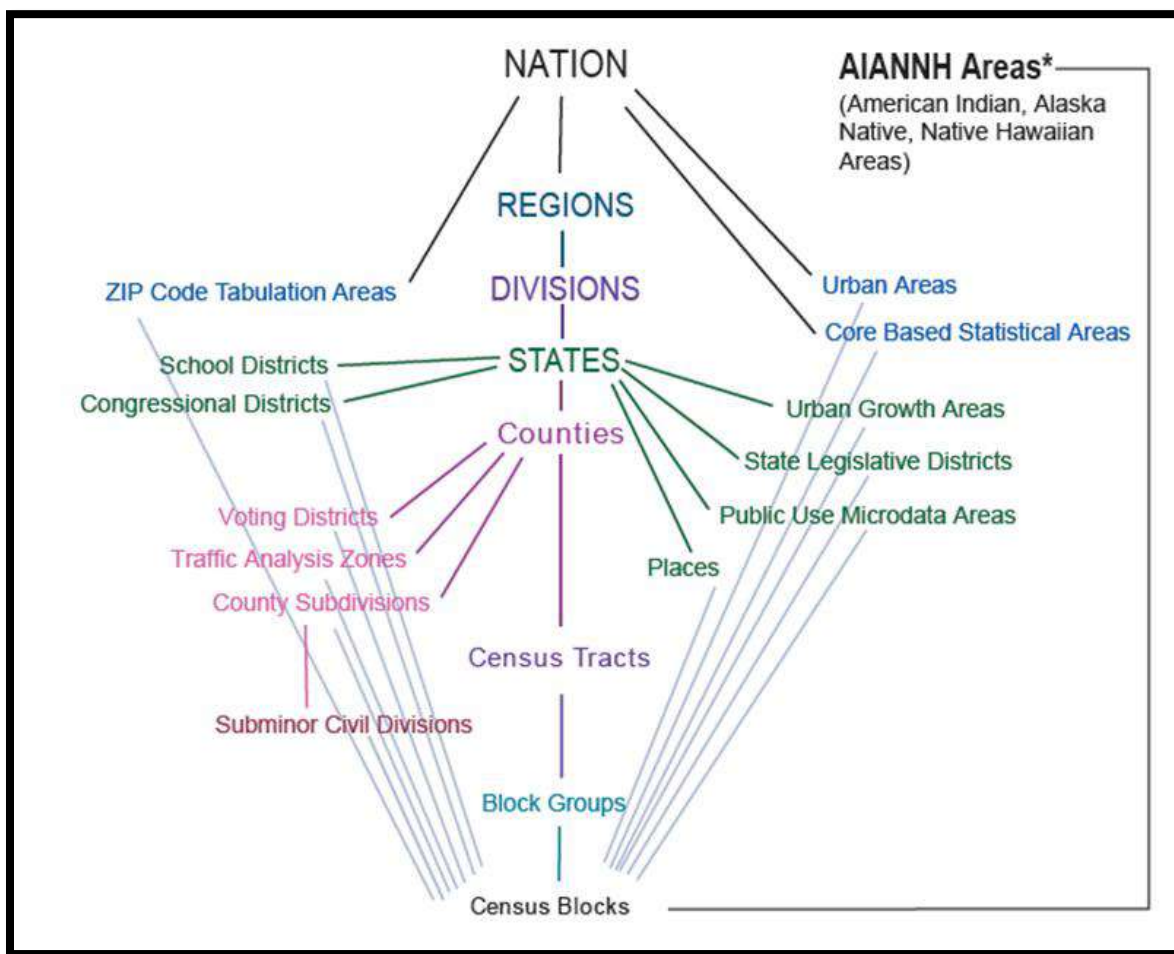
- Census tracts.
- Block groups.
- Census designated places (CDPs).

- Census county divisions (CCDs), in 21 states.

Tribal statistical geography includes the following:

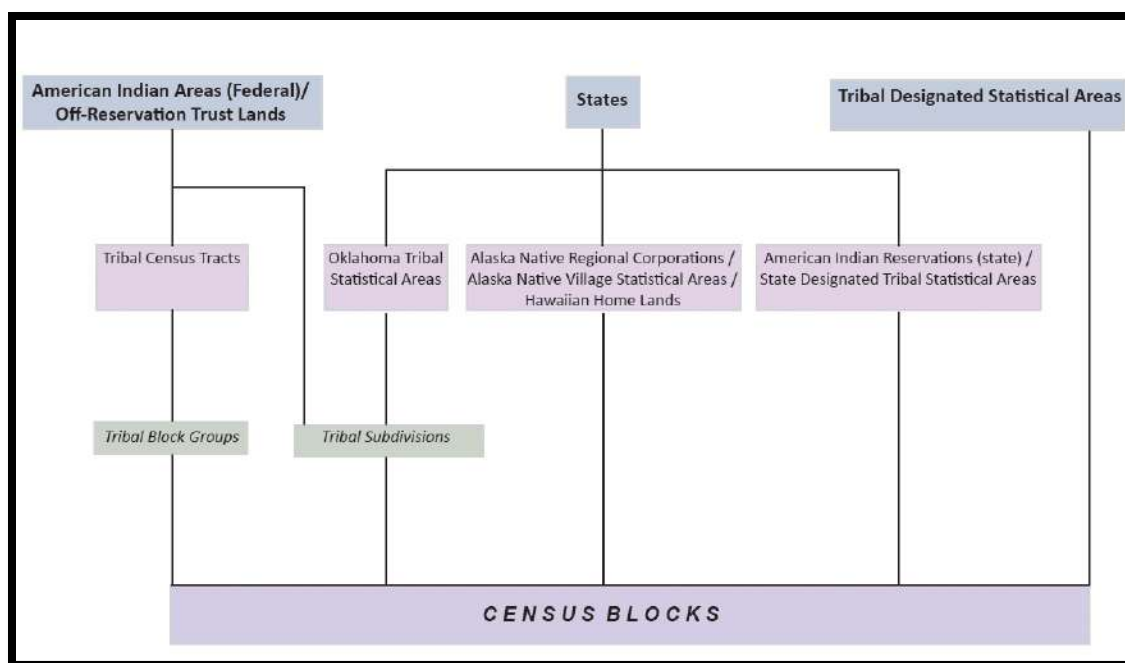
- Tribal census tracts.
- Tribal block groups.
- Census designated places (CDPs).
- Alaska Native village statistical areas (ANVSAs).
- Oklahoma tribal statistical areas (OTSAs) and OTSA tribal subdivisions.
- Tribal Designated Statistical Areas (TDSAs).
- State Designated Tribal Statistical Areas (SDTSAs).
- Alaska Native Regional Corporations (ANRCs) and State American Indian Reservations (SAIRs).<sup>1</sup>

To gain a better understanding of how PSAP geographies relate to one another and to other geographies, refer to **Figure 1** and **Figure 2**.



**Figure 1. Standard Hierarchy of Census Geographic Entities**

<sup>1</sup> ANRCs and SAIRs are not statistical areas, but they are included in 2020 Census PSAP for administrative reasons.



**Figure 2. Hierarchy of American Indian, Alaska Native, and Native Hawaiian Areas**

For 2020, the Census Bureau integrated the Tribal Statistical Areas Program (TSAP) that covered the tribal geographies in 2010 into the PSAP. The Census Bureau prepared separate documentation for the tribal statistical geography component of PSAP. Those tribal details are not included in this material.

In addition to the integration of TSAP into PSAP, the Census Bureau reviewed census tracts and block groups in nearly all counties, identifying suggested changes and adjustments to help streamline the review and update on the part of primary participants.<sup>2</sup> The Census Bureau terms this early review and the associated updates an “internal review” and its output as the “2020 Proposed Plan.” Participants choose either the “2020 Proposed Plan” or “2010 Geographies” when using the Modify Area Feature button in the Geographic Update Partnership Software (GUPS). Refer to [Table 18](#) for a visual showing both choices.

This internal review ensures a consistent review of the census tract and block group statistical geographies prior to any external review conducted by 2020 Census PSAP participants. The Census Bureau believes the internal review reduces the burden of participation; however, participants can opt to conduct their own review and update the 2010 statistical geographies or they can review and update the 2020 proposed plan. Because of decreased processing timeframes, the Census Bureau is unable to provide the internal review updates made to the census designated place geographies during the delineation phase; however, those updates will appear during verification phase of PSAP in January 2020. The verification phase allows

<sup>2</sup> The Census Bureau did not conduct this internal review for seven large counties with active PSAP participants that we anticipate already had plans for updating statistical areas for 2020. The Census Bureau contacted these participants to inform them of the absence of a 2020 proposed plan.

participants to see the updates made by the Census Bureau as well as those made by the participant during the delineation phase.

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

The Boundary and Annexation Survey (BAS) is the annual Census Bureau survey of legal geographic entities. Whereas the PSAP provides the process for reviewing and updating the statistical geographic entities, the BAS provides the process for reviewing and updating legal geographic entities. Its purpose is to determine, solely for data collection and tabulation by the Census Bureau, the complete and current inventory and the correct names, legal descriptions, official status, and official, legal boundaries of the legal geographic entities with governmental authority over certain areas within the United States, as of January 1 of the survey year. The BAS also collects specific information to document the legal actions that established a boundary or imposed a boundary change. Through the BAS, the Census Bureau also accepts updates to features such as roads or rivers, and address range break information at the boundaries. To update the boundaries for legal boundaries, participate in the BAS.

For information regarding the BAS, consult the Census Bureau's BAS website at <https://www.census.gov/programs-surveys/bas.html>. For questions, email [geo.bas@census.gov](mailto:geo.bas@census.gov) or call 1-800-972-5651.

### D. 2020 Census PSAP Schedule

**Table 1** provides the PSAP program schedule and timeframe for completion of the various tasks. Understanding the 2020 Census PSAP schedule is important for participants to prepare for the delineation and verification phases.

**Table 1: 2020 Census PSAP Schedule**

Date	Event
<b>February 2017-October 2018</b>	Census Bureau conducted PSAP internal review to generate 2020 proposed plans.
<b>March-May 2018</b>	Census Bureau contacted 2010 Census PSAP participants to inquire about 2020 Census PSAP participation.
<b>July 2018</b>	Census Bureau began sending 2020 Census PSAP invitation materials to participants.
<b>January 2019</b>	PSAP delineation phase begins. Participants have 120 calendar days to submit updates.
<b>January 2019</b>	PSAP webinar trainings begin.
<b>July 2019</b>	Census Bureau sends official communication notifying closeout of PSAP delineation phase.
<b>January 2020</b>	PSAP verification phase begins. Participants have 90 calendar days to review updates.
<b>October 2020</b>	Census Bureau conducts closeout of the 2020 Census PSAP.

The PSAP delineation phase begins in January 2019 with the delivery of delineation materials. Participants have a maximum of 120 days from the receipt of materials to complete and submit any statistical geography updates to the Census Bureau. The closeout of the delineation phase

begins in the summer of 2019 prior to the start of the verification phase in January 2020. A final closeout occurs after the conclusion of the verification phase in October 2020.

In March 2018, the Census Bureau began contacting previous participants from the 2010 program, regional multi-county organizations, local governments, state data centers, and other interested individuals to solicit participation in the 2020 Census PSAP.<sup>3</sup> The Census Bureau began formally inviting the interested participants in July 2018.

## E. Training and Support

The Census Bureau provides assistance by answering questions; clarifying criteria, guidelines, and procedures; and providing information concerning specific situations that participants encounter when reviewing, delineating, and submitting their statistical area plans. The Census Bureau plans to conduct training webinars to provide instruction on participating in PSAP and the use of the GUPS. The webinar schedule is available at <<https://www.census.gov/programs-surveys/decennial-census/about/psap.html>>. In addition, an electronic version of this guide is available on that website. For questions concerning technical problems with the GUPS application or specific programmatic questions, support is available via telephone at 1-844-788-4921 and email at <[geo.psap@census.gov](mailto:geo.psap@census.gov)>.

## F. Respondent Guide Organization

Participants reviewing standard statistical area geographies are required to use the Geographic Update Partnership Software, or GUPS, to make updates. In addition to providing the criteria and programmatic guidelines necessary to define and update standard statistical geographies, this guide provides participants with systematic instructions of GUPS for use in PSAP. It also introduces the fundamental concepts of the software as well as the major functionalities developed and contained in the software and services. By using this guide and adhering to the PSAP guidelines and criteria, participants learn to utilize GUPS to review (and potentially update) a variety of statistical geographies and submit their final updates to the Census Bureau. They also learn about the next steps for PSAP. This guide contains four parts.

### Part 1 Overview of the 2020 Census PSAP Materials and the Standard Statistical Geographies<sup>4</sup>

This section provides an overview of the 2020 Census PSAP delineation materials and summarizes the statistical geography criteria and guidelines for census tracts, block groups, CDPs, and CCDs. Participants use the content within this section to familiarize themselves with the materials provided by the Census Bureau and with the background of the four standard

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<sup>3</sup> For Census Bureau purposes, the term “county” includes parishes in Louisiana; boroughs, city and boroughs, municipalities, and census areas in Alaska; independent cities in Maryland, Missouri, Nevada, and Virginia; districts and islands in American Samoa, and districts in the U.S. Virgin Islands; municipalities in the Commonwealth of the Northern Mariana Islands; municipios in the Commonwealth of Puerto Rico; and the areas constituting the District of Columbia and Guam. Henceforth in this document, the term “counties” will refer to all of these entities.

<sup>4</sup> Within the document, **bold, blue colored font** denotes the presence of a cross-referenced hyperlink to other sections, figures, tables, or appendices. Use the Ctrl key and click of left mouse button while hovering over these **bold blue words** to skip directly to the linked item. The “**Part One:**” above is the first cross-reference hyperlink in this document.

statistical geographies.

## **Part 2 Introducing GUPS for 2020 Census PSAP**

This section introduces GUPS and the basics of the software. Participants refer to this section for the technical instructions to install GUPS, to learn how to get started, and to familiarize themselves with menus, buttons, and tools within the software.

## **Part 3 Using GUPS for 2020 Census PSAP**

This section describes the use of GUPS for 2020 Census PSAP. It discusses the review and update of PSAP geographies. It provides instruction to validate a submission and to prepare it for delivery to the Census Bureau using the Secure Web Incoming Module (SWIM). Participants find information and detailed steps to review and modify the statistical geographies.

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**Note:** The examples in this section highlight the function of the menu, the button, the tool, or the process. They are not specific to the vintage of geography (i.e., the 2010 statistical geography or the 2020 proposed plan). The function of the menus, buttons, and tools applies regardless of the vintage of the geography.

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## **Part 4 Next Steps for 2020 Census PSAP**

This section provides information on the next steps for 2020 Census PSAP. It includes information for participants on the Census Bureau's processing of submissions, the upcoming verification phase, and the final closeout phase after verification.

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**IMPORTANT:** Due to operational updates, some minor discrepancies may occur between the appearance of individual screens within GUPS, especially concerning polygon colors and symbology in the Map View and the appearance of specific buttons and warning messages. Other small variations may also appear.

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## PART 1 OVERVIEW OF THE 2020 CENSUS PSAP MATERIALS AND THE STANDARD STATISTICAL GEOGRAPHIES

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This portion of the Respondent Guide lays the programmatic foundation for the remainder of the document and provides a reference for upcoming sections. It provides an overview of the delineation materials and 2020 Census PSAP standard statistical geographies. It summarizes the statistical geography criteria, guidelines, and specifications for each of the four standard statistical geographies.

The goal of PSAP is to produce meaningful statistical geographies for data users while maintaining consistent statistical geography nationwide. It is the Census Bureau's responsibility to ensure nationwide uniformity in applying the statistical area criteria and guidelines. As a result, we may require some changes in the boundaries or delineation of some statistical areas to meet the national standard.

By creating one, streamlined method of participation for standard statistical geographies (i.e., the Geographic Update Partnership Software, or GUPS), the Census Bureau provides an efficient and intuitive system to review and update statistical boundaries and edit data layers while maintaining flexibility to retrieve and review selected information. Participants must use the Census Bureau supplied GUPS and shapefiles to participate in PSAP. The Census Bureau will not accept any submission delineated outside of the GUPS or based on non-Census Bureau provided shapefiles.

**Part B** of the Introduction mentions that 2020 proposed plans for census tracts and block groups exists for most counties in the nation. The Census Bureau recommends participants review the 2020 proposed plan. Participants may review and agree with the proposed plan or they may make adjustments to that plan. Taking this approach may streamline the review and update process, if any updates are required. Use of the 2020 proposed plan ensures the aforementioned consistency of review mentioned in the previous section.

If participants choose to begin their review from the 2010 statistical geographies, they must conduct the necessary updates to ensure the statistical areas meet the published criteria and guidelines, coding and naming conventions, and ensure the features used for the boundaries are valid. This approach is likely to be lengthier than a review of the 2020 proposed plan, but some participants may find it the best approach for their situation.

---

**IMPORTANT:** If participants begin conducting their review and wish to change to the other vintage of geography, they must delete their GUPS project. **Table 14** includes a section that describes the process of deleting a project in GUPS and starting over by choosing the **GUPS Data Settings** button.

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# CHAPTER 1. DELINEATION PHASE MATERIALS FOR 2020 CENSUS PSAP

This chapter focuses on identifying the materials participants receive for the delineation phase.

## 1.1 Informational and Instructional Materials

The Census Bureau provides this Respondent Guide for conducting the 2020 Census PSAP work using GUPS. To support participants' review and update of their statistical geographies for the 2020 Census, the Census Bureau created Quick Reference and Quick Program Guides that summarize each standard statistical geography and digital delivery methods, as well as Microsoft Excel files of 2020 proposed changes for census tracts and block groups. These files exist for all but the seven stateside counties not worked through the Census Bureau's internal review.

The Census Bureau provides all informational and instructional materials in digital format. Locate the digitally formatted materials on the PSAP website as well as on the "Data disc" provided to participants that requested DVDs during the invitation phase of 2020 Census PSAP. Review Table 2 to identify each piece of informational and instructional material distributed by the Census Bureau in support of 2020 Census PSAP for standard geographies and to identify the participants receiving those materials.

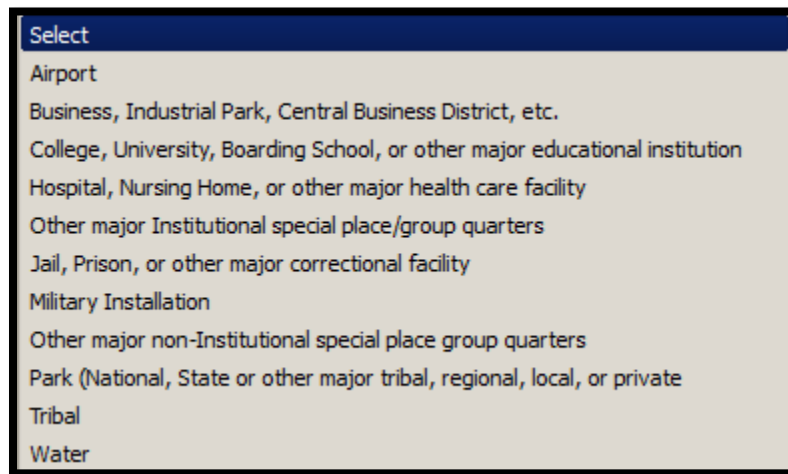
**Table 2: Quick Reference, Quick Program, and Respondent Guide Materials**

Document ID	Name of Material	Participant(s) Receiving Material
G-640	Quick Reference: Block Groups	Stateside, non-tribal participants.
G-650	Quick Reference: Census Tracts	Stateside, non-tribal participants.
G-615	Quick Reference: Census Designated Places	Stateside, non-tribal participants.
G-660	Quick Reference: Census County Divisions	Stateside, non-tribal participants.
G-615PR	Quick Reference: Census Designated Places	Puerto Rico participants.
G-640PR	Quick Reference: Block Groups	Puerto Rico participants.
G-650PR	Quick Reference: Census Tracts	Puerto Rico participants.
Q-900	Quick Program Guide for Digital Download of GUPS	Stateside, non-tribal participants that requested to download their materials online.
Q-905	Quick Program Guide for DVD delivery of GUPS	Stateside, non-tribal participants and Puerto Rico participants that requested DVDs for delivery of materials.
G-730	Standard GUPS Respondent Guide	Stateside, non-tribal participants and Puerto Rico participants.

The Census Bureau supplies the list of changed statistical entities in the form of a Microsoft Excel file (e.g., psap20\_proposed\_changes\_<SSCCC>.xlsx), where SS is the two-digit state FIPS code and CCC is the three-digit county FIPS code. This file is the output from Census Bureau's internal review. It appears on the previously mentioned "Data disc" and is available online for download. The Excel file contains census tracts that have been split or merged, or have had code/type changes and census tracts with modified block groups. The following seven fields of information comprise the file:

- STATEFP is the two-digit state FIPS code.

- COUNTYFP is the three-digit county FIPS code.
- TRACTCE is the six-digit census tract code (with leading and trailing zeros and no decimal point).
- BLKGRPCE is the one-digit block group number. It will be blank if the entity is a tract, and will have an integer from 1-9 if it pertains to a block group.
- BLKGRPID is the 12-digit block group code that concatenates the STATEFP, COUNTYFP, TRACTCE, and BLKGRPCE information into one field if the record represents a block group, otherwise it will be blank. Participants use this field, along with the TRACTCE field, to review the Census Bureau changes performed to the 2010 geographies within the 2020 proposed plan.
- TRACTTYP and BGTYP are blank unless the entity is a special use entity, in which case it will contain a single letter pertaining to the special use categories within GUPS (A, B, C, H, I, J, M, O, P, T, and W). These single character codes represent the information shown in [Figure 3](#) in both special use census tracts and special use block groups.



**Figure 3. Types of Special Use Geographies**

## 1.2 DVD Materials

The Census Bureau supplies two DVDs to stateside, non-tribal participants that asked to receive their delineation material by that digital medium during the invitation phase, as well as to all Puerto Rico participants. One DVD contains the GUPS software to install on the participant's computers. The second DVD is the "Data disc." It contains the partnership shapefiles to conduct the 2020 Census PSAP work using the GUPS software. The "Data disc" also contains digital copies of the Quick Reference Guides, the appropriate Quick Program Guide, and the Microsoft Excel file(s) 2020 proposed changes list for each county the participant agreed to review. All informational and instructional materials provided on DVD are available on the PSAP website for online download. Instructions for using these DVDs for 2020 Census PSAP are in [Part 2](#).

## 1.3 Delineation Phase Postcard

One important item enclosed with the delineation materials is the delineation phase postcard (e.g., Document ID P-300 and P-300PR for Puerto Rico). After reviewing the standard statistical geographies and determining the update status of the materials, please complete the postcard indicating whether changes are forthcoming. The return of this postcard assists the Census Bureau with planning for incoming submissions and identifying participants that will not be providing updates. The Census Bureau requests the return of this postcard within a month of receipt of the delineation phase materials.

If a participant discovers changes are necessary to their 2020 Census PSAP materials after returning the delineation postcard, please contact the Census Bureau PSAP staff by email at [geo.psap@census.gov](mailto:geo.psap@census.gov), or phone them at 1-844-788-4921 to let them know a submission is forthcoming.

## CHAPTER 2. CENSUS TRACTS

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Census tracts are small, relatively permanent geographic divisions of a county or statistically equivalent entity defined for the tabulation and presentation of data from the decennial census, the ACS, and selected other statistical programs. Census tracts nest within, and completely cover, counties nationwide. Ideally, their boundaries remain the same between censuses making it possible to compare statistics from decade to decade.

The Census Bureau published the 2020 Census PSAP census tract criteria in the *Federal Register*, available on the PSAP website. [Appendix B](#) provides a summary of the statistical geographies criteria thresholds.

The following criteria apply to the United States, including federally recognized American Indian reservations (AIRs) and off-reservation trust lands (ORTLs), Puerto Rico, and the Island Areas<sup>5</sup>:

- Census tracts must not cross county or state boundaries.
- Census tracts must cover the entire land and water area of a county.
- Census tracts must comprise a reasonably compact and contiguous land area, with a few exceptions.<sup>6</sup>
- Census tract boundaries should follow visible and identifiable features.
- Census tracts must meet specific population and housing unit thresholds outlined in [Table 3: Census Tract Types and Thresholds](#).
- Census tracts must have a basic numeric identifier composed of no more than four digits and may have a two-digit decimal suffix. Find more detail on numbering in [Section 2.2, Census Tract Codes and Numeric Identification](#).
- Census tracts have three types for the 2020 Census, standard, tribal, and special use. Refer to [Table 3: Census Tract Types and Thresholds](#) for the definition and associated criteria for standard and special use census tracts. Tribal census tracts do not appear in the table since they are out of scope for this material.

The Census Bureau may modify and, if necessary, reject any proposals for census tracts that do not meet the published criteria. In addition, the Census Bureau reserves the right to modify the boundaries and attributes of census tracts as needed to meet the published criteria and/or maintain geographic relationships before or after the final tabulation geography is set for the 2020 Census.

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<sup>5</sup> For Census Bureau purposes, the United States typically refers to only the fifty states and the District of Columbia, and does not include the U.S. territories (Puerto Rico, the Island Areas, and the U.S. Minor Outlying Islands). The Island Areas includes American Samoa, the Commonwealth of the Northern Mariana Islands, Guam, and the U.S. Virgin Islands. The U.S. Minor Outlying Islands are an aggregation of nine U.S. territories: Baker Island, Howland Island, Jarvis Island, Johnston Atoll, Kingman Reef, Midway Islands, Navassa Island, Palmyra Atoll, and Wake Island.

<sup>6</sup> The Census Bureau permits noncontiguous boundaries only where a contiguous area or inaccessible area would not meet population or housing unit count requirements for a separate census tract, in which case the noncontiguous or inaccessible area must be combined with an adjacent or proximate tract. For example, combine an island that does not meet the minimum population threshold for recognition as a separate census tract with other proximate land to form a single, noncontiguous census tract. The Census Bureau reviews each instance of noncontiguous census tracts and uses their discretion to accept or reject.

**Table 3: Census Tract Types and Thresholds**

Census Tract Types	Description	Population Thresholds	Housing Unit Thresholds	Area Measurement Thresholds	Employment Threshold
<b>Standard Census Tract</b>	Small statistical subdivisions of counties; emphasis on comparability over time to facilitate longitudinal analysis.	Optimum: 4,000 Min: 1,200 Max: 8,000	Optimum: 1,600 Min: 480 Max: 3,200	None	NA
<b>Special Use Census Tract</b>	A census tract encompassing an employment center, large airport, public park, public forest, or large water body with no (or very little) population or housing units.	None (or very little) or within the standard census tract threshold	None (or very little) or within the standard census tract threshold	At least comparable in size to surrounding standard census tracts	Suggested minimum of 1,200 workers or jobs when encompassing employment centers.

## 2.1 Census Tract Threshold Requirements

Census tracts, with the exception of special use tracts, must meet specified population or housing unit thresholds as outlined above in [Table 3: Census Tract Types and Thresholds](#). This helps ensure a minimal level of reliability in the sample data and minimized potential disclosures of sensitive information. PSAP participants should aim to create census tracts that meet the optimal population of 4,000 or 1,600 housing units and maintain the minimum thresholds unless it is flagged as a special use tract (discussed above), or is coextensive with a county with fewer than 1,200 people. The Census Bureau uses a housing unit criterion to accommodate seasonably occupied areas in which the decennial census population count will be lower than the ACS estimates.<sup>7</sup>

A census tract that exceeds the maximum thresholds should be split into multiple tracts; those that drop below the minimum thresholds should be merged with an adjacent tract. If a participant chooses not to split or merge tracts that do not meet approved thresholds, they must provide a justification for retaining the existing geography. GUPS allows participants to add remarks or justifications to statistical geographies that are not changed in the event that population growth (new housing development, typically) or decline (following depopulation trends or scheduled housing demolition) is anticipated.

Participants should use the 2010 Census population and housing counts for census tract review in most cases. Locally produced population and housing unit estimates are permissible when reviewing and updating areas experiencing considerable growth since the 2010 Census.

<sup>7</sup> “Occupied seasonally” refers to seasonal communities in which residential populations are lower on Census Day, April 1, than at other times of the year, and for which estimates may be reflected in the ACS. The ACS is designed to produce local area data for a 12-month period estimate.

The housing unit thresholds use the national average of 2.5 persons per household. Because of local and regional variations to this average, the Census Bureau will consider variation while reviewing all census tract revisions.

## 2.2 Census Tract Codes and Numeric Identification

The census tract codes consist of six digits with an implied decimal between the fourth and fifth digit, with leading and trailing zeroes for census tracts without a full six digits; e.g. 140102 and 002300, respectively. Census tract numbers (sometimes described as census tract names) are the same digits but expressed without the full digit range of the code (1401.02 or 23, for the examples above). A permanent numbering system is desirable since it helps data users make comparisons of information by census tract from one decade to the next.

The Census Bureau uses suffixes (the final two digits of the tract code, populated with '00' if none exists) to help identify census tract changes for comparison purposes. Census tract suffixes may range from .01 to .98. When a census tract splits, the resulting tracts retain the basic four-digit base code and receive different suffixes. For example, if census tract 0014.00 splits, the new tract codes are 0014.01 and 0014.02. If census tract 0014.02 splits, the "02" suffix is "retired" and the resulting tracts suffix becomes "03" and "04" (or the next available suffixes). Data users expect the four-digit basic census tract codes to remain unchanged from one decade to another. The Census Bureau allows renumbering of census tracts only in limited circumstances, such as when there are more anticipated census tract splits than available suffixes.

Some ranges of census tract numbers identify distinctive types of census tracts. The code range 9400 identifies census tracts with a majority of population, housing, or land area associated with an American Indian Area. The 9800 code range was established for the 2010 Census and used to specifically identify special land-use census tracts; that is, census tracts defined to encompass a large area with little or no residential population and/or with special characteristics, such as large parks, special land use, or employment areas. For 2020, this range also includes areas not characterized by residential population (i.e., National Parks or large water bodies). It morphed into special use census tracts, removing reference to land since they may be water. Refer to [Table 3: Census Tract Types and Thresholds](#) for details on the thresholds for special use census tracts. These types of tracts are optional in PSAP.

## 2.3 Census Tract Boundary Requirements

Census tract boundaries generally follow permanent, visible features that are identifiable in the field. The following features are preferred as census tract boundaries:

- State and county boundaries must always be census tract boundaries. This criterion takes precedence over all other criteria or requirements.
- American Indian reservation and off-reservation trust land boundaries.
- Visible, perennial natural and cultural features, such as roads, shorelines, rivers, perennial streams and canals, railroad tracks, or aboveground high-tension power lines.
- Boundaries of legal and administrative entities in selected states. See [Table 4](#) for states with acceptable minor civil division and incorporated place boundaries.
- Additional legally defined administrative boundaries for barrio, barrio-pueblo, and subbarrio boundaries in Puerto Rico; census subdistrict and estate boundaries in the U.S. Virgin Islands;

county and island boundaries in American Samoa; election district boundaries in Guam; municipal district boundaries in the Northern Mariana Islands; and Alaska Native Regional Corporation boundaries in Alaska.<sup>8</sup>

- Boundaries of large parks, forests, airports, penitentiaries/prisons, and or military installations if the boundaries are clearly visible.
- Some nonstandard visible features such as major ridgelines, aboveground pipelines, intermittent streams, or fence lines.
- Some nonstandard nonvisible features such as parcel boundaries, straight-line extensions and other lines-of-sight between acceptable visible features.

**Table 4: Acceptable Minor Civil Division (MCD) and Incorporated Place Boundaries**

State	All MCD Boundaries	Boundaries of MCDs Not Coincident with the Boundaries of Incorporated Places that themselves are MCDs	All Incorporated Place Boundaries	Only Conjoint Incorporated Place Boundaries
Alabama				X
Alaska				X
Arizona				X
Arkansas				X
California				X
Colorado				X
Connecticut	X		X	
Delaware				X
Florida				X
Georgia				X
Hawaii				X
Idaho				X
Illinois		X		X
Indiana	X			X
Iowa		X <sup>9</sup>		X
Kansas		X <sup>10</sup>		X
Kentucky				X
Louisiana				X
Maine	X		X	
Maryland				X
Massachusetts	X		X	X
Michigan		X		X
Minnesota				X
Mississippi				X
Missouri				X
Montana				X
Nebraska				X
Nevada				X
New Hampshire	X		X	

<sup>8</sup> Insofar as such boundaries are unambiguous for allocating living quarters as part of 2020 Census activities.

<sup>9</sup> Governmental townships only.

<sup>10</sup> Townships only.

State	All MCD Boundaries	Boundaries of MCDs Not Coincident with the Boundaries of Incorporated Places that themselves are MCDs	All Incorporated Place Boundaries	Only Conjoint Incorporated Place Boundaries
New Jersey	X		X	
New Mexico				X
New York	X		X	
North Carolina				X
North Dakota		X		X
Ohio		X		X
Oklahoma				X
Oregon				X
Pennsylvania	X		X	
Rhode Island	X		X	
South Carolina				X
South Dakota				X
Tennessee		X		X
Texas				X
Utah				X
Vermont	X		X	
Virginia				X
Washington				X
West Virginia				X
Wisconsin		X		X
Wyoming				X

## CHAPTER 3. BLOCK GROUPS

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Block groups are statistical geographic subdivisions of a census tract defined for the tabulation and presentation of data from the decennial census and select other statistical programs. They are the smallest geographies for which the Census Bureau provides sample data, primarily from the ACS 5-year period estimates. Block groups nest within, and completely cover, census tracts nationwide. They form the geographic framework within which the Census Bureau defines and numbers census blocks. The block group number becomes the first digit of the four-digit census blocks. Each block group comprises a reasonably compact and contiguous cluster of census blocks. Census tracts may contain no more than 10 block groups (nine standard and one comprised of water).

The Census Bureau published the 2020 Census PSAP block group criteria in the *Federal Register* notice available on the PSAP website. [Appendix B](#) provides a summary of the statistical geographies criteria thresholds.

The following criteria apply to the United States, including federally recognized American Indian reservations (AIRs) and off-reservation trust lands (ORTLs), Puerto Rico, and the Island Areas:

- Block groups must not cross census tract boundaries.
- Block groups must cover the entire land and water area of each census tract.
- Block groups must meet specific population and housing unit thresholds and suggested area and employment thresholds outlined below in [Table 5: Block Group Types and Thresholds](#).
- Block groups must comprise a reasonably compact and contiguous land area.
- Block group boundaries should follow visible and identifiable features.
- Block groups have three types, standard, tribal, and special use for the 2020 Census. For the definition and associated criteria for standard and special use block groups, refer again to [Table 5: Block Group Types and Thresholds](#). Tribal block groups do not appear in the table since they are out of scope for this material.

The Census Bureau may modify and, if necessary, reject any proposals for block groups that do not meet the published criteria. In addition, the Census Bureau reserves the right to modify the boundaries and attributes of block groups as needed to meet the published criteria.

Modification may also occur to maintain geographic relationships before or after the final tabulation geography is set for the 2020 Census.

As with census tracts, the Census Bureau recognizes there are significant, or special, geographic areas characterized by unique populations or not characterized by residential populations that local data users may wish to exclude from populated block groups. PSAP participants may designate special use block groups to distinguish them from standard block groups. Special use block groups are optional, and if delineated, they must follow specific details outlined in [Table 5](#). Special use census tracts must contain at least one special use block group and it must be coextensive with the special use tract boundary. If the area is not large enough to sustain a special use census tract, participants may identify special use block groups within standard census tracts.

**Table 5: Block Group Types and Thresholds**

Block Group Types	Description	Population Thresholds	Housing Unit Thresholds	Area Measurement Thresholds	Employment Threshold
<b>Standard Block Groups</b>	Subdivisions of census tracts; smallest geographic area for which ACS data are tabulated and disseminated.	Min: 600 Max: 3,000	Min: 240 Max: 1,200	None	NA
<b>Special Use Block Groups</b>	A block group, usually coextensive with a special use census tract, encompassing an employment center, large airport, public park, public forest, or large water body with no (or very little) population or housing units.	None (or very little) or within the standard block group thresholds	None (or very little) or within the standard block group thresholds	At least comparable in size to surrounding standard block groups	Suggested minimum of 600 workers or jobs.

### 3.1 Block Group Threshold Requirements

Block groups must meet specified population and housing unit thresholds as outlined above in [Table 5](#). This helps ensure a minimum level of reliability in sample data and minimizes potential disclosures of sensitive information. Like census tracts, the Census Bureau uses housing unit criterion to accommodate seasonably occupied areas that may have higher populations at times of the year other than on Census Day, April 1.

Like census tracts, a block group that exceeds maximum thresholds should be split; those that drop below the minimum thresholds should be merged with an adjacent block group. If a participant chooses not to change threshold errant block groups, they must provide justification for their retention. Unlike census tracts, block groups may be completely redefined to meet population or housing thresholds; however, in doing so, please consider the impact on analysis of block group level data across time.

In most cases, participants should use the 2010 Census population counts for block group review. Locally produced population and housing unit estimates are permissible when reviewing and updating areas experiencing considerable growth since the 2010 Census.

The housing unit thresholds use the national average of 2.5 persons per household. Because of local and regional variations to this average, the Census Bureau will consider variation while reviewing all block group revisions.

### 3.2 Block Group Codes and Numeric Identification

Block groups are identified by a single digit integer code from “1” through “9.” Codes with “0” designate a water only block group that does not contain population or housing units. If a

census tract needs more than nine block groups to organize the population and housing units, split the tract. The block group number provides the first digit for the 2020 tabulation blocks. For example, block group 3 includes all 2020 tabulation blocks numbered in the 3000 range within a single census tract. Block group numbers can repeat within a county, but must be unique within individual census tracts. Find details on the thresholds for special use block groups in [Table 5: Block Group Types and Thresholds](#).

### 3.3 Block Group Boundary Requirements

Like census tracts, block group boundaries generally follow permanent, visible features that are identifiable in the field. The following features are preferred as block group boundaries:

- State, county, and census tract boundaries must always be block group boundaries. This criterion takes precedence over all other criteria or requirements.
- American Indian reservation and off-reservation trust land boundaries.
- Visible, perennial natural and cultural features, such as roads, shorelines, rivers, perennial streams and canals, railroad tracks, or aboveground high-tension power lines.
- Boundaries of legal and administrative entities in selected states. See [Table 4](#) for states with acceptable minor civil division and incorporated place boundaries.
- Additional legally defined administrative boundaries for barrio, barrio-pueblo, and subbarrio boundaries in Puerto Rico; census subdistrict and estate boundaries in the U.S. Virgin Islands; county and island boundaries in American Samoa; election district boundaries in Guam; municipal district boundaries in the Northern Mariana Islands; and Alaska Native Regional Corporation boundaries in Alaska.
- Boundaries of large parks, forests, airports, penitentiaries/prisons, and or military installations if the boundaries are clearly visible.
- Some nonstandard visible features such as major ridgelines, aboveground pipelines, intermittent streams, or fence lines.
- Some nonstandard nonvisible features such as parcel boundaries, straight-line extensions and other lines-of-sight between acceptable visible features.

## CHAPTER 4. CENSUS DESIGNATED PLACES (CDPS)

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Census designated places (CDPs) are statistical geographic entities representing closely settled, unincorporated communities that are locally recognized and identified by name. They are the statistical equivalents of incorporated places, with the primary differences being the lack of both a legally defined boundary and an active, functioning governmental structure, chartered by the state and administered by elected officials. CDPs include comunidades and zona urbanas in Puerto Rico.

The Census Bureau published the 2020 Census PSAP CDP criteria in the *Federal Register*. It is available on the PSAP website and in [Appendix B](#). The following criteria apply to the United States, including federally recognized American Indian reservations (AIRs) and off-reservation trust lands (ORTLs), Puerto Rico, and the Island Areas:

- CDPs constitute a single, named, closely settled center of population.
- CDPs generally consist of a contiguous cluster of census blocks comprising a single piece of territory with a mix of uses similar to that of an incorporated place of similar size.
- CDPs cannot be located, partially or entirely, within an incorporated place or another CDP.
- CDPs may cross county boundaries, but must not cross state boundaries.
- CDPs have no minimum population or housing unit thresholds, but must contain some population, housing units, or both.
- CDP boundaries should follow visible features, except in circumstances where the boundary is coincident with the nonvisible boundary of a state, county, minor civil division, or incorporated place.
- CDP boundaries may follow other nonvisible features in instances where reliance upon visible features would result in over bounding of the CDP in order to include housing units on both sides of a road or street feature.
  - Such boundaries might include parcel boundaries and Public Land Survey System (PLSS) lines; fence lines; national, state, or local park boundaries; ridgelines; or drainage ditches.
- CDP names should be recognizable and used in daily communication by the residents of the community it represents.<sup>11</sup>
- CDP names cannot have the same name as an adjacent or nearby incorporated place.

In accordance with the final criteria, the Census Bureau may modify and, if necessary, reject any proposals for CDPs that do not meet the established criteria. In addition, the Census Bureau reserves the right to modify the boundaries and attributes of CDPs as needed to maintain geographic relationships before the final tabulation geography is set for the 2020 Census.

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<sup>11</sup> There should be features in the landscape that use the name, such that a non-resident would have a general sense of the location or extent of the community; for example, signs indicating when one is entering the community; highway exit signs that use the name; or businesses, schools, or other buildings that make use of the name.

## CHAPTER 5. CENSUS COUNTY DIVISIONS (CCDS)

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Census county divisions (CCDs) and equivalent entities are statistical geographic entities established cooperatively by the Census Bureau and officials of state and local governments in 21 states where minor civil divisions (MCDs) either do not exist or have been unsatisfactory for reporting statistical data.<sup>12</sup> The 21 states are as follows: Alabama, Alaska, Arizona, California, Colorado, Delaware, Florida, Georgia, Hawaii, Idaho, Kentucky, Montana, Nevada, New Mexico, Oklahoma, Oregon, South Carolina, Texas, Utah, Washington, and Wyoming. [Appendix D](#) depicts the CCD states in green.

The Census Bureau discourages major revisions to CCDs since the primary goal of the CCD program has been to establish and maintain a set of sub-county units that have stable boundaries and recognizable names. However, updates and revisions may be necessary in some instances, where there have been revisions to census tract boundaries and the CCD boundaries follows those boundaries, or to resolve discrepancies where the census tract and CCD boundaries were supposed to be conjoint but were not. Revisions to CCD names may be necessary due to population changes within CCDs. Changes to CCD names must follow the guidance outlined in [Section 5.1](#).

The Census Bureau published detailed 2020 Census PSAP CCD criteria in the *Federal Register*, available on the PSAP website. [Appendix B](#) provides a summary of CCD criteria. The following criteria apply to the 21 states that contain CCDs:

- CCDs must have community orientation, i.e., center on place(s) that form a cohesive community area.
- CCDs must have visible and/or stable boundaries.
- CCD boundaries must follow state and county boundaries and conform to census tract boundaries.<sup>13</sup>
- CCD boundaries may follow the boundaries of federally recognized AIRs, and federal, state, or locally managed land.<sup>14</sup>
- CCD boundaries may follow conjoint city limits (where change to the boundary is infrequent).
- CCD boundaries may follow some nonstandard visible features such as major ridgelines, aboveground pipelines, intermittent streams, or fence lines.
- CCD boundaries may follow some nonstandard nonvisible features such as parcel boundaries, straight-line extensions and other lines-of-sight between acceptable visible features.
- CCDs must have recognizable names (see the next section for detail on name identification).

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<sup>12</sup> In Alaska, census subareas are county subdivisions equivalent to CCDs. For purposes of this notice, the term CCD also refers to census subareas in Alaska.

<sup>13</sup> Whenever possible, a CCD should encompass one or more contiguous census tracts or multiple CCDs should constitute a single census tract. Therefore, CCD boundaries should be consistent with census tract boundaries. Population size is not as important a consideration with CCDs as it is with census tracts

<sup>14</sup> Managed land includes National Parks, National Monuments, National Forests, other types of large parks or forest, airports, marine ports, prisons, military installations, or other large facilities.

## 5.1 Census County Division Name Identification

Though CCDs do not include numeric identification, there are criteria for naming CCDs:

- Names of existing CCDs shall not be changed unless a compelling reason is provided, such as when the name from which the CCD was derived has changed, as in the case of Bainbridge Island, Washington, when the name of the city (Winslow) changed.
- Name new CCDs after the largest population center or historically central place within it (e.g., Taos, or Zuni Pueblo, New Mexico).
- CCDs with multiple centers of equal importance may represent two or three centers (e.g., Mount Pleasant-Moroni, Utah).
- CCDs may be named after the AIR (e.g., Hualapai, Arizona or Nez Perce, Idaho) or a prominent land use area (e.g., Federal Reservation, Washington or Yellowstone National Park, Wyoming) in which it is significantly or wholly located.
- CCDs may be named after a prominent physical feature (e.g., Mount Rainier, Washington) or a distinctive region within the county (e.g., Death Valley, California; Everglades or Lower Keys, Florida).
- If there is no clear cultural focus or topographic name that can be applied, a CCD name shall consist of the county name and a compass direction to indicate the portion of the county in the CCD or a place name and a compass direction to give the CCD location relative to the place. The directional indicator precedes a county name (e.g., Northeast Cobb, Georgia). If an incorporated place name is used, the directional indicator follows it (e.g., Del Rio Northwest, Texas).

In all cases, the objective is to identify the extent of the CCD by means of an area name since CCD names should always be meaningful to data users. Any name used as a CCD name must also be recognized by the Board on Geographic Names for federal use and appear in the Geographic Names Information System maintained by the U.S. Geological Survey. This includes any individual names combined to make a hyphenated CCD name.

With the overview of and high-level information on the statistical geographies provided in this portion and the general information from the Introduction of the Respondent Guide, the focus now shifts to introducing the GUPS for 2020 Census PSAP in the next portion, [Part 2](#).

## PART 2 INTRODUCING GUPS FOR 2020 CENSUS PSAP

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This portion of the Respondent Guide includes detailed system requirement information necessary to use GUPS. It offers an introduction to GUPS and its menus, and toolbars. It provides specific instructions, through "Step - Action and *Result*" tables. In these tables, the Action is usually a command or action to perform and the *Result(s)* of the action are in *italics*. For example, if participants click the QGIS icon on the desktop, *the software should begin to run automatically*.

GUPS allows participants to review and modify the statistical geographies in a more efficient manner than previous decades. GUPS integrates the standardized PSAP requirements and thresholds that define statistical geographies to eliminate the guesswork for participants.

GUPS runs in both a desktop PC and a network environment. It runs in QGIS, an open source Geographic Information System (GIS), and contains all functionality required to make updates, executes automated checks for program criteria compliance, and creates standardized data output files for Census Bureau processing. Many of the menus and functionality are solely part of QGIS functionality and not applicable to GUPS. For information on the QGIS open-source platform, go to: <<http://www.qgis.org/en/site/>>.

GUPS is available on DVD or available for download from the PSAP website at during the delineation phase. If participants chose the "DVD GUPS and SHAPEFILES" selection, there are two DVDs enclosed with their PSAP delineation materials. One includes the GUPS software and the second is the "Data disc." If participants chose the "DOWNLOAD GUPS and SHAPEFILES" selection, they must navigate to the following website to download GUPS: <<https://www2.census.gov/geo/pvs/gups/>>.

Once installed, the Census Bureau recommends using the "Census Web" choice within GUPS for accessing and loading the necessary shapefiles into GUPS. Use of this functionality eases participant burden of installing directly from the DVD or from copying the data from the DVD to the local computer.

The next three chapters cover the following topics:

### Chapter 6 System Requirements and Installation

- GUPS system requirements.
- GUPS installation instructions.

### Chapter 7 Getting Started with GUPS

- Accessing the shapefiles for 2020 Census PSAP.
- Open GUPS and start a new project.
- Save a project.
- Open a previous project.

### Chapter 8 GUPS Menus and Toolbars

- GUPS Page Layout.
- GUPS interface, including the Menu bar, various toolbars, Table of Contents, and the Map View.
- Instructions for using the tools available through the menu and toolbars.

## CHAPTER 6. SYSTEM REQUIREMENTS AND INSTALLATION

### 6.1 System Requirements

Before beginning the installation, check the computer to verify it has the capabilities needed to run GUPS. [Table 6](#) lists the hardware and software requirements to install and run GUPS and the software requirements to submit files through the SWIM website.

**Table 6: GUPS Hardware and Software Requirements**

Hardware	Operating System	Browser
<p><b>Disk Space Needed to Run GUPS:</b> 3.3 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. <i>The Files Properties box opens and displays the folder size.</i> Select multiple files/folders in the 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><b>Windows:</b> To run GUPS, Windows users need one of the following operating systems:</p> <ul style="list-style-type: none"><li>• Windows 7</li><li>• Windows 8</li><li>• Windows 10</li></ul> <p><b>Apple Mac OS X:</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. Locate instructions for using Boot Camp at: &lt;<a href="https://www.apple.com/support/bootcamp/getstarted/">https://www.apple.com/support/bootcamp/getstarted/</a>&gt;.</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>	<p><b>Minimum Browser Versions to Use SWIM:</b> SWIM supports the two most recent version of each of the major browsers (Internet Explorer, Google Chrome, Mozilla Firefox, and Apple Safari.</p>

Depending on the Windows or OS version, the GUPS dialog boxes may have a different appearance than the screenshots contained in the respondent guide, although the content is the same.

### 6.2 GUPS Installation


This section provides instructions for both methods, download and DVD, of GUPS installation. Administrator privileges may be required to install GUPS. Please ensure use of the version supplied for 2020 Census PSAP to conduct the review and update of statistical geographies. To complete the installation, follow the steps in [Table 7](#).

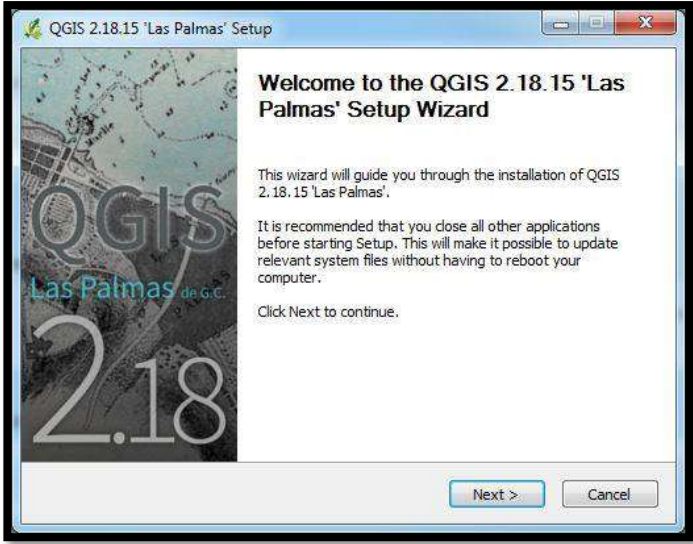
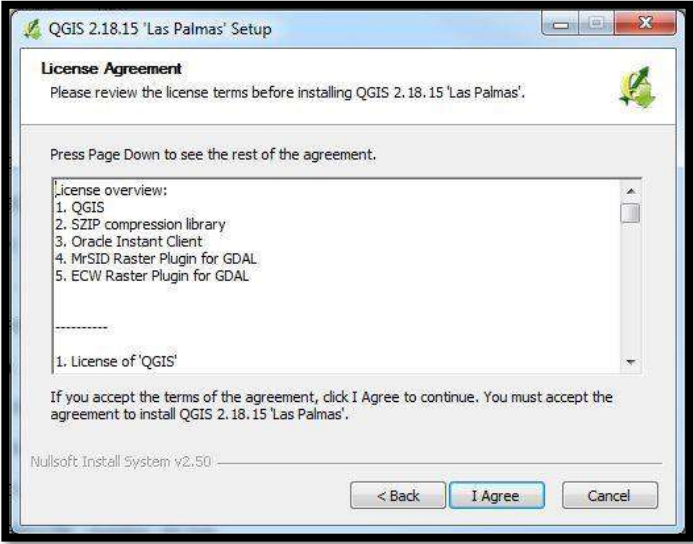
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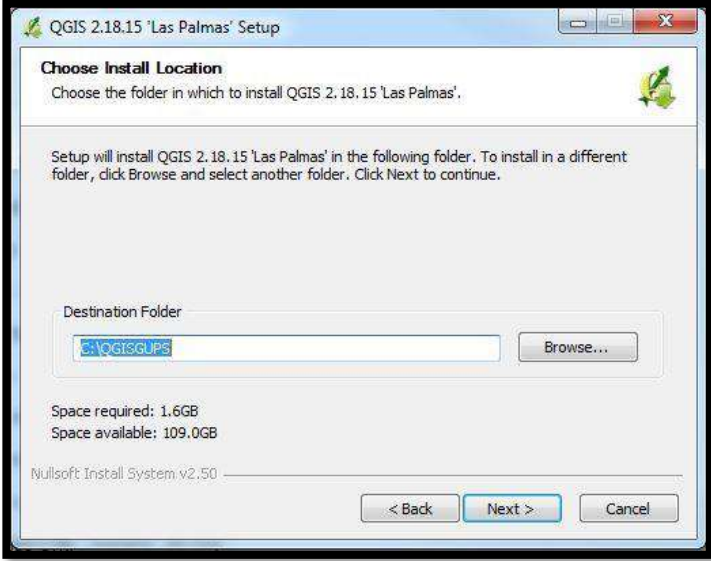
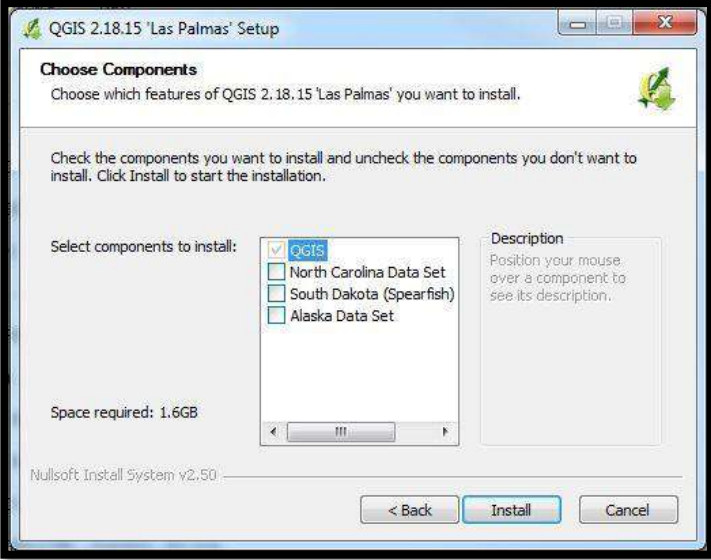

**Note:** To check for the latest version, navigate to the **GUPS** tab and click the **About GUPS** option in the drop-down menu to find the GUPS version number. If not running the latest version, download and follow the setup instructions that will automatically uninstall the old version before it installs the latest GUPS version.

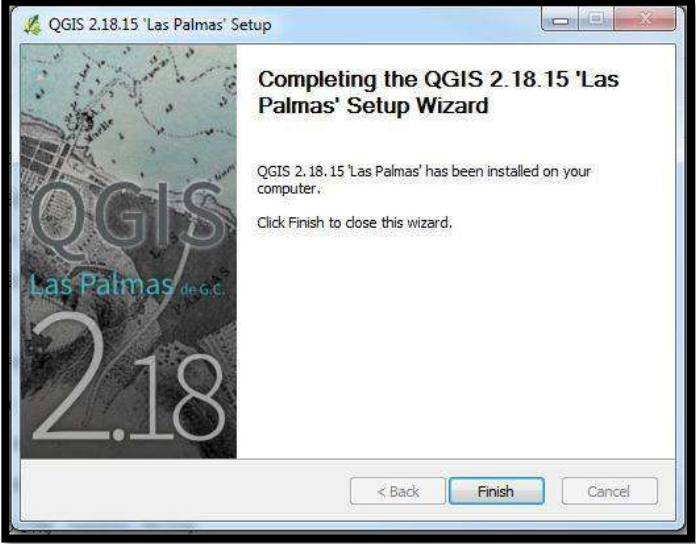
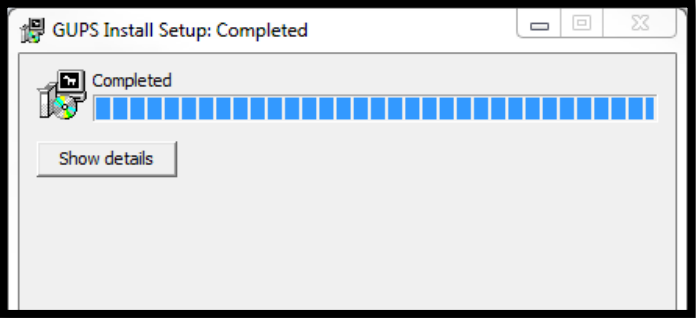
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**Table 7: Installation of the GUPS Application**

Step	Action and Result
<b>Step 1</b>	<p>Click the direct download link &lt;<a href="https://www2.census.gov/geo/pvs/gups/">https://www2.census.gov/geo/pvs/gups/</a>&gt; or place the installation DVD (GUPS disc) into the computer's DVD drive. <i>For some participants, a <b>Windows protected your PC</b> warning may appear.</i></p> <div> </div> <p>To continue, click <b>More info</b>, and then select <b>Run anyway?</b></p>
<b>Step 2</b>	<p>Other participants may receive an account control warning that asks, “Do you want to run this file?”, “Do you want to allow the following program from an unknown publisher to make changes to this computer?”, or a similar query. See an example below.</p> <div> </div> <p>If received, click <b>Run, Yes, Allow</b>, or an option that allows GUPS to proceed. <i>The software should begin to run automatically.</i></p>
	<p>Be aware some participants may experience issues with installation because of administrative rights and privileges on their local computer systems. Work with the local Information Technology (IT) support staff to understand the settings that prevent the installation of external software prior to contacting the Census Bureau for assistance.</p>
<b>Step 3</b>	<p>If the software does not run automatically, open Windows Explorer, navigate to the CD/DVD drive where the GUPS disc is located, and double click on the file named <b>Setup-9.0.x.bat</b>. Please be aware, the name of this file may vary slightly, but it will be the only setup .bat file available. If the software still does not run properly, contact the local System Administrator for assistance locally. If they cannot resolve the installation problem, contact the GUPS help desk at 1-844-788-4921 or by email at <a href="mailto:geo.psap@census.gov">geo.psap@census.gov</a>.</p>

Step	Action and Result
<b>Step 4</b>	<p>When the installer opens, the <b>Welcome to the QGIS Setup Wizard</b> screen appears.</p>  <p><b>Note:</b> The version needed for PSAP is QGIS 2.18.15 Las Palmas. If another version of QGIS exists on the computer, an instruction to uninstall appears prior to installing the Las Palmas version. Allow the uninstall process to complete or problems with GUPS may occur. Before proceeding, close all other open programs or applications. Once other programs and applications are closed, click the <b>Next</b> button.</p>
<b>Step 5</b>	<p>The <b>License Agreement</b> screen appears.</p>  <p>Read the <b>License Agreement</b> and click the <b>I Agree</b> button to continue.</p>

Step	Action and Result
<b>Step 6</b>	<p>The <b>Choose Install Location</b> screen opens. To prevent potential installation errors, allow the software to install at the default location (usually C:\Program files\QGISGUPS).</p>  <p>To begin the installation, click <b>Next</b> to continue.</p>
<b>Step 7</b>	<p>The <b>Choose Components</b> screen opens.</p>  <p>'<input checked="" type="checkbox"/> QGIS' in the <b>Select components to install</b> field is grayed out since it is the default. Click <b>Install</b> to continue.</p>
	<p>To review a previous screen or reread the license agreement, click the <b>Back</b> button (each screen contains this button).</p>

Step	Action and Result
<b>Step 8</b>	<p>The software should take between 5 and 10 minutes to install. When it finishes, <i>the <b>Completing the QGIS GUPS Setup Wizard</b> screen opens.</i></p>  <p>Click the <b>Finish</b> button.</p>
<b>Step 9</b>	<p>After choosing <b>Finish</b> button from the previous menu, <i>the <b>GUPS Install Setup: Completed</b> screen appears after showing the status of the installation.</i></p> 
<b>Step 10</b>	<p>To complete the installation, click the <b>Close</b> button at the bottom of the <b>GUPS Install Setup: Completed Setup Wizard</b> screen. Once the application installs, <i>a QGIS icon appears on the desktop. In addition, the All Programs menu list within the Start Menu includes a folder for QGIS.</i></p>

## CHAPTER 7. GETTING STARTED WITH GUPS

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After successfully installing GUPS, there are three ways to retrieve shapefiles when starting a new project:

- Census Web (Recommended. Loads directly into GUPS).
- CD/DVD (i.e., the “Data disc”).
- My Computer (If downloaded contents of “Data disc” onto local hard drive).

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**Note:** The next chapter, [Chapter 8. GUPS Menus and Toolbars](#), describes the menus, buttons, and toolbars referenced throughout this chapter.

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### 7.1 Accessing the Shapefiles for 2020 Census PSAP

Regardless of the product preference selected during the invitation phase, the shapefiles necessary to conduct PSAP are available directly within the GUPS application. By choosing the “Census Web” option when selecting the geography initially in GUPS, participants with internet connectivity can load files as needed, or load multiple county files at once.

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**Note:** The “Census Web” option is the recommended method for accessing the shapefiles for use in 2020 Census PSAP. Use of this option ensures the proper placement of the required files for the application to access.

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Participants that do not have internet connectivity, or those that have slow, unreliable internet connectivity, can load the shapefiles directly into GUPS from the “Data disc” or from a location on their computer where they saved the “Data disc” contents. Instructions on how to load shapefiles are contained in [Table 8](#).

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 (e.g., H:\GUPSGIS\gupsdata\...). It then displays them in the application. GUPS manages the files for the participant. No further action is necessary. Because of this GUPS functionality, participants must not make any changes to the shapefile or folder names. The files and folders must have the exact names as provided on the “Data disc” for GUPS to recognize and load them.

---

**IMPORTANT:** Census Bureau testing of the GUPS used for PSAP has shown that large counties may take from 15 – 35 minutes for GUPS to create and build the PSAP project. Please be patient while GUPS gathers all of the necessary files and calculates the population and housing unit information.

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### 7.2 Open GUPS and Start a New Project

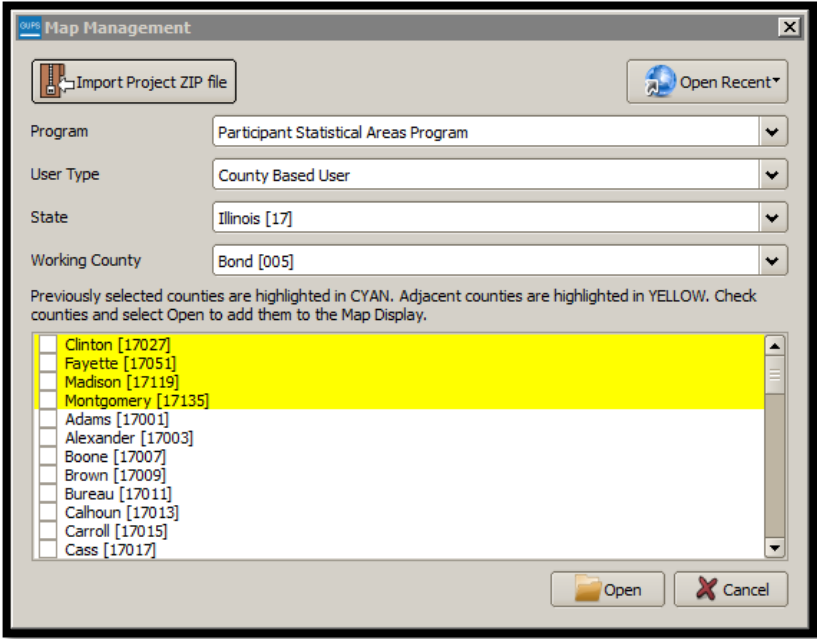
To open GUPS and begin the PSAP review, follow the steps in [Table 8](#) below. Before beginning, GUPS needs at least 3.3 gigabytes of free space on the hard drive to begin.

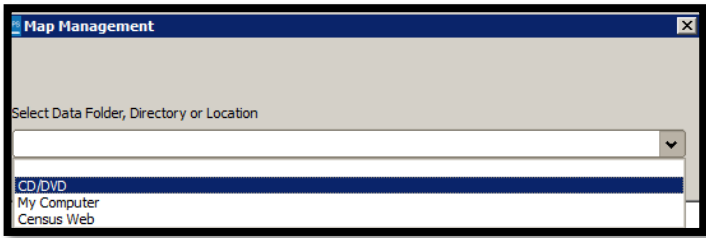

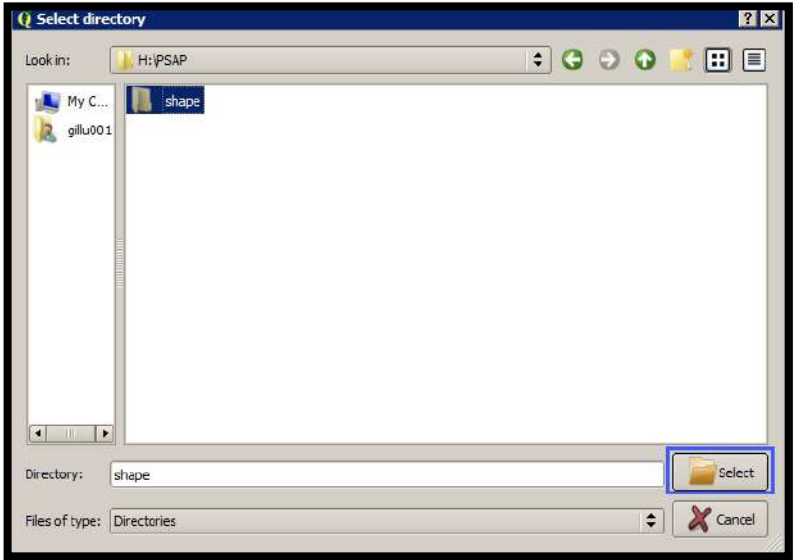
- To practice using GUPS without committing the changes, simply exit the system without saving. Before the system closes, it will provide the option to discard the changes.

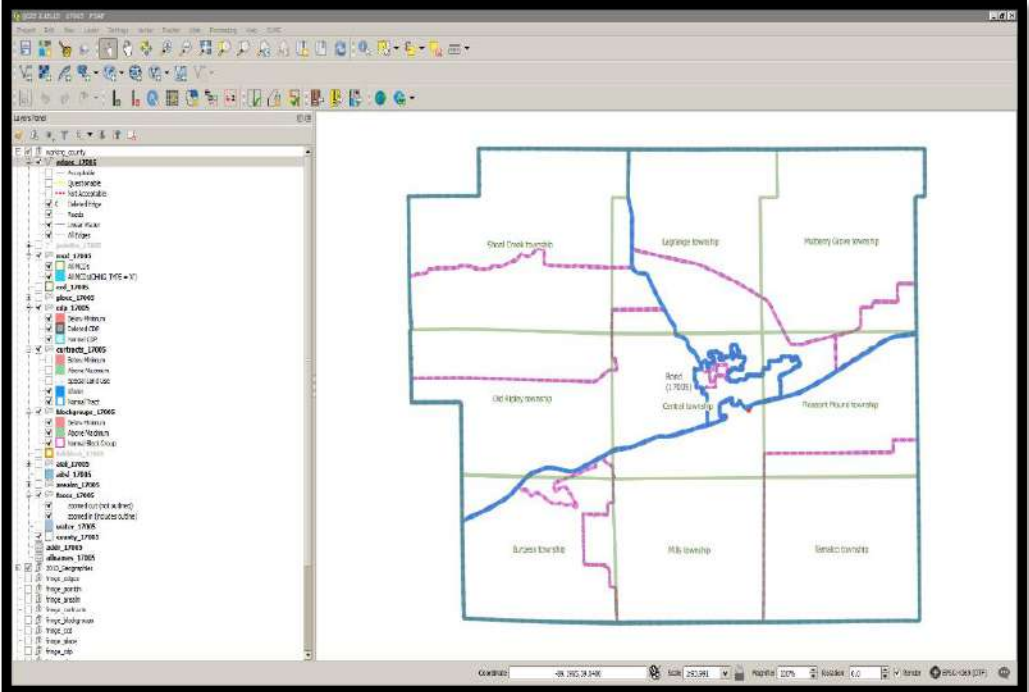

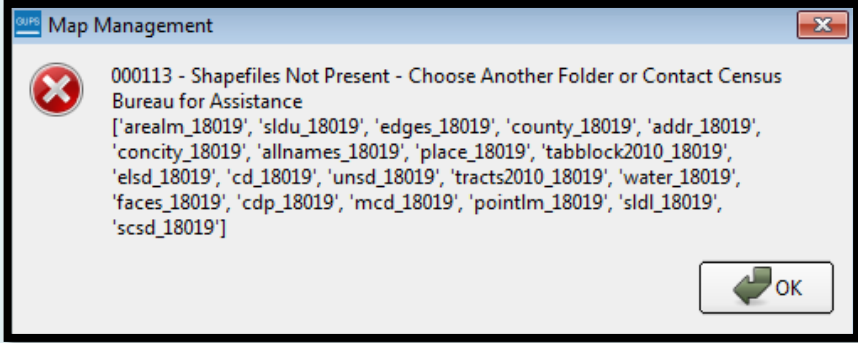
- If comfortable with the GUPS, but completion of review and changes are not possible in one session, simply save the changes and close the system. Participants can reopen saved projects and continue working open GUPS later.

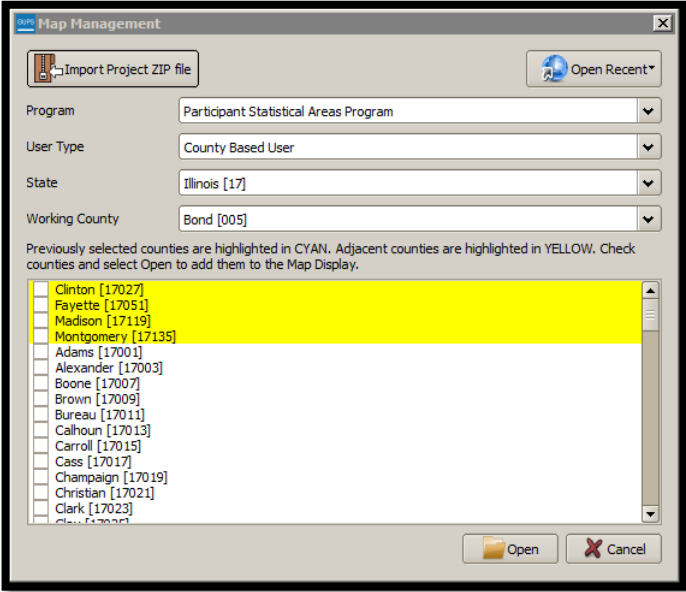
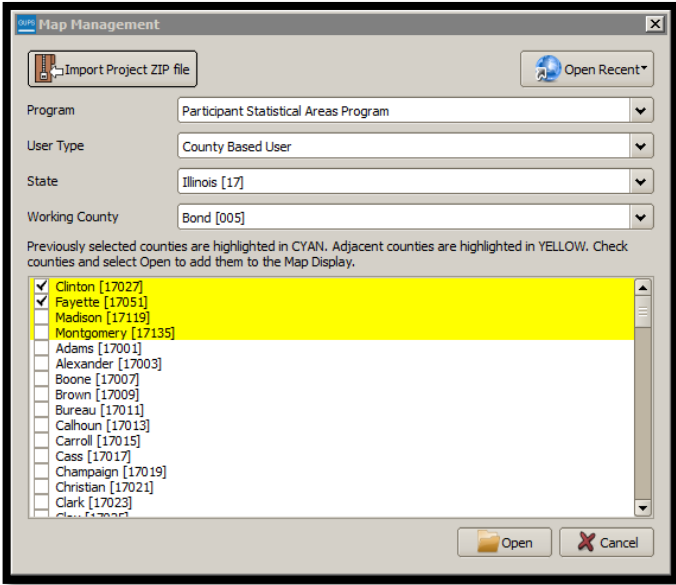
**Table 8: Open GUPS and Start a New Project**

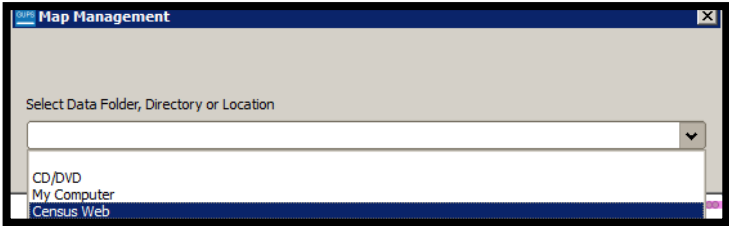
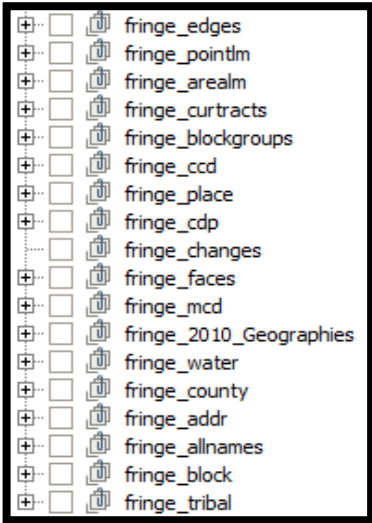
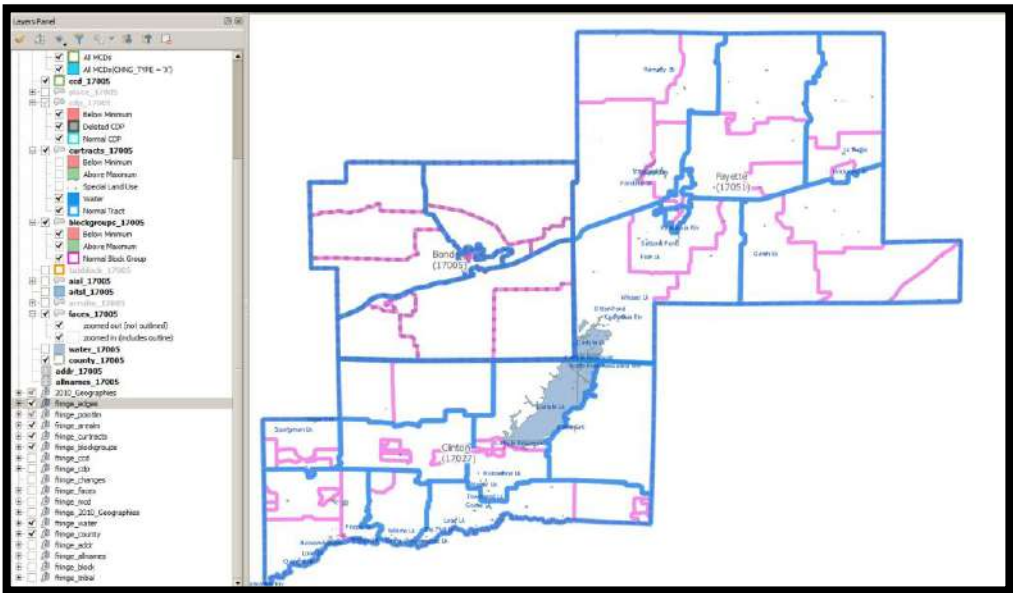
Step	Action and Result
Step 1	<p>Double click the <b>QGIS</b> icon on the desktop or navigate to QGIS from the Start Menu, All Programs choice and select the <b>QGIS Desktop 2.18.15</b>. <i>The QGIS splash screen appears.</i></p>  <p>The image shows the QGIS 2.18 splash screen. It features a grayscale map background with the text 'QGIS 2.18' in large white letters. Below the version number, it says 'Las Palmas de G.C.' in a smaller font. At the bottom, it says 'Setting up the GUI'.</p>
Step 2	<p>Wait until the application loads (An older computer may require a few minutes). When the GUPS application has successfully loaded, <i>the main page opens, and the <b>QGIS Tips!</b> window appears.</i></p>  <p>The image shows a window titled 'QGIS Tips!'. It has a green arrow icon and the text 'Become an QGIS translator'. Below this, it says 'Would you like to see QGIS in your native language? We are looking for more translators and would appreciate your help! The translation process is fairly straight forward - instructions are available in the QGIS wiki <a href="#">translator's page</a>.' At the bottom, there is a checkbox labeled 'I've had enough tips, don't show this on start up any more!' and three buttons: 'OK', 'Previous', and 'Next'.</p> <p>Since QGIS provided the open-source platform for building GUPS, participants may see references to QGIS in several locations within the GUPS application.</p>
	<p>To view QGIS system tips, click the <b>Next</b> button to read the first tip. Use the <b>Previous</b> and <b>Next</b> buttons to navigate within tips. To skip the tips, click the checkbox in the bottom left-hand corner that states, <i>"I've had enough tips, don't show this on start up any more!"</i></p>


Step	Action and Result
<b>Step 3</b>	<p>To begin a GUPS project, close the <b>QGIS Tips!</b> window by clicking the <b>OK</b> button. <i>The tip box closes and the <b>Map Management</b> dialog box opens, as shown below.</i></p> <ul style="list-style-type: none"> <li>• Choose <b>Participant Statistical Areas Program</b> from the <b>Program</b> menu.</li> <li>• Choose <b>County Based User</b> from the <b>User Type</b> menu.</li> <li>• Choose the state of the Working County from the <b>State</b> menu.</li> <li>• Choose the county to update from the <b>Working County</b> menu.</li> </ul>  <p>At this point, the participant has not selected how to open these files, so <i>the window populates with all of the counties within the state</i>. The highlighted counties are the counties adjacent to the working county.</p> <p><b>Note:</b> Only participants opening data using <b>Census Web</b> can load adjacent county into the <b>Map View</b> along with the working county. This adjacent county functionality will not work for participants using the “Data disc” DVD. They do not have access to the universe of counties for the entire state. Participants can only update the working county. It is not required to display the adjacent counties, but sometimes helpful in reviewing legal boundaries and CDP boundaries of those that cross county boundaries. For this review, participants do not need to load the adjacent counties and doing so likely causes GUPS performance to decrease.</p> <p>Click the <b>Open</b> button.</p>

Step	Action and Result
<b>Step 4</b>	<p>After selecting the working county or adjacent counties, GUPS asks to specify the location from which to pull the county's (or county equivalent's) shapefile. <i>The <b>Select Data Folder, Directory or Location</b> dialog box opens.</i></p>  <p>In the <b>Select Data Folder, Directory or Location</b> dialog box drop-down menu, select the location to pull the working county file. This example assumes the participant is pulling the data from the <b>CD/DVD</b> in the drop-down menu. To download data directly into GUPS from the Census Bureau, choose <b>Census Web</b> (recommended) or directly from the local hard drive, choose <b>My Computer</b> (least recommended option).</p>
	<p>GUPS only asks to specify a location of the data the <b>first time</b> a participant opens a county's shapefile. When returning to work on the same county, the shapefile automatically loads, even if there were no changes in the first session.</p>
<b>Step 5</b>	<p>From the <b>Select directory</b> window, navigate to the location of the CD/DVD and then click the <b>shape</b> folder to populate the <b>Directory</b> field. Then click <b>Select</b>.</p>  <p><b>IMPORTANT:</b> Participants must select the shape folder and not specific files within the folder.</p>

Step	Action and Result
<p><b>Step 6</b></p>	<p>GUPS downloads all the shapefiles necessary for PSAP off the DVD and opens the requested working county project. GUPS displays a <b>Map Management</b> window that shows the progress of building the working county project and calculates the population and housing units. Progress displays by a blue status bar with the percentage of download completed shown to the right of the status bar.</p> <p>Please be patient. Based on the size of the working county, it might take some time to download the data and appear on the screen. Once downloaded, <i>the working county appears in the <b>Map View</b> and layers are visible within the <b>Table of Contents</b>.</i></p> 
	<p>If the shapefiles are missing from the directory location chosen in the <b>Select Data Folder, Directory or Location</b> window drop-down menu, or the files are corrupted and cannot be loaded, <i>the following error message appears.</i> Close GUPS and start the process again.</p> 

Step	Action and Result
Step 7	<p>As mentioned in <b>Step 3</b> of this table, participants using the <b>Census Web</b> option can add the adjacent counties of the working county by clicking the <b>Map Management</b> button in the <b>Standard toolbar</b>. <i>The Map Management window displays the working county selected from the previous steps. Adjacent counties highlight in yellow in the <b>Map Management</b> window.</i></p>  <p>Click the boxes to the left of the highlighted counties list to select adjacent counties to download. <i>All counties with a checkmark will download and display in the <b>Map View</b>.</i> Unchecking a county excludes that county from the project.</p> <p><b>Note:</b> Loading adjacent counties likely slows GUPS performance.</p> 

Step	Action and Result
Step 8	<p>Click <b>Open</b>. From the subsequent <b>Map Management</b> window, choose <b>Census Web</b>.</p>  <p><i>GUPS</i> downloads all the selected adjacent counties layers and places them in the <b>Table of Contents</b>, labeled as “fringe_.”</p>  <p>To view the layers, check the boxes to the left of the fringe layer name to activate and display the chosen layer in the <b>Map View</b>.</p>  <p>For this example, several fringe layers for the two previously selected adjacent counties (Clinton and Fayette) appear with working county (Bond).</p>


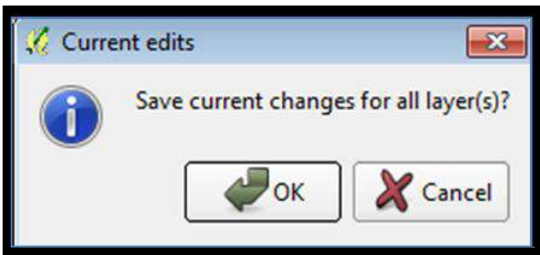

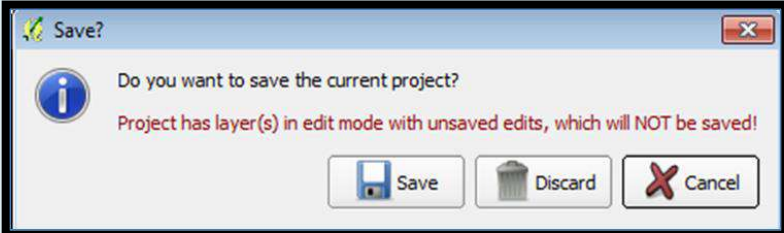
Step	Action and Result
	<p>The limit for loading counties at once is <b>11 (the working county plus 10 other counties)</b>. To load shapefiles for additional counties, after the first 10 are loaded:</p> <ol style="list-style-type: none"> <li>1. Leave the same working county selected in the <b>Working County</b> field.</li> <li>2. Uncheck the already loaded counties in the <b>Map Management</b> dialog box list.</li> <li>3. Check the checkboxes for the additional counties (up to 10) to add.</li> <li>4. Click the <b>Open</b> button and after the <b>Select Data Folder, Directory or Location</b> box opens, use the drop-down menu to select the source of the files.</li> </ol> <p>Repeat this process as many times as needed.</p>

### 7.3 Save a Project in GUPS

To save any PSAP updates, follow the steps in [Table 9](#). Make sure to save the project prior to exiting GUPS.

**Note:** The Census Bureau recommends saving often, but only after ensuring the changes are accurate. Participants cannot perform the **Undo** action discussed in [Table 12](#) and in [Table 17](#) on a change after performing a save action.

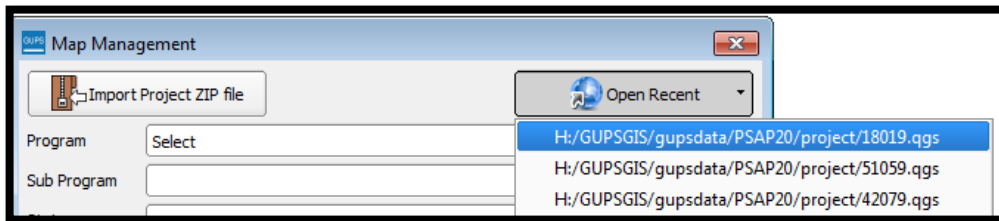

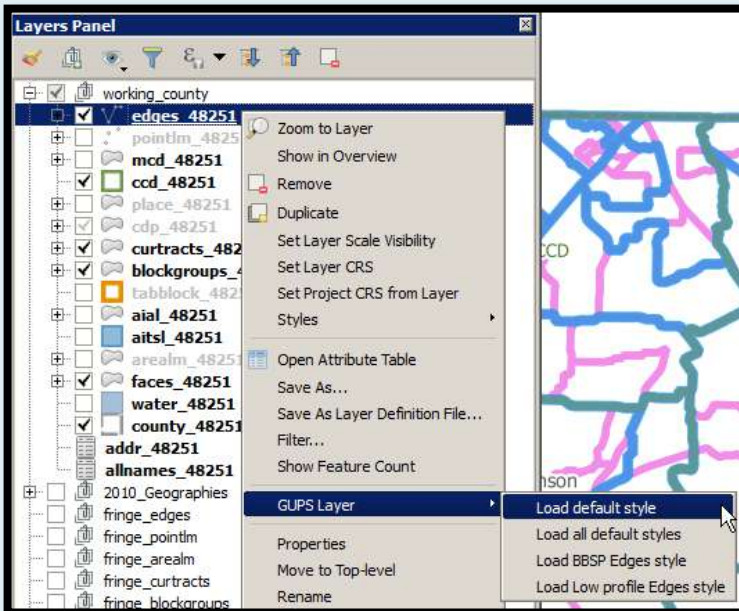
**Table 9: Save a GUPS Project**

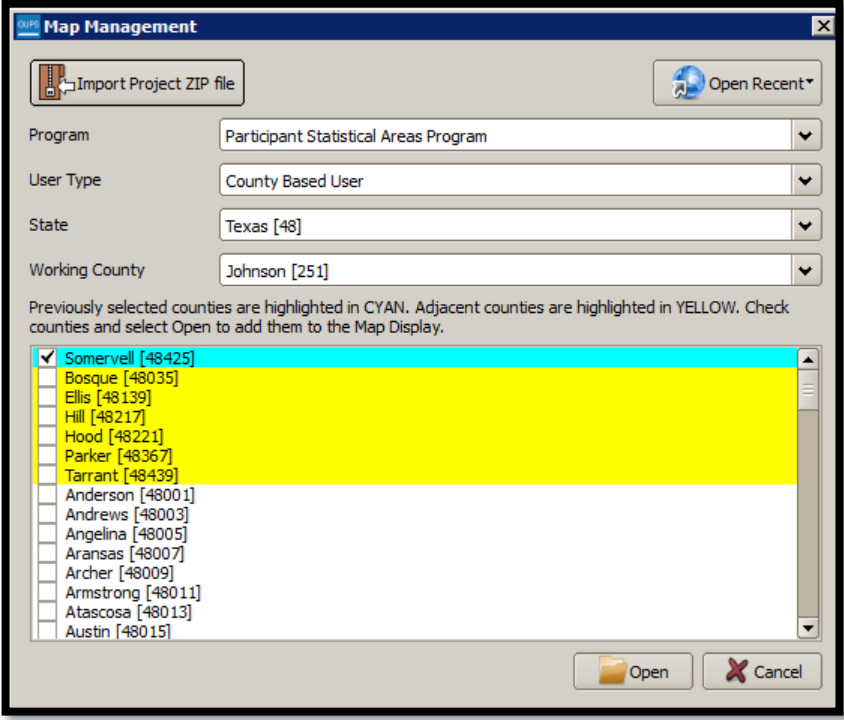
Step	Action and Result
<b>Step 1</b>	<p>After working on a project, be sure to <b>Save</b> before exiting. Otherwise, edits will be lost. To save, participants select <b>Project</b> from the main menu and <b>Save</b> from the drop-down menu or click the <b>Save</b> button on the <b>Standard toolbar</b> (as shown below).</p>  <p>Both choices result in the prompting of the <b>Current edits</b> confirmation dialog box.</p>  <p>Click <b>OK</b> to save or <b>Cancel</b> to return to the <b>Map View</b> without saving.</p>
	<p>To exclude changes, close the application (click the <b>red X</b> in the upper right-hand corner of the main GUPS page). A <b>Save?</b> dialog box asking to save, discard, or cancel appears.</p>  <p>Click <b>Discard</b> to close the application without saving the project.</p>

## 7.4 Open a Previous Project in GUPS

To open a previously saved PSAP project, follow the steps in [Table 10](#) below.

**Table 10: Open a Previous Project in GUPS**

Step	Action and Result
Step 1	<p>To open a previously saved project, in the <b>Map Management</b> dialog box, click the down arrow next to the <b>Open Recent</b> button. <i>The drop-down menu opens with one or more project(s) listed.</i> If the dialog box does not appear after opening GUPS, click the <b>Map Management</b> button in the <b>Standard toolbar</b> to open the dialog box shown below.</p>  <p><b>Note:</b> If participants share the computer, then the potential exists for multiple projects to appear in the <b>Open Recent</b> list. To identify the proper project file, review the number string. This string comprises the state FIPS and county FIPS. Each state / county FIPS is 5 digits. The first two digits indicates the state FIPS code and the following three digits are the county FIPS code for the working county.</p>
Step 2	<p>Select the correct project file from the <b>Open Recent</b> list. The map for the project automatically loads and the layers show in the <b>Table of Contents</b>.</p>
	<p>Census Bureau-defined default layers and view settings are loaded with each new project in GUPS. Changing and saving these settings for a project saves any new settings. When reopening the project, the <b>Table of Contents</b> and <b>Map View</b> display the layers and the map according to the settings last used rather than returning to the default settings. To restore the default settings for a layer, right-click the layer in the <b>Table of Contents</b>. <i>A drop-down menu opens.</i> In the drop-down menu, select <b>GUPS Layer</b>. <i>A sub-menu opens.</i> In the sub-menu, select <b>Load default style</b> (see illustration below). To reset the default settings for all layers, select the second choice <b>Load all default style</b>.</p> 

Step	Action and Result
<b>Step 3</b>	<p>When reopening a previously saved project, note that <i>any previously selected counties highlight in cyan blue and remain checked. Adjacent counties, not previously selected, highlight in yellow.</i></p>  <p>Participants may check and load additional adjacent counties at this point if they use <b>Census Web</b>. Participants working from DVD are not able to load adjacent counties.</p>

## CHAPTER 8. GUPS MENU AND TOOLBARS

With the basics of GUPS outlined in [Chapter 7 Getting Started with GUPS](#), this chapter serves to introduce and provide specific details of the various GUPS menus and toolbars available for use during PSAP.

### 8.1 GUPS Page Layout

The image below illustrates the GUPS page layout. The yellow text boxes provide labels for the page components including the Menu and Toolbars, the Map View, the Table of Contents (labeled in GUPS as “Layers Panel”), and the Status Bar.

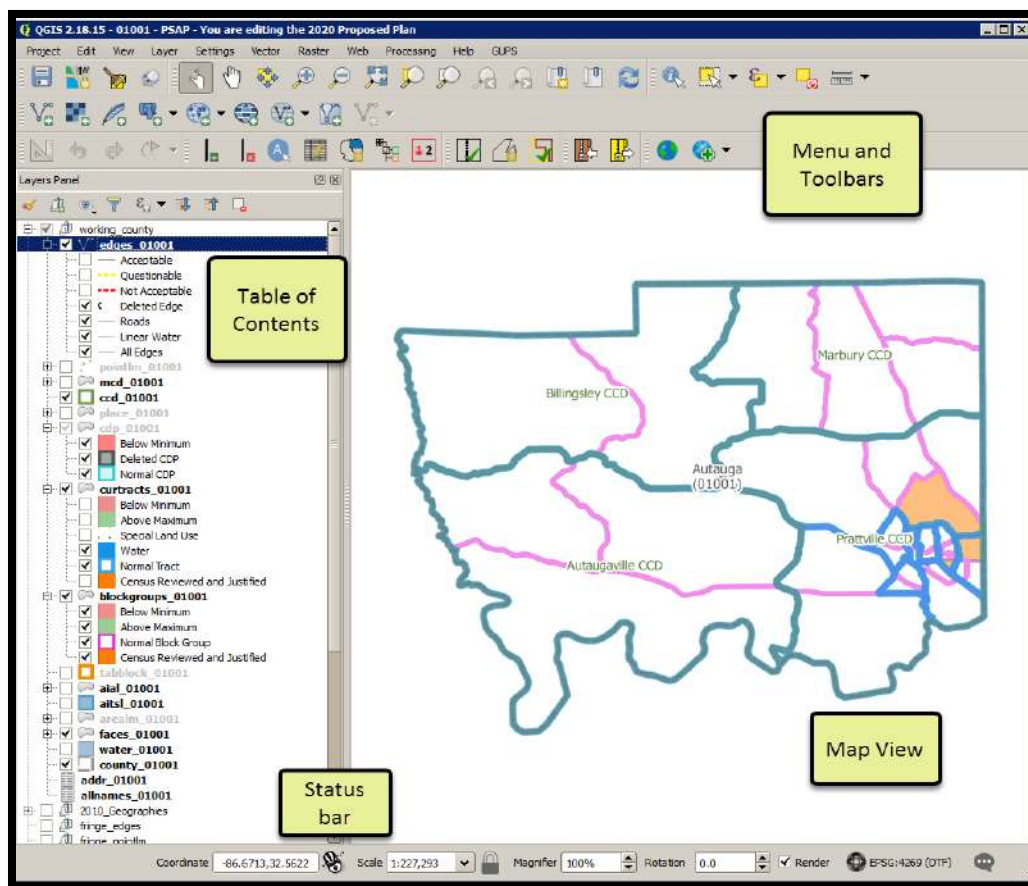
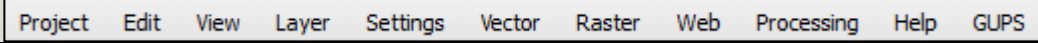



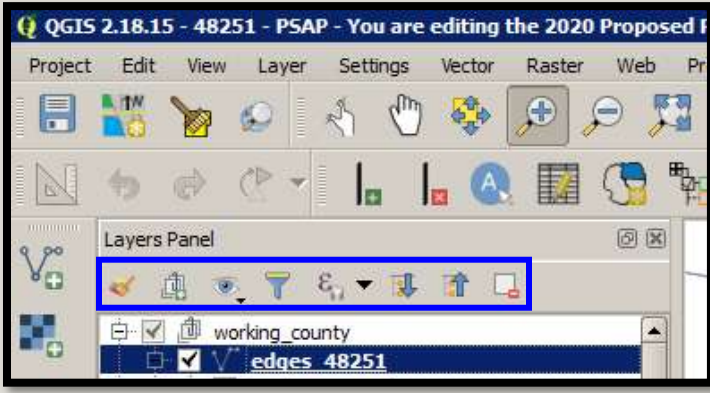



Figure 4. GUPS Page Layout

**Table 11** explains the purpose for each element on the main GUPS page. [Section 8.2](#) details the individual components and specific functions of each element.

Table 11: GUPS Main Page Elements

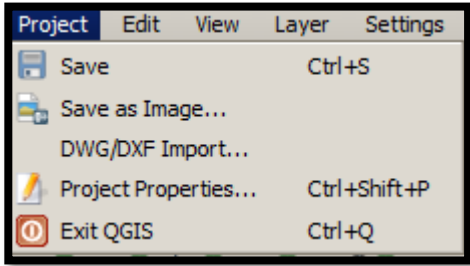

Page Element	General Function
Map View	The <b>Map View</b> displays the default data layers for the PSAP. GUPS automatically loads the layers based on the program selected in <b>Map Management</b> . The <b>Map View</b> reflects symbology updates (i.e. turn layers on/off, zoom or pan) as participants make those adjustments.

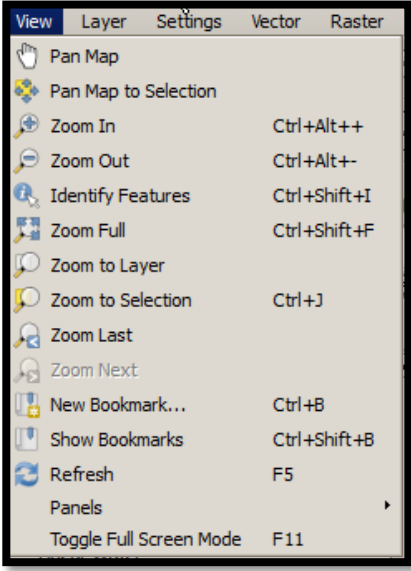
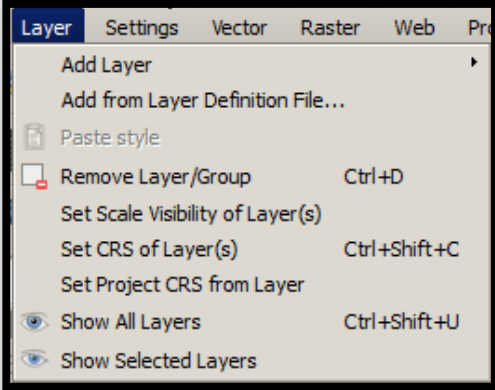
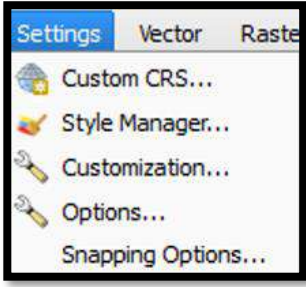
Page Element	General Function
<b>Menu bar</b>	<p>The <b>Menu bar</b> allows access to QGIS and some GUPS features using a standard hierarchical menu. It offers basic features such as <b>Settings</b> and <b>Help</b>; tools to manage the <b>Map View</b> and import user-provided data; important calculation, measurement, and geoprocessing tools; and tools needed to make shapefile updates. Almost all of the functions available from the <b>Menu bar</b> are also available in the application's conveniently located toolbars.</p> 
<b>Standard toolbar</b>	<p>The <b>Standard toolbar</b> provides navigation tools and other tools needed to interact with the <b>Map View</b> and layers' attribute tables, and data query and editing tools.</p> 
<b>PSAP toolbar</b>	<p>The <b>PSAP toolbar</b> provides software functions and the specific tools needed to make PSAP updates, view linear feature attributes, review and validate changes, import and export zipped files and print in support of PSAP.</p> 
<b>Manage Layers toolbar</b>	<p>The <b>Manage Layers toolbar</b> offers tools to import participants own data. They may superimpose map layers in GUPS to compare the features on their own maps with those on the Census shapefiles. QGIS is the source of these tools, not GUPS. Refer to the QGIS documentation for detailed definitions on their use.</p> <p>Although shown horizontally here, this toolbar may appear aligned vertically to the left of the <b>Table of Contents</b> in the GUPS application. Reposition it accordingly.</p> 
<b>Table of Contents toolbar</b>	<p>The <b>Table of Contents</b> shows the layers on the map for the working county selected. The <b>Table of Contents toolbar</b>, positioned at the top of the Table of Contents, beneath the Layer Panel, allows participants to add or remove layers (or groups), manage layer visibility, and filter the legend by map content.</p> 
<b>Status bar</b>	<p>The <b>Status bar</b> displays information on the coordinates, map scale, magnification, rotation, and projection and allows for the adjustment of the display.</p> 

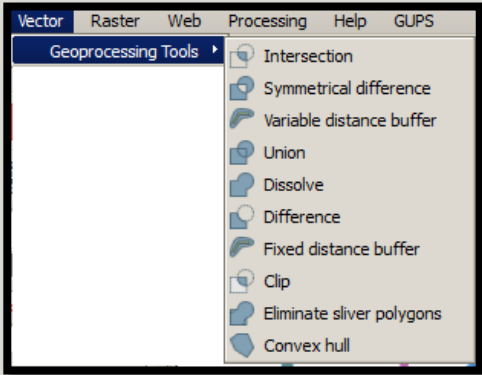
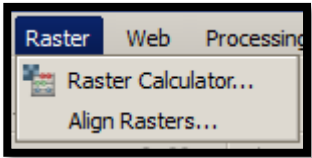
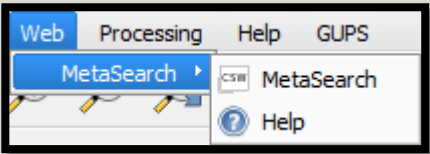
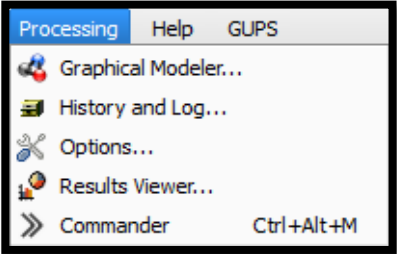

## 8.2 Menu Bar

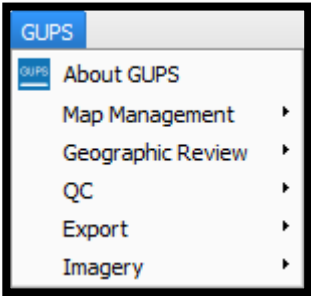
The **Menu bar** includes top-level, drop-down menus and allows navigation through GUPS using a standard hierarchical menu. Most relate to QGIS functionality and not GUPS functionality. Refer to the QGIS documentation, cited in Part Two, for details on the menu and sub-menu functionality. **Table 12** provides a glimpse into the menu bar and its sub-menus.

**Table 12: Menu Bar Tabs, Drop-down Menus, and Functions/Descriptions**

Tab	Drop-down Menu	Function/Description
Project		The <b>Project</b> tab allows participants to save changes to the project layers, create image files, import AutoCAD files, display project properties, and exit the GUPS application.
Edit		<p>The <b>Edit</b> tab allows participants to undo or redo vector-editing operations. The <b>Undo</b> and <b>Redo</b> actions are dockable widgets. They activate in the <b>Edit</b> menu and display with orange or green icons on the <b>Advanced Digitizing toolbar</b> when a split, merge, and boundary change action occurs.</p> <p><b>IMPORTANT:</b> Click on the edited layer (e.g., curtracts_STCOU) to make it active before performing undo or redo action. Click the <b>Undo</b> button to cancel an action or the <b>Redo</b> button to redo a recently canceled action. Use these tools before saving the change to the layer; otherwise, if the participant saves the changes after an action then the <b>Undo</b> and <b>Redo</b> functionality deactivates and the associated icons gray-out.</p> <p><b>Note:</b> There is no PSAP use for the Add Circular String or Add Circular String Radius functions. These icons remain inactive in this menu.</p>

Tab	Drop-down Menu	Function/Description
View		<p>The <b>View</b> tab duplicates several actions available on the <b>Standard toolbar</b>. Included are options for navigating the map, identifying feature attributes, measuring distance, and creating spatial bookmarks to return to the same <b>Map View</b> later. <b>Refresh</b> restores the map to its original map extent. <b>Panels</b> changes the layer order, browses to a location on the computer to add additional layers, opens the processing toolbox, and more. If not visible or closed earlier, click <b>Panels</b> in the drop-down menu, then click the right arrow, and click <b>Layers</b> in the <b>Layers</b> drop-down-menu to restore the <b>Table of Contents</b>. The <b>Toggle Full Screen Mode</b> expands GUPS to fill the entire screen. Selecting it again, removes the full screen mode.</p>
Layer		<p>The <b>Layer</b> tab adds and removes layers from the map, opens the layer attribute table, sets the map projection or Coordinate Reference System (CRS), displays or hides layers.</p> <p><b>Note:</b> Many of these same functions are located on the <b>Manage Layers toolbar</b> and the small toolbar at the top of the <b>Table of Contents</b>. Some of these actions are available from the <b>Table of Contents toolbar</b>.</p>
Settings		<p>The <b>Settings</b> tab allows participants to customize the CRS and map display options and set snapping tolerances (see instructions below this table).</p> <p><b>Note:</b> Snapping tolerances in GUPS are pre-defined by layer (e.g., the default tolerance for edges is set to 15 pixels). When making corrections, participants may want to adjust the snapping tolerances for a layer or layers within this same menu. Locate the definition of edges in <a href="#">Appendix A</a>.</p>

Tab	Drop-down Menu	Function/Description
Vector	 The screenshot shows the 'Vector' tab selected in the top menu bar. A drop-down menu is open, displaying 'Geoprocessing Tools' with a list of tools: Intersection, Symmetrical difference, Variable distance buffer, Union, Dissolve, Difference, Fixed distance buffer, Clip, Eliminate sliver polygons, and Convex hull.	The <b>Vector</b> tab provides access to several tools that aid in the creation of buffers around features; overlay areas to create an intersection, union, or symmetrical difference; merge features; and perform other common geoprocessing actions.
Raster	 The screenshot shows the 'Raster' tab selected in the top menu bar. A drop-down menu is open, displaying 'Raster Calculator...' and 'Align Rasters...'.	The <b>Raster</b> tab provides access to a Raster Calculator that allows for the calculation of existing raster pixel values. The results of which are written to a new raster layer with a GDAL-supported format. The Align Rasters tool is able to ingest several rasters as input and align them perfectly by performing several actions including reprojection, resampling, clipping, and rescaling. It saves all rasters to a separate file. These tools are QGIS based and not used for PSAP work in GUPS.
Web	 The screenshot shows the 'Web' tab selected in the top menu bar. A drop-down menu is open, displaying 'MetaSearch' with a sub-menu icon, and 'Help'.	The <b>Web</b> tab provides access to MetaSearch, an easy and intuitive approach and user-friendly interface to searching metadata catalogues within QGIS.
Processing	 The screenshot shows the 'Processing' tab selected in the top menu bar. A drop-down menu is open, displaying 'Graphical Modeler...', 'History and Log...', 'Options...', 'Results Viewer...', and 'Commander' with a keyboard shortcut 'Ctrl+Alt+M'.	The <b>Processing</b> tab includes several tools; however, these are not required for Census Bureau geographic program participation. The sub-menus pertain to algorithms, creating models, viewing the results of algorithms executed, and history.
Help	 The screenshot shows the 'Help' tab selected in the top menu bar. A drop-down menu is open, displaying 'GUPS Help', 'Report an issue', 'QGIS Home Page' with a keyboard shortcut 'Ctrl+H', 'Check QGIS Version', 'About', and 'QGIS Sponsors'.	The <b>Help</b> tab provides tools for understanding QGIS (the open-source platform on which GUPS was developed), the GUPS application itself and allows participants to report an issue with the software. The <b>GUPS Help</b> sub-menu, routes participants to the PSAP website.

Tab	Drop-down Menu	Function/Description
<b>GUPS</b>		<p>The <b>GUPS</b> tab provides quick access to the key tools also available on the <b>Standard toolbar</b> and <b>PSAP toolbar</b>, including those needed to manage maps.</p> <p>Click the <b>About GUPS</b> option in the drop-down menu to find the GUPS version number. Callers to technical support need to provide this number.</p>

## 8.3 Map View and Table of Contents

GUPS automatically loads a set of default data layers (and default layer groups) defined by the Census Bureau for the program and geography selected in the **Map Management** dialog box. As the map opens in the **Map View**, the list of the preset layers (already grouped) appears in the **Table of Contents**.

**Note:** Participants may also see the **Table of Contents** labeled as the **Layer Panel** within GUPS. The two are synonymous and reflect what others often call a Legend.

Participants use the **Table of Contents** and the **Table of Contents toolbar** to manage the **Map View**. These two windows are interdependent. Selections made in the **Table of Contents** reflect immediately in the **Map View**.

To close the **Table of Contents**, click the small 'x' in the upper right corner of the Layer Panel. To restore the **Table of Contents**, click the **View** tab on the **Menu bar**, select **Panels** in the drop-down menu, click the arrow next to Panel to open the sub-menu, and click **Layers Panel**. Toggling the Layer Panel on and off may be helpful for providing a larger **Map View** window.

### 8.3.1 Table of Contents Toolbar


Using the buttons on the toolbar located at the top of the **Table of Contents**, participants can add and remove layers or groups, manage layer visibility, filter the legend by map content, expand or condense all sections of the **Table of Contents** list at once, and group layers.










Figure 5. Table of Contents Toolbar

The **Table of Contents toolbar** contains the items shown above in [Figure 5](#) with descriptions provided below in [Table 13](#).

Table 13: Table of Contents Toolbar Buttons, Names, and Functions/Descriptions

Button	Name	Function/Description
	<b>Open the Layer Styling Dock</b>	Click the <b>Open the Layer Styling Dock</b> button to toggle the layer styling panel on and off.

Button	Name	Function/Description
	<b>Add Group</b>	Click the <b>Add Group</b> button to organize layers in the <b>Table of Contents</b> into groups.
	<b>Manage Layer Visibility</b>	Click the <b>Manage Layer Visibility</b> button to preset views in the <b>Table of Contents</b> .
	<b>Filter Legend by Map Content</b>	Click the <b>Filter Legend by Map Content</b> button to remove layers from the <b>Table of Contents</b> that are not currently in the <b>Map View</b> extent. This feature ensures that the <b>Table of Contents</b> does not contain entries for items not currently in the <b>Map View</b> .
	<b>Filter Legend by Expression</b>	Click the <b>Filter Legend by Expression</b> button to remove features from the selected layer tree style that have no features satisfying the condition. Used to highlight features within a given area/feature of another layer. Drop-down list allows participants to edit or clear the expression set.
	<b>Expand All</b>	Click the <b>Expand All</b> button to expand the <b>Table of Contents</b> menus (+) to display all layers under each group's menu.
	<b>Collapse All</b>	Click the <b>Collapse All</b> button to collapses the <b>Table of Contents</b> menus (-) to show only groups.
	<b>Remove Layer/Group</b>	Click the <b>Remove Layer/Groups</b> button to remove a layer or group from the <b>Table of Contents</b> .

## 8.3.2 Managing the Map View from the Table of Contents

Within the **Table of Contents**, participants can manage layer visibility (i.e., determine what layers display on the map), reorder data layers, expand and condense the layer's/layer groups, add labels to layers, and change the layer scale visibility. The following five sub-sections explain these topics. Though not recommended for the pre-loaded layers, participants can also set new layer symbology within the **Layer Properties, Style menu**. This section does not detail this process, but [Figure 11](#) depicts the menu.

### 8.3.2.1 Manage Layer Visibility

To add or remove layers from the **Map View**, click the checkbox next to a layer to add it to the **Map View** as shown in [Figure 6](#). Uncheck the checkbox next to a layer to remove it from the **Map View** as shown in [Figure 7](#). Both illustrate the manipulation of the “edges” layer.

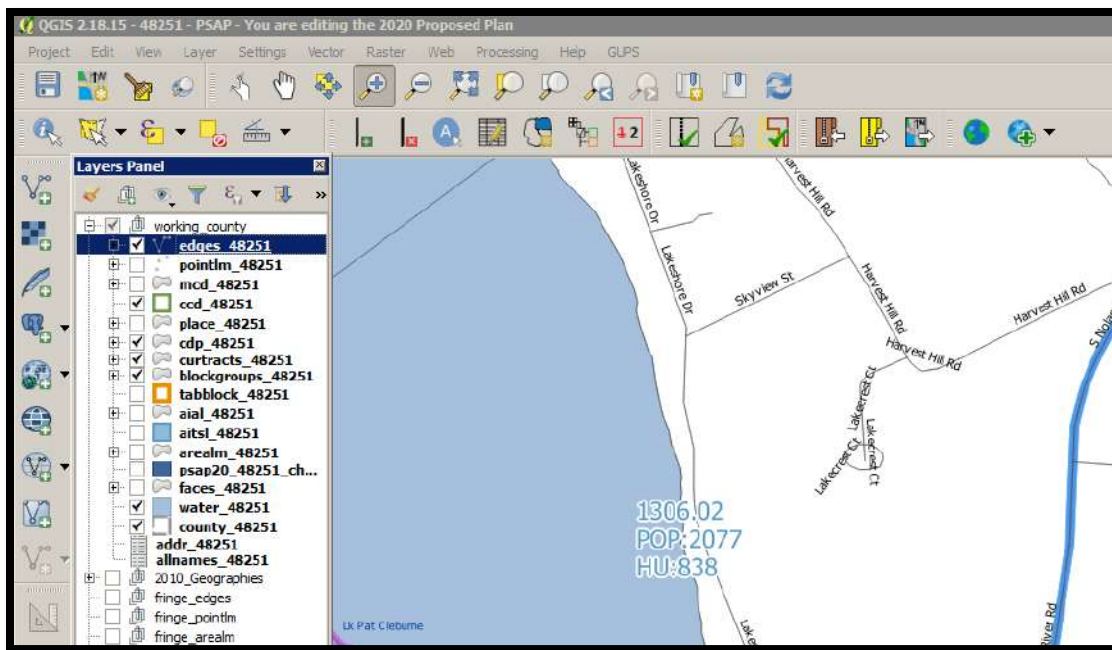


Figure 6. Check a Checkbox to Add a Layer

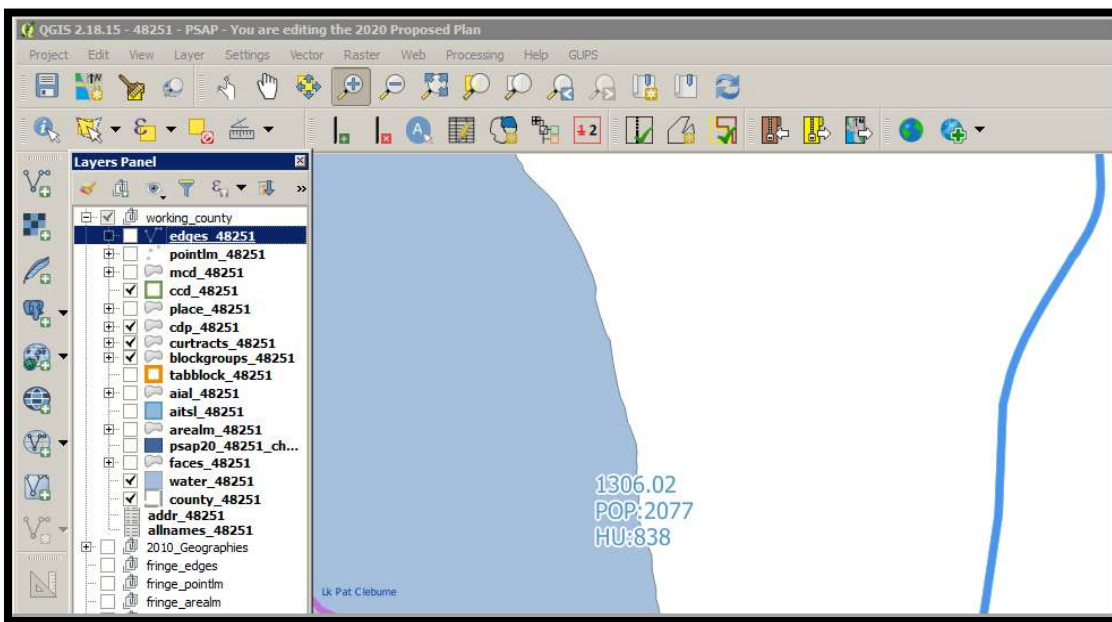


Figure 7. Uncheck a Checkbox to Remove a Layer

Participants can also right-click the name of the layer and select **Remove** in the drop-down menu, as shown in [Figure 8](#), to remove the entire layer from the project. Though shown for this example to illustrate the presence of the button, the GUPS PSAP project includes all layers necessary to conduct a review and update. Please use the checkbox to manage the visibility of any preloaded layers rather than removing them from the project. The **Remove** action may be helpful for removing external data added by the PSAP participant.

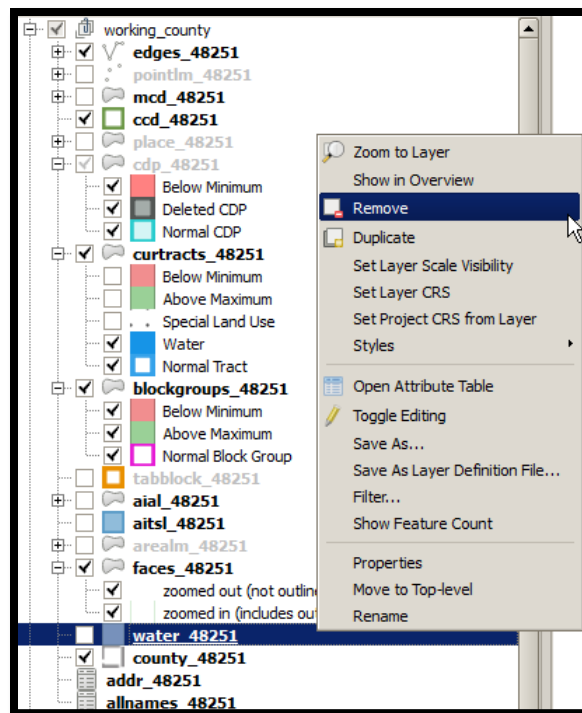


Figure 8. Highlight Layer and Right Click to Remove

### 8.3.2.2 Reorder Data Layers

In the **Table of Contents**, the layer order determines how the layers display on the map. The top layers display on top of those below them. This is very important for conducting a review of the 2020 proposed plan in comparison to the 2010 statistical geographies. To change the display order:

- Left-click on the layer name.
- Hold down the mouse button and drag the layer to the desired position in the list.
- Release the mouse button to place the layer in its new position. The map display reflects the new layer order in the **Table of Contents**.

### 8.3.2.3 Expand/Condense Layers or Layer Groups

To expand or contract the menu for a layer or layer group, click on the '+' sign to expand the group and, once expanded, click the '-' sign to condense the group. These individual functions allow for a more specific management of layers than the **Expand All/Collapse All** buttons on the **Table of Contents** toolbar.

### 8.3.2.4 Add Labels to Layers

Participants may notice that many of the standard geographies layers (e.g., census tracts and block groups specifically) are labeled as part of the creating the project in GUPS. Other layers do not automatically label. This section informs participants how to label the edges layer.

From the **Table of Contents**, right-click the name of the layer and select **Properties** in the drop-down menu, as shown in [Figure 9](#) and left-click to open the layer properties window. This opens the Layer Properties window shown in [Figure 10](#).

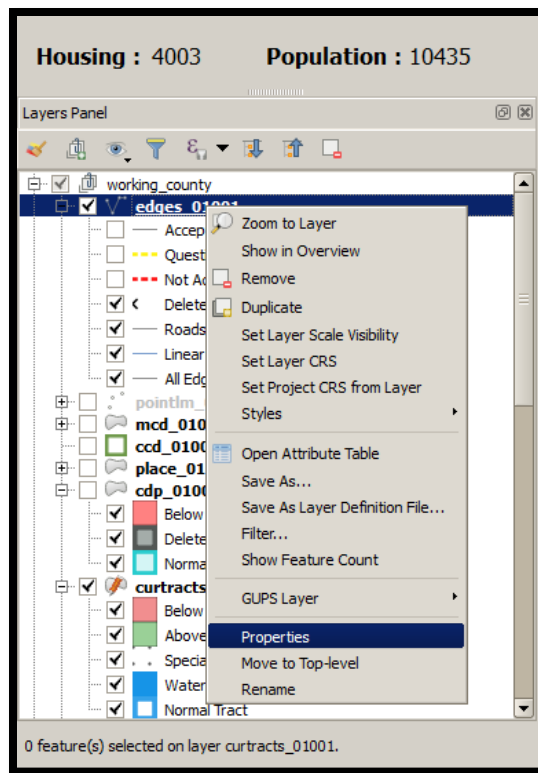


Figure 9. Layer Properties Menu

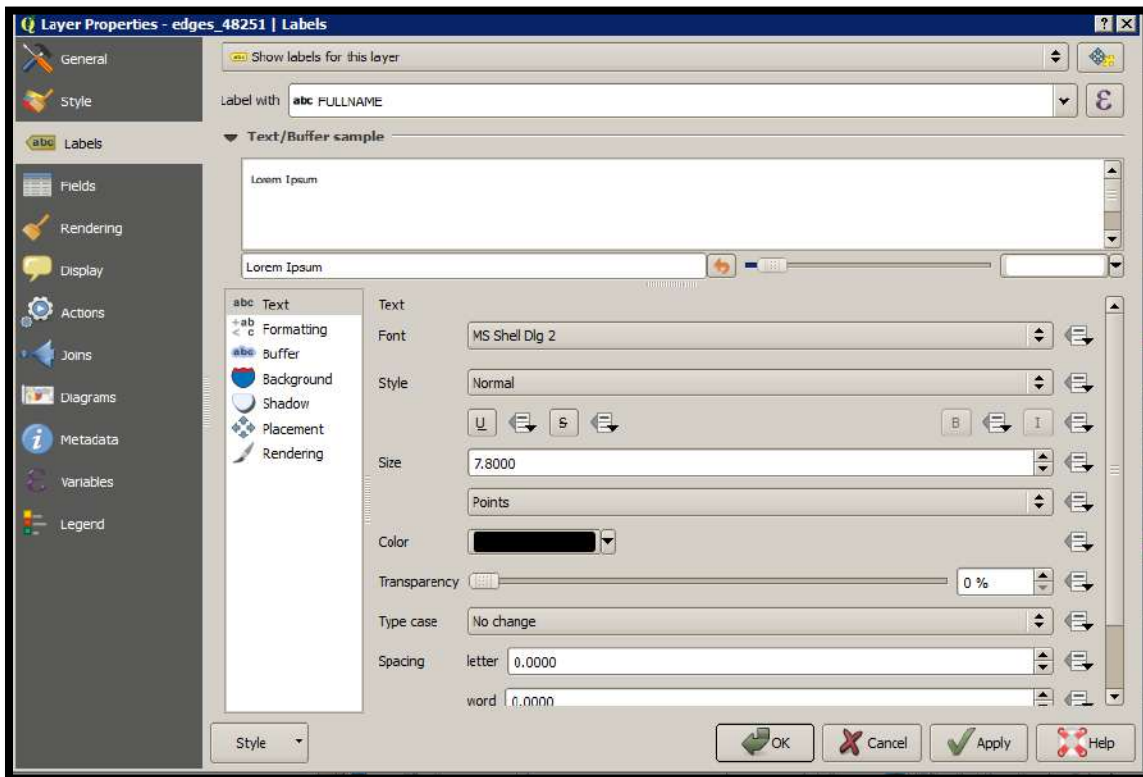


Figure 10. Layer Properties Window – Labels Menu

Click the **Labels** menu on the left side of the window. Choose **Show labels** for this layer from the drop-down menu along the top of the window. From the **Label with** section, select the field to use for labeling the layer's features. In this example, choose **FULLNAME**. Participants can customize the labels Font, Style, Size, Color, Transparency level, Type case, Spacing, Blend mode, etc. and set formatting, buffers, backgrounds, shadows, placement, and rendering options. Click **Apply** and then **OK** to exit the window.

### 8.3.2.5 Change Layer Scale Visibility

From the **Table of Contents**, right-click the name of the layer and select **Properties** in the drop-down menu, as shown in [Figure 9](#) and left-click to open the layer properties window. This opens the **Layer Properties** window shown in [Figure 11](#).

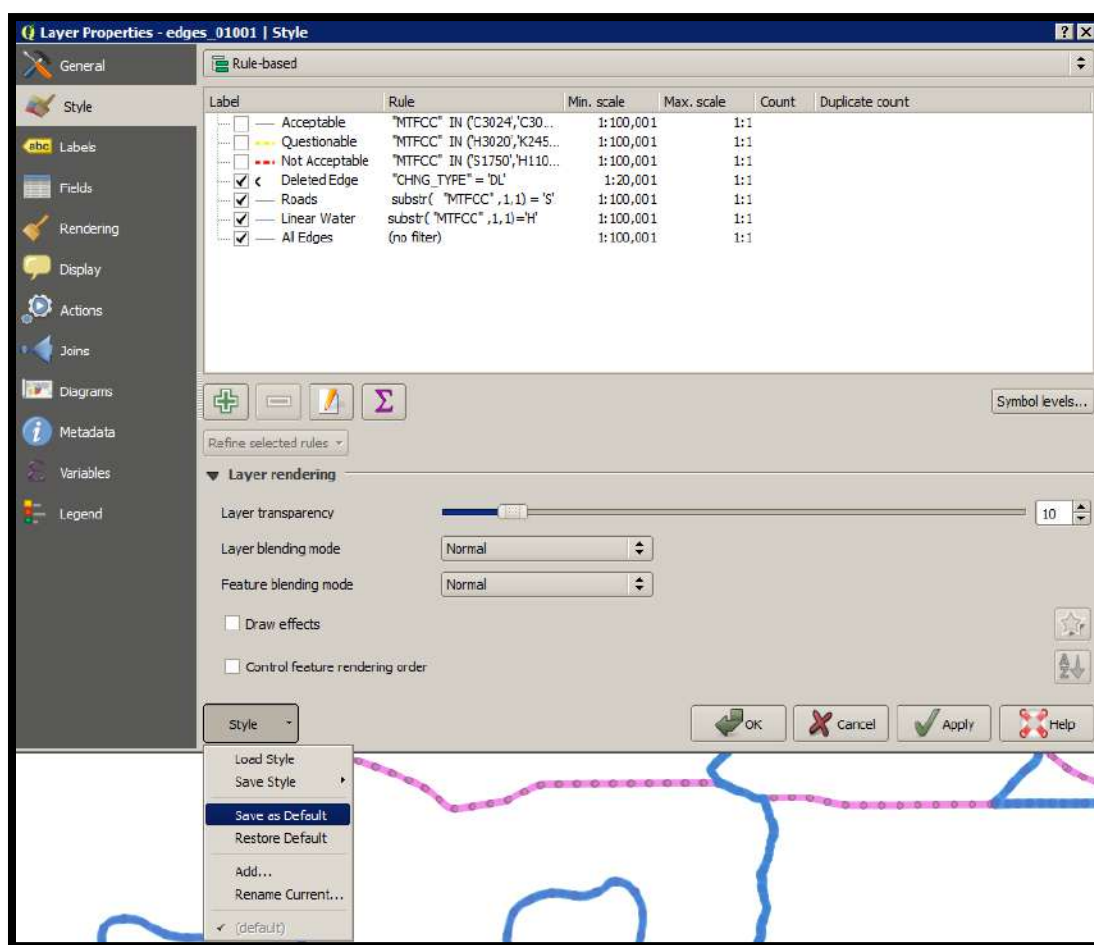


Figure 11. Layer Properties Window – Style Menu

Click the **Style** menu on the left side of the window. Choose each row, or all rows, to change the **Min. Scale** field to an appropriate scale. At the bottom left of the window, within the **Style** drop-down, choose **Set as Default**. Click **Apply** and then **OK** to exit the window. Setting the layer visibility means the layer will not display until reaching a scale below the set Min. Scale.

**Note:** Participants can also set the scale dependent visibility in the **General** menu within the **Layer Properties** window by setting the **Minimum (exclusive)** value.

## 8.4 Toolbars

There are two toolbars for GUPS, as shown below. The **Standard toolbar** and **PSAP toolbar** are located at the top of the GUPS page. These toolbars offer general GIS and system tools and allow participants to make specific program updates. The top toolbar is the **Standard toolbar**, which provides map navigation, data query and manipulation tools. The **PSAP toolbar** provides the functionality needed for the PSAP.

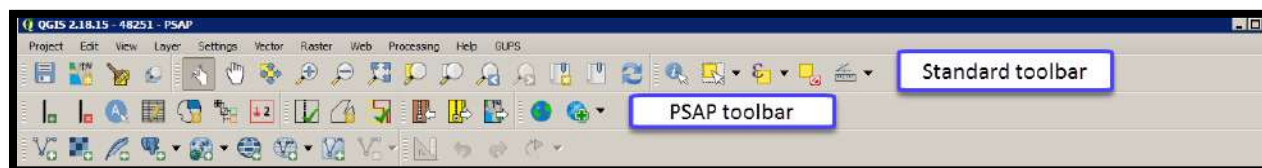


Figure 12. GUPS Toolbars

**Note:** Participants may move the toolbars and re-dock them to their own preference. For example, if a participant prefers that the **Manage Layers toolbar**, discussed in a later section, to appear at the top of the page, they can drag it there. This allows for the expansion of the area available for the **Table of Contents** and the **Map View**.

Hover the mouse over any toolbar button to see the name of the tool it represents. The next section describes the **Standard toolbar**.

### 8.4.1 Standard Toolbar

The **Standard toolbar**, shown in [Figure 13](#), provides the necessary tools to interact with the map and layers. It includes three separate sub-toolbars, identified by the grouping bars or marker on the toolbar, shown in [Figure 14](#). The first sub-toolbar contains the buttons for saving projects, changing map projects and conducting searches. This sub-toolbar is the **Project toolbar**. The second sub-toolbar contains the buttons for navigation. This sub-toolbar is the **Map Navigation toolbar**. The third sub-toolbar provides tools for selecting features, making measurements, creating special bookmarks, and working with the layer's attribute tables. It is the **Attributes toolbar**.



Figure 13. Standard Toolbar




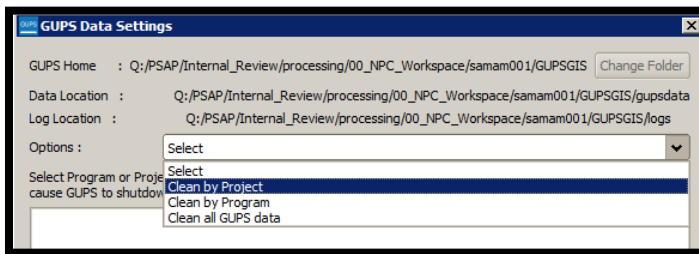
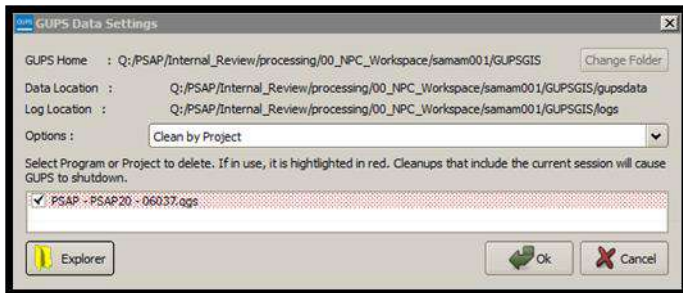

To rearrange the toolbars, left-click and hold the sub-toolbar marker (shown with blue below) then drag it to the desired location. Release the mouse button to set the toolbar in the new location.


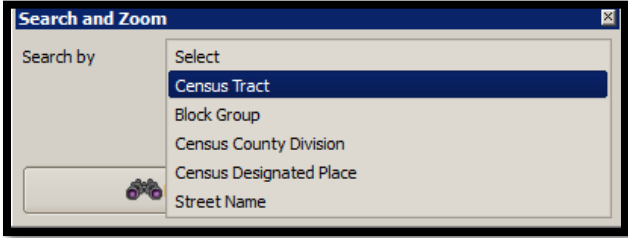













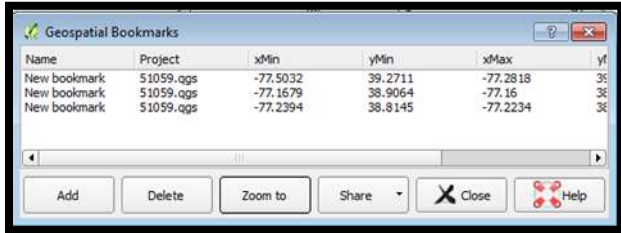

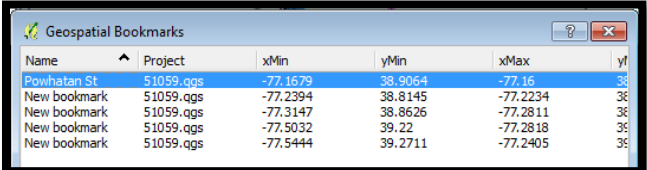

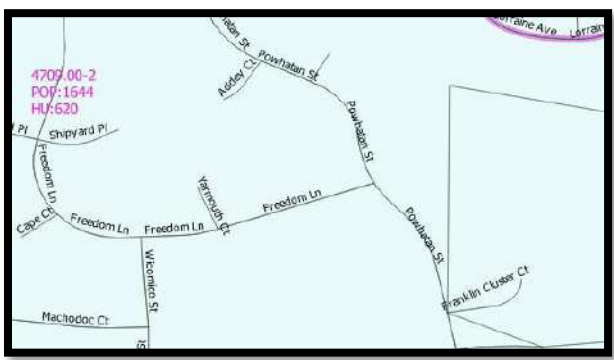

Figure 14. Sub-Toolbar Markers


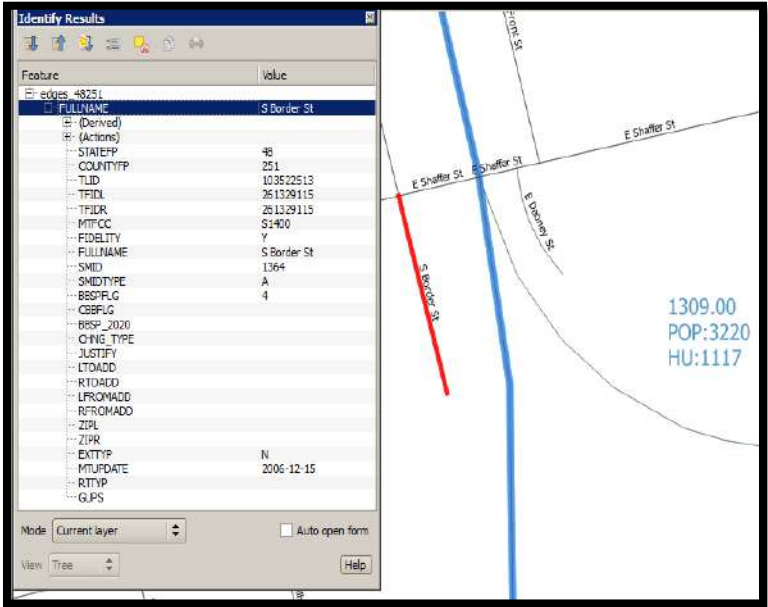

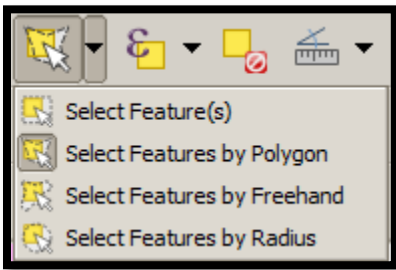

**Table 14** defines the purpose of each button on the **Standard toolbar**. A few of the buttons listed in the table include examples or links to additional tables for further explanation of the button.



**Table 14: Standard Toolbar Buttons, Names, and Functions/Descriptions**

Button	Name	Function/Description
<b>Project Toolbar Grouping</b>		
	<b>Save</b>	Click the <b>Save</b> button to save the current project, including any change to the layer properties, projection, view extent, and layers.
	<b>Map Management</b>	Click the <b>Map Management</b> button to choose the participant program in GUPS and the county to update. GUPS automatically loads a set of default data layers for the chosen program.
	<b>GUPS Data Settings</b>	<p><b>Warning! This tool deletes files and folders permanently!</b> Click the <b>GUPS Data Settings</b> button to <i>open the GUPS Data Settings window</i>. Click the <b>Options</b> drop-down menu and select <b>Clean by Project</b>.</p> <div>  </div> <div>  </div> <p>From the list that returns, check the box to the left of the project name to select it for deletion. Click <b>OK</b> to continue. <i>GUPS displays a warning message to confirm the action removes files and folders permanently.</i> Clean-ups of the current session (highlighted in <b>red</b> in the choices list) cause GUPS to close.</p> <p><b>Note:</b> This list could include more than one project if a participant has multiple counties in their workload.</p> <div>  </div> <p>Click <b>OK</b> to proceed with deletion.</p>


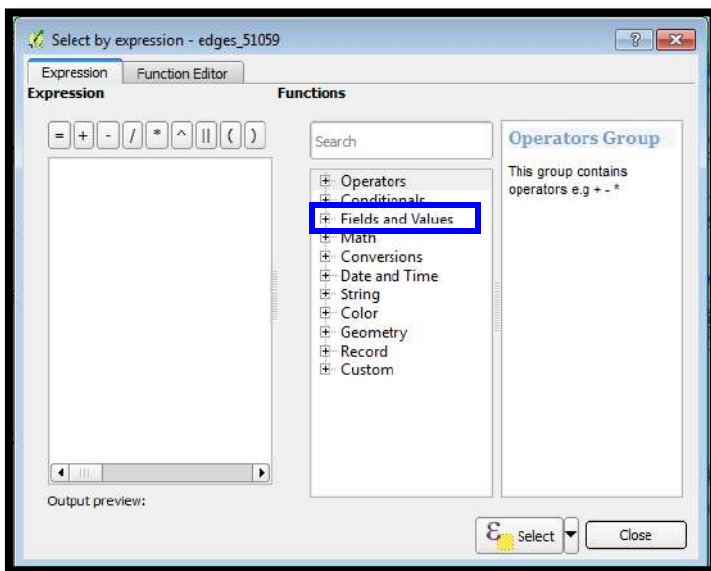
Button	Name	Function/Description
	<b>Search and Zoom</b>	<p>Click the <b>Search and Zoom</b> button to search the map by census tract, block group, census designated place, census county division (if applicable), or street name.</p>  <p>After selecting the <b>Search by</b> choice, a subsequent selection field appears for the participant to choose the specific value to search for in the working county (e.g., Census Tract). Once selected, click the <b>Find</b> or <b>Find and Close</b> button to zoom and center the <b>Map View</b> on the selection.</p>
<b>Map Navigation Toolbar Grouping</b>		
	<b>Touch Zoom and Pan</b>	Click the <b>Touch and Zoom</b> button to zoom and pan using finger gestures on a touchscreen computer. This functionality also works with the roller ball on the mouse.
	<b>Pan Map</b>	Click the <b>Pan</b> button to re-center the map in the <b>Map View</b> at the location clicked in the map while preserving the map scale.
	<b>Pan Map to Selection</b>	Click the <b>Pan to Selection</b> button after selecting a feature on the map (or in the attribute table) to re-center the map based on the selected feature(s).
	<b>Zoom In</b>	Click the <b>Zoom In</b> button to increase the map scale after clicking on the map and to display the map in <b>Map View</b> at a larger scale.
	<b>Zoom Out</b>	Click the <b>Zoom Out</b> button to decrease the map scale after clicking on the map and to display the map in <b>Map View</b> at a smaller scale.
	<b>Zoom Full</b>	Click the <b>Zoom Full</b> button to display the map at the full extent of the county.
	<b>Zoom to Selection</b>	Click the <b>Zoom to Selection</b> button after selecting a feature on the map (or in the attribute table) to view the feature at the scale of the selected feature.
	<b>Zoom to Layer</b>	Click the <b>Zoom to Layer</b> button after selecting a layer in the <b>Table of Contents</b> to display the map at the extent of the selected layer.
	<b>Zoom Last</b>	Click the <b>Zoom Last</b> button to return to the previous zoom extent.
	<b>Zoom Next</b>	Click the <b>Zoom Next</b> button to move forward to the next zoom extent.

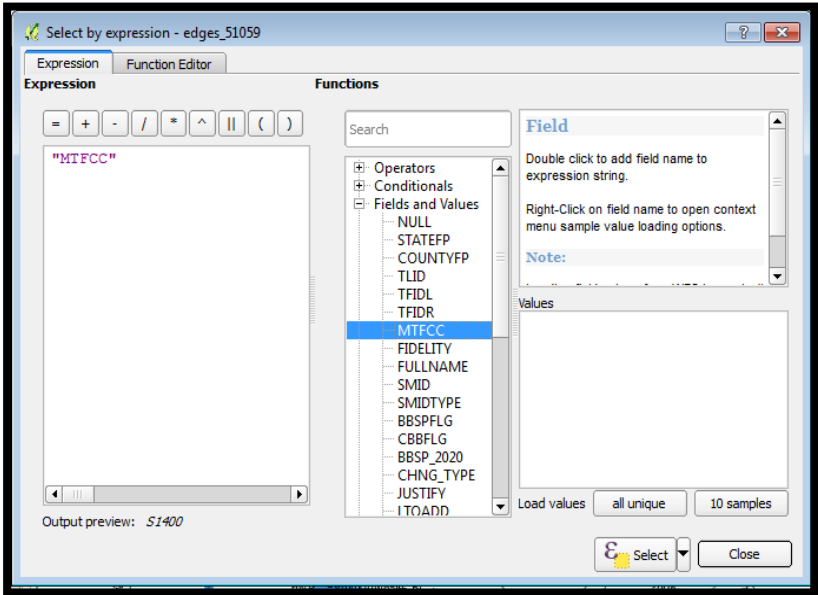
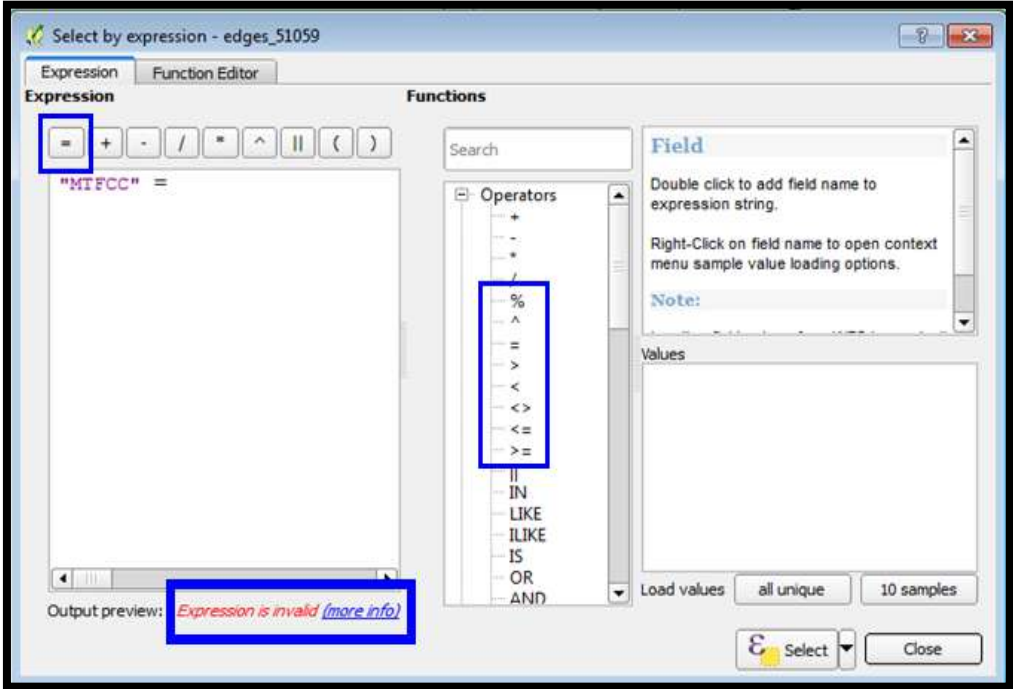
Button	Name	Function/Description
	<b>New Bookmark</b>	<p>Click the <b>New Bookmark</b> button to create, name, and save geographic locations in the <b>Map View</b> for future reference.</p> <p>To create and save a geographic location, first zoom to the location to bookmark and then select <b>New Bookmark</b>. <i>The Geospatial Bookmarks window opens.</i></p>  <p>Click on a row named <b>New bookmark</b>, backspace over the name “New bookmark” to delete the name, and enter a descriptive name for the bookmark (255-character limit). Click the <b>Close</b> button to add the new bookmark.</p>
	<b>Show Bookmarks</b>	<p>Click the <b>Show Bookmarks</b> button to view and manage the bookmarks.</p>  <p>To zoom to a bookmark, click on a bookmark name in the <b>Geospatial Bookmarks</b> dialog box and then click the <b>Zoom to</b> button.</p>  <p><i>The <b>Map View</b> zooms to the bookmark.</i></p>  <p>To delete a bookmark, click a bookmark name and click the <b>Delete</b> button.</p>
	<b>Refresh</b>	Click the <b>Refresh</b> button to refresh the screen at its current extent.

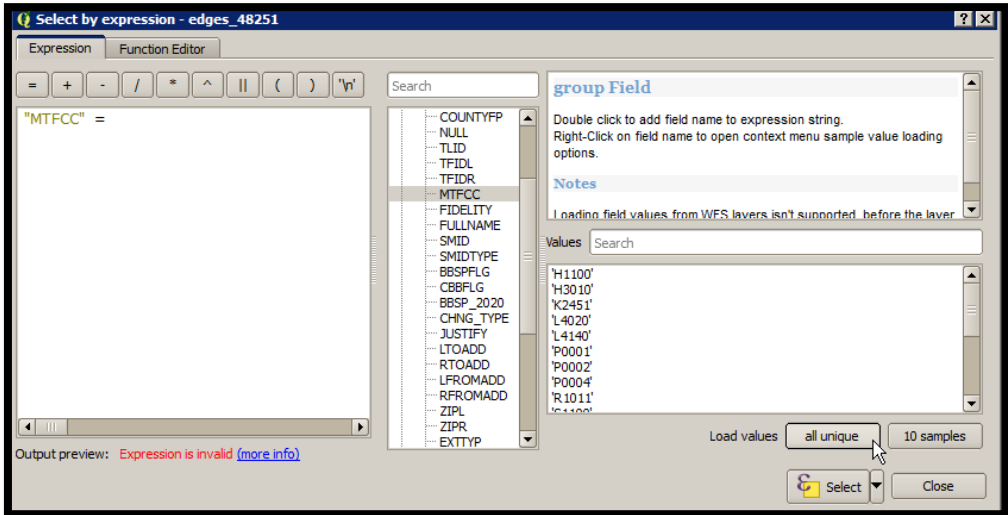
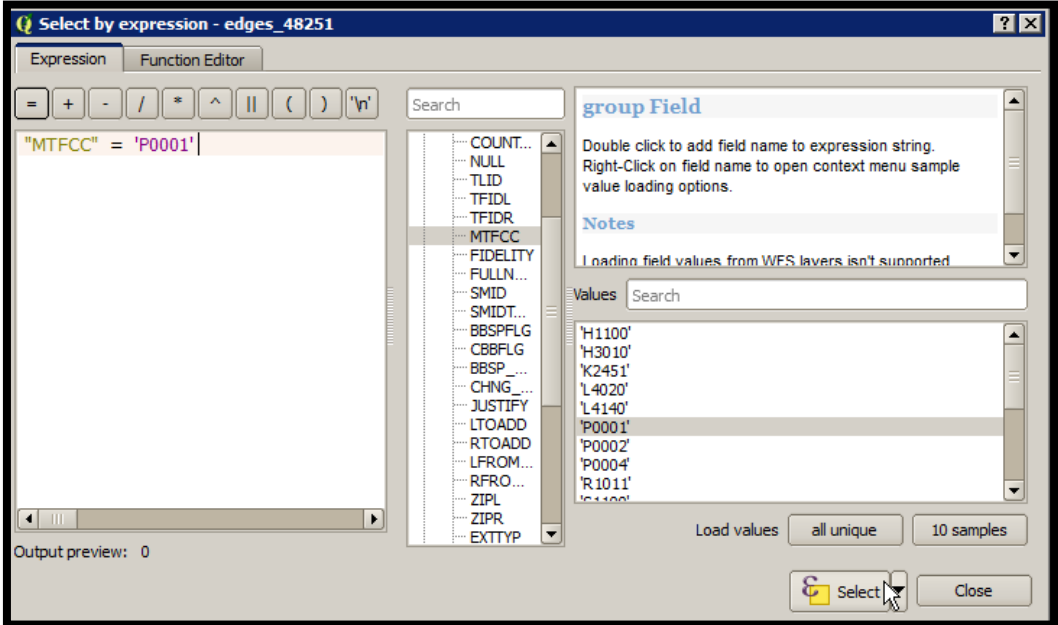

Button	Name	Function/Description
<b>Attributes Toolbar Grouping</b>		
	<b>Identify Features</b>	<p>Click the <b>Identify Features</b> button, followed by a click on a feature on the map, to identify the feature. <i>The selected feature appears in red in the Map View and the results appear in the <b>Identify Results</b> window.</i></p> 
	<b>Select Feature(s) by Area or Single Click</b>	<p>Click the <b>Select Feature(s) by Area or Single Click</b> button to select layer features in the map window with a single click, dragging a box, or drawing graphics on the screen.</p>  <p>To select a single feature, click the <b>Select Features</b> button, choose <b>Select Feature(s)</b> from the drop-down menu, and click the feature on the map. To select multiple features, hold down the Ctrl key while selecting more than one feature. To remove one or more features from a selection of multiple features, hold down the Ctrl key and click the feature(s) again. Participants can also use <b>Select Features by Polygon</b>, <b>Select Features by Freehand</b>, and <b>Select Features by Radius</b> tools to select multiple features using graphics they draw on the screen.</p>
	<b>Select Features Using an Expression</b>	<p>Click the <b>Select Features Using an Expression</b> button to select features by querying the attribute table based on table fields and/or values in the fields. See <a href="#">Table 15</a> for an example of using the <b>Select Features Using an Expression</b> tool to view the features in the edges layer that have an MTFCC code of P0001.</p>


Button	Name	Function/Description
	<b>Deselect Features from All Layers</b>	Click the <b>Deselect Features from all Layers</b> button to deselect the selected features in all layers in a single action.
	<b>Measure</b>	Click the <b>Measure</b> button to measure the distance between two or more points, an area, or an angle on a map. See <a href="#">Table 16</a> for examples of using the <b>Measure</b> tool.

**Table 15: Select Features Using an Expression Button**

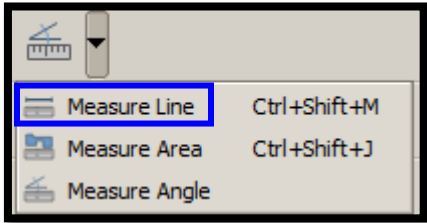
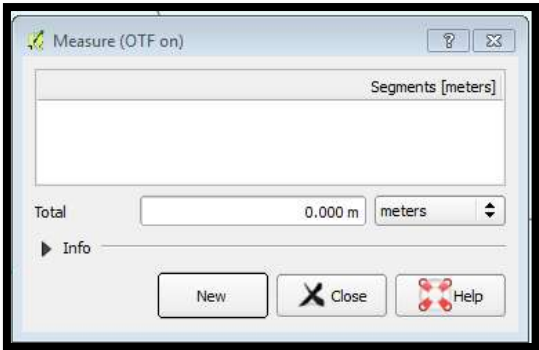
Step	Action and Result
<b>Step 1</b>	<p>With the edges layer selected in the <b>Table of Contents</b>, click the <b>Select Features Using an Expression</b> button on the <b>Standard toolbar</b>.</p> 
<b>Step 2</b>	<p>The <b>Select by Expression</b> dialog box opens. Click on the '+' next to <b>Fields and Values</b> to expand it.</p> 

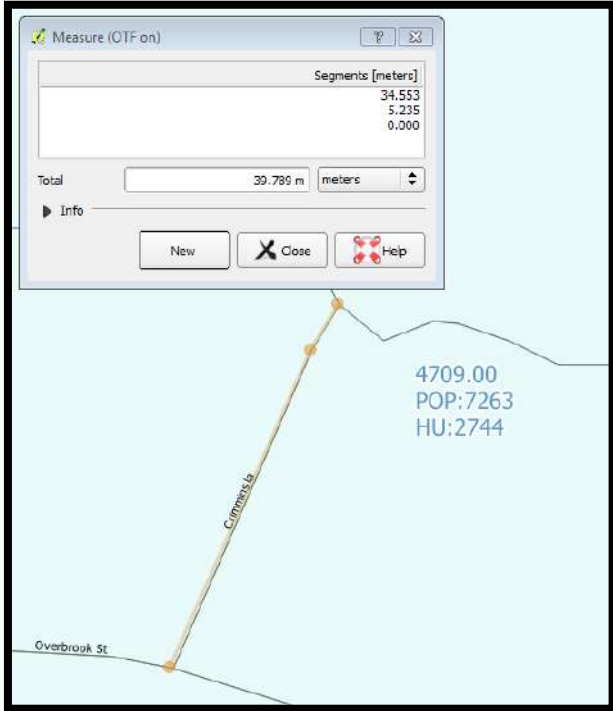
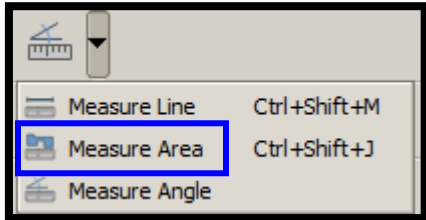
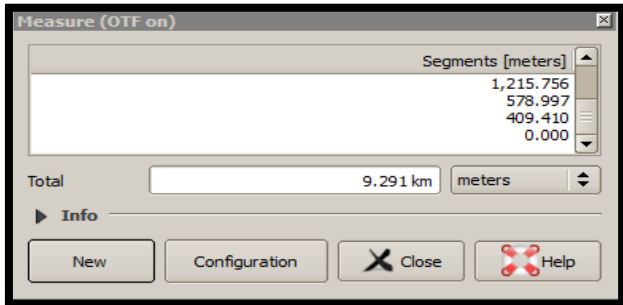
Step	Action and Result
<b>Step 3</b>	<p>Double click on a field name to add it to the <b>Expression</b> window. This example depicts the selection of the MAF/TIGER Feature Classification Code (MTFCC) field and its field name appearance in the <b>Expression</b> window.</p> 
<b>Step 4</b>	<p>Single click on an operator button to add it to the <b>Expression</b> window. <i>In this example, the “=” was chosen.</i></p> <p><b>Note:</b> There are more operators available than those shown above the <b>Expression</b> window. Click the <b>Operators</b> menu in the center window of the dialog box to see additional options, including commonly used expressions such as &lt;, &gt;, &lt;=, &gt;=.</p>  <p>For this screenshot, notice the <b>Output preview</b>: message below the window indicates the expression is invalid because the value for the expression is missing.</p>

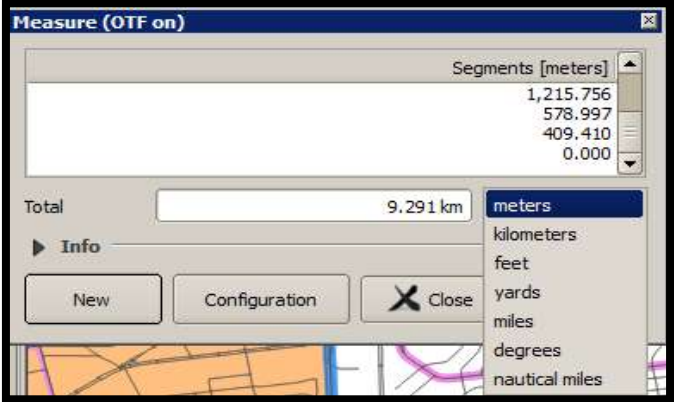
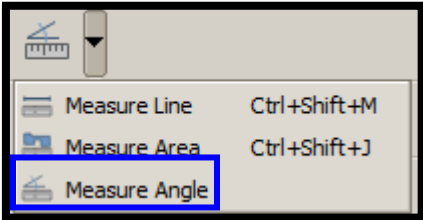
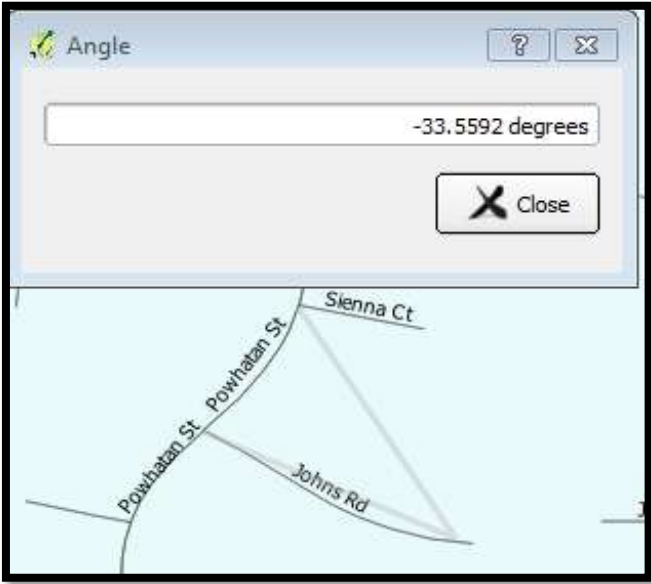
Step	Action and Result
<p><b>Step 5</b></p>	<p>Reselect <b>MTFCC</b>. Click the <b>Load values - all unique</b> button, which shows all of the values for the chosen field name. Double click a value to <i>add it to the Expression window</i>. For more information about MTFCC codes, please refer to <b>Appendix F</b> or the following webpage: <a href="http://www.census.gov/geo/reference/mtfcc.html">http://www.census.gov/geo/reference/mtfcc.html</a>.</p> 
<p><b>Step 6</b></p>	<p>For this example, double click the value <b>"P0001"</b> (Nonvisible Linear Legal/Statistical Boundary) in the values window to <i>add it to the Expression window</i>.</p>  <p>To execute the expression, click the  <b>Select</b> button.</p>

Step	Action and Result
Step 7	<p>The features meeting the expression, "MTFCC" = 'P0001', are highlighted on the map.</p> 

**Table 16: Measure Button**

Step	Action and Result
Step 1	<p>To measure the distance between two points on the map, select the <b>Measure</b> button and then <b>Measure Line</b> choice.</p>  <p>The Measure (OTF on) dialog box opens.</p> 

Step	Action and Result
<b>Step 2</b>	<p>Zoom to the desired map location to take the measurement. Left-click the beginning point on the map and continue clicking points until reaching the final point. Right-click to show completion of point selection. <i>The length of each segment of the line, as well as the total length of the line between the beginning point and the ending point, appear in the Measure box.</i></p>  <p>Click <b>New</b> to start another measurement or click <b>Close</b> to close the <b>Measure</b> tool.</p>
<b>Step 3</b>	<p>To measure the area on the map, select the <b>Measure</b> tool and then <b>Measure Area</b> choice.</p>  <p><i>The Measure (OTF on) dialog box opens.</i></p> 

Step	Action and Result
<b>Step 4</b>	<p>Zoom to the desired map location to take the measurement. Left-click on the map to begin drawing a polygon around the area to measure. Left-click at each vertex of the polygon. Right-click to show completion of the polygon. <i>The polygon's area appears in the <b>Total</b> field.</i> Use the drop-down to the right to see the area in other units of measure. Meters, kilometers, feet, yards, miles, degrees, and nautical miles are the unit of measure choices.</p>  <p>Click <b>New</b> to start another measurement or click <b>Close</b> to close the <b>Measure</b> tool.</p>
<b>Step 5</b>	<p>To measure an angle on the map, select the <b>Measure</b> tool and then <b>Measure Angle</b> choice.</p> 
<b>Step 6</b>	<p>Zoom to the desired map location to take the measurement. Left-click on the map to begin drawing the angle. Drag the mouse to create the first side of the angle, then left-click, and drag the mouse again to draw the second leg. <i>The <b>Angle</b> box opens showing the angle measurement.</i></p>  <p>Click <b>Close</b> to close the <b>Measure</b> tool.</p>

## 8.4.2 PSAP Toolbar

The **PSAP toolbar**, shown [Figure 15](#), provides the software functionality to complete PSAP review and update activities. It includes four separate sub-toolbars, identified by the grouping bars described earlier in the **Standard toolbar** section.



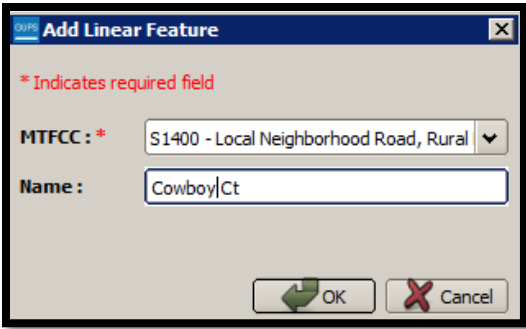


Figure 15. PSAP Toolbar

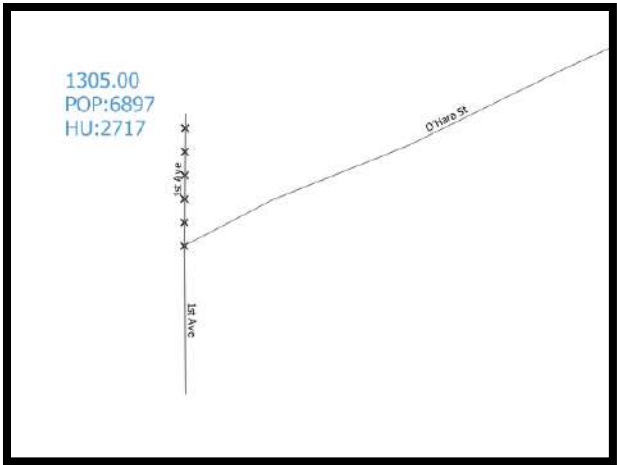
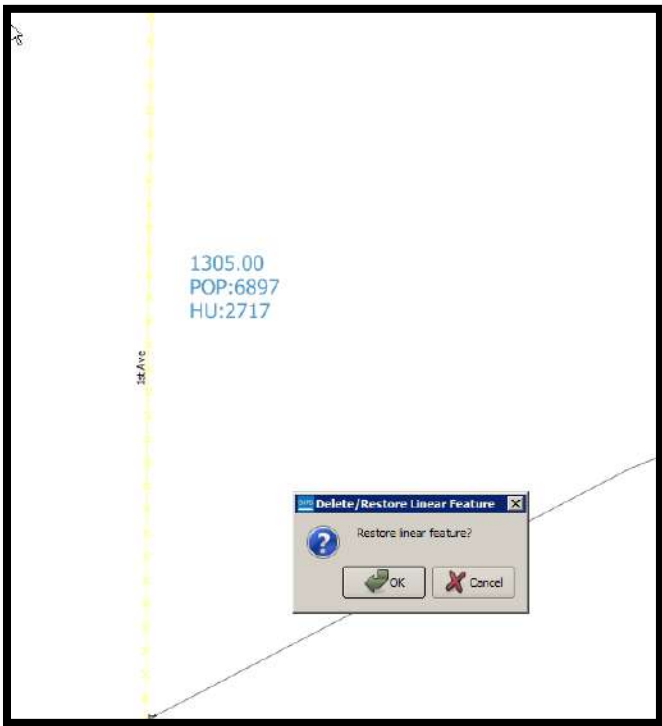
The first sub-toolbar contains the buttons for adding and deleting linear features, modifying linear feature attributes and areal features, displaying names and the legend, and renumbering block groups. The second sub-toolbar contains buttons for conducting geography and PSAP criteria reviews. The third sub-toolbar contains buttons for importing shapefiles, exporting the map to a zip file, and exporting a map to print. The fourth sub-toolbar contains buttons for adding an internet map service and adding imagery.

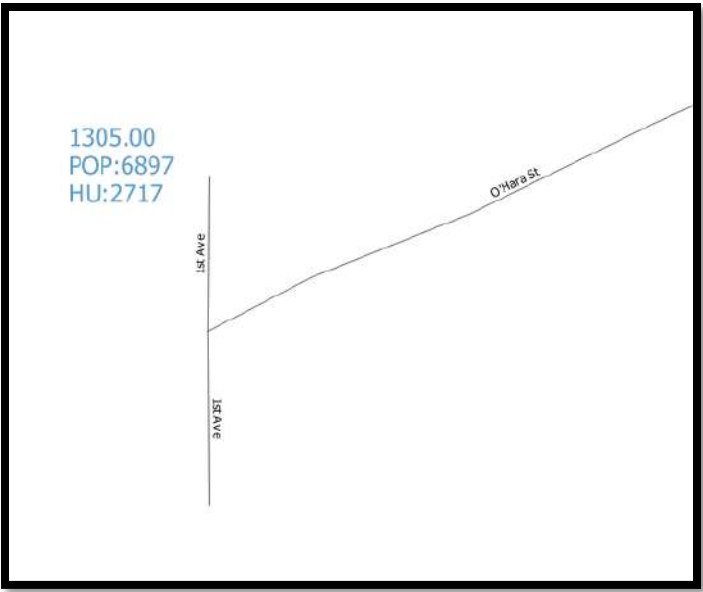

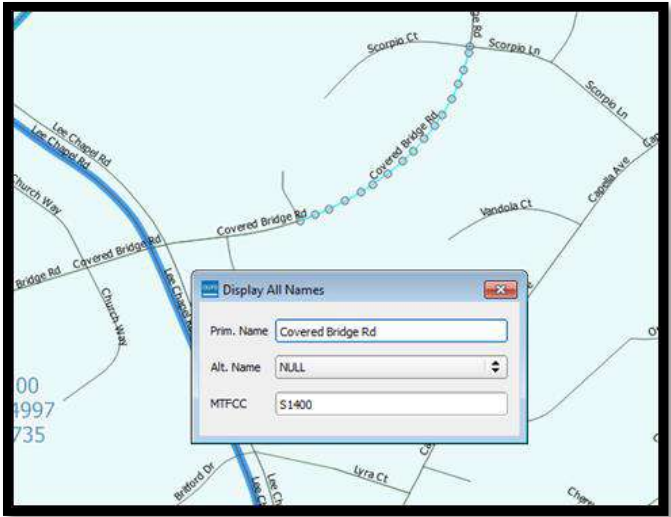
An additional toolbar, the **Manage Layers toolbar**, allows participants to add vector and raster data layers and import data tables. [Table 17](#) and [Table 27](#) describe the **PSAP toolbar** and the **Manage Layers toolbar** respectively.


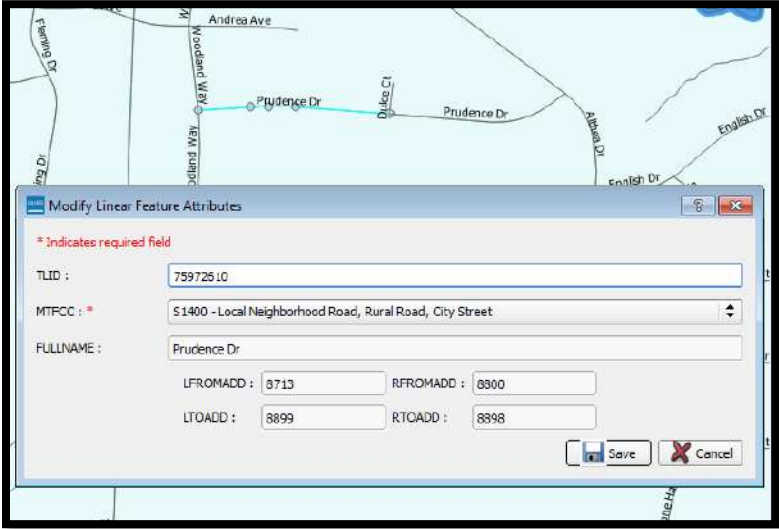
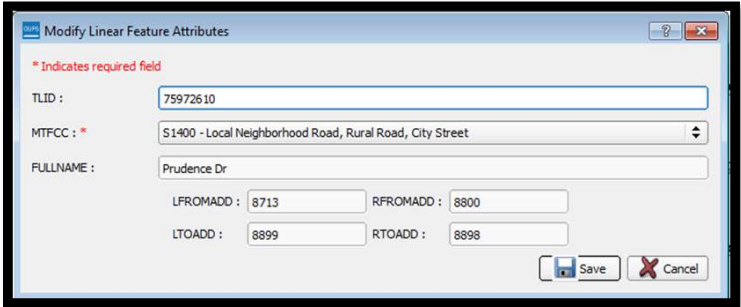


Table 17: PSAP Toolbar Buttons, Names, and Functions/Descriptions












Button	Name	Function/Description
	<b>Add Linear Feature</b>	<p>Click the <b>Add Linear Feature</b> button to digitize a new linear feature.</p> <p>To add a linear feature, click the mouse to begin the line and continue to click at each vertex point of the line. Right-click the mouse to complete the new line, shown in pink in the image below.</p> <p>Upon completion of digitization, the <b>Add Linear Feature</b> dialog box opens. Click the <b>MTFCC</b> drop-down menu to choose the appropriate feature classification code. If named, type the name of the feature in the <b>Name</b> field.</p>

Button	Name	Function/Description
		 <p><b>Note:</b> To locate information on the MAF/TIGER Feature Classification Codes (MTFCC) codes, refer to <a href="#">Appendix F</a>. Refer to <a href="#">Appendix H</a> for a list of standardized street type abbreviations since the street type (i.e. St., Rd., Ave., Cir., etc.) is required to upload the feature correctly.</p>
	<b>Delete/Restore Linear Feature</b>	<p>Click the <b>Delete/Restore Linear Feature</b> button to delete a linear feature. Participants can restore linear features if deleted in error.</p> <p>To delete a linear feature, click the mouse on the feature to delete.</p>  <p><i>The <b>Delete/Restore Linear Feature</b> confirmation dialog box opens with a question about certainty of the delete. Click <b>OK</b> to mark the feature for deletion. The deleted feature appears on the map with a gray X's on top of the linear feature.</i></p>

Button	Name	Function/Description
		 <p><b>Note:</b> When a feature is marked for deletion, GUPS assigns a delete flag to the feature in the attribute table. The deletion occurs later if it remains marked as such. Assigning a flag rather than immediately deleting the feature allows for the restoration of the feature if deleted in error.</p> <p>To restore a deleted linear feature, click on the <b>Delete/Restore Linear Feature</b> button. Click the feature on the map previously marked for deletion (<i>highlights in light yellow</i>).</p>  <p>The <b>Delete/Restore Linear Feature</b> confirmation dialog box opens with question restore the line.</p> <p>Click the <b>OK</b> button to remove the delete line flag from the attribute table and restore the feature.</p>

Button	Name	Function/Description
		
	<b>Display All Names</b>	<p>Click the <b>Display All Names</b> button to display the primary and alternate names for a street. It also shows the MTFCC for other linear features such as streams, railroads, non-visible features.</p> <p>To check for the name of a street feature, click the <b>Display All Names</b> button and then click on the street on the map. The selected feature highlights in light blue and the <b>Display All Names</b> dialog box opens showing the primary name in the <b>Prim. Name</b> field and the alternate name, if one exists, in the <b>Alt. Name</b> field. To see all alternate names, click the drop-down arrow to the right of the <b>Alt. Name</b> field. If no alternate name exists, 'NULL' appears in the <b>Alt. Name</b> field.</p> 


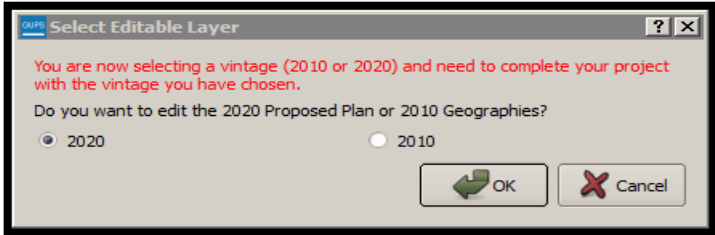
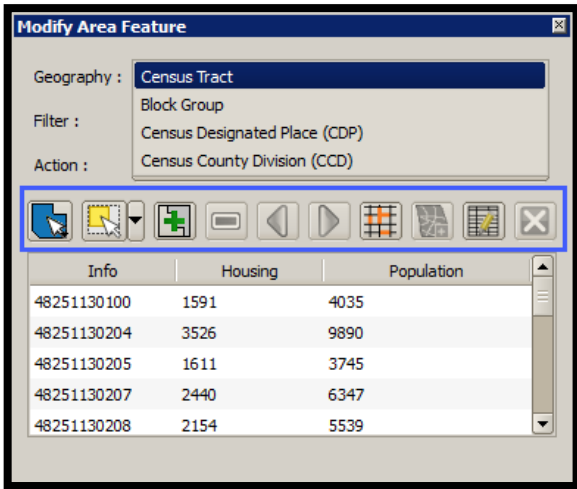
Button	Name	Function/Description
	<b>Modify Linear Feature Attributes</b>	<p>Click the <b>Modify Linear Feature Attributes</b> button to edit attribute fields for a selected linear feature.</p> <p>To edit the attribution of a linear feature, click the <b>Modify Linear Feature Attributes</b> button and then click the linear feature to edit.</p>  <p>The <b>Modify Linear Feature Attributes</b> dialog box opens with the TIGER/Line Feature ID (TLID) of the feature selected. The <b>MTFCC</b> field displays the assigned MTFCC. If the feature is unnamed, the <b>FULLNAME</b> field is blank. The <b>TLID</b> field is not eligible for modification.</p> <p>To update the <b>MTFCC</b> field, click the down-drop box and select the correct MTFCC code. This field is required for all linear features.</p>  <p>To update the <b>FULLNAME</b> field, enter the name if the field is blank. If the field contains an incorrect name, highlight the existing name and press the Delete key from the keyboard or backspace over the existing name to clear the field prior to entering the current/correct name.</p>
	<b>Modify Area Feature</b>	<p>Click the <b>Modify Area Feature</b> button to choose the geography, filter, and action for the statistical geographies in the given entity (county or tribal). Applying a search filter to each geography helps locate the statistical geographies that do not meet specified criteria. Refer to <a href="#">Table 18</a> for several detailed examples of its use. This button is a major component used for updating statistical geographies.</p>
	<b>Show/Hide Legend</b>	<p>Click the <b>Show/Hide Legend</b> button to hide the layer list. Click it again to show the layer list.</p>

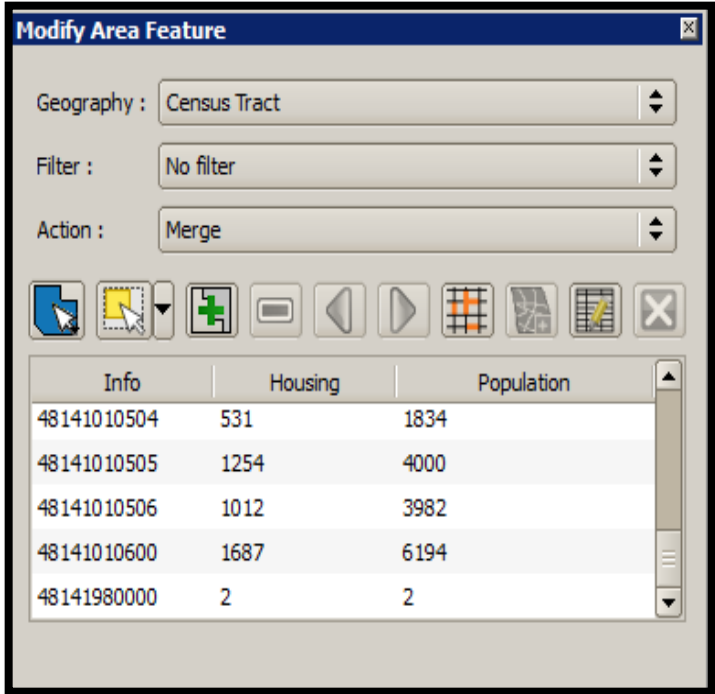
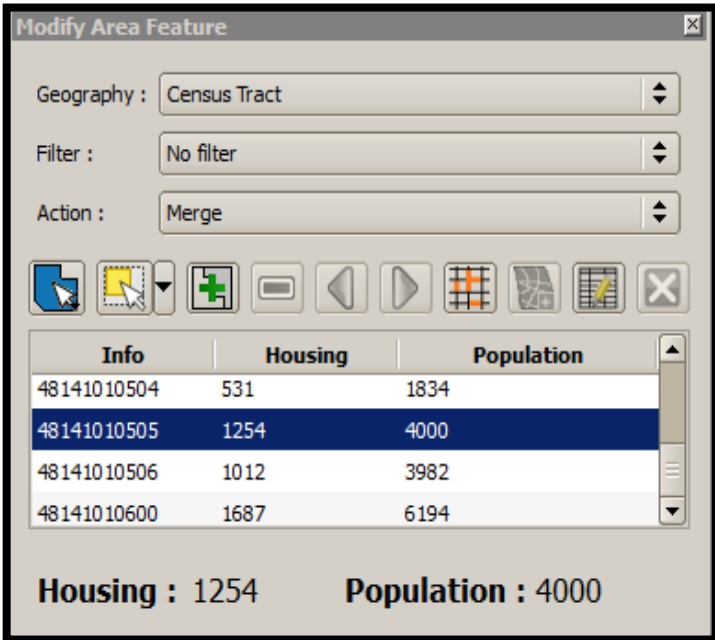
Button	Name	Function/Description
	<b>Renumbering Tool</b>	Click the <b>Renumbering Tool</b> button to renumber newly created or modified block groups resulting from merges or splits. Renumbering is not required. Participants choosing to renumber should execute this tool after all block group work concludes. Save the project to make the changes permanent.
	<b>Geography Review Tool</b>	Click the <b>Geography Review Tool</b> button to filter a layer based on field values in the attribute table. The <b>Geography Review Tool</b> does not allow for changes. Refer to <a href="#">Table 20</a> for details on its use.
	<b>Review Change Polygons</b>	Click the <b>Review Change Polygons</b> button to view the review the updated polygons created from the edits made to census tracts, block groups, CDPs, and CCDs where applicable. The <b>Review Change Polygons</b> button allows for changes to previous updates. Refer to <a href="#">Table 21</a> for details on its use.
	<b>PSAP Criteria Review</b>	Click the <b>PSAP Criteria Review</b> button to generate a list of threshold failures and to correct the failures or provide a justification for the failures. This mandatory check is required before creating a data output file. Refer to <a href="#">Section 10.1</a> and <a href="#">Table 22</a> for details on its use.  <b>Note:</b> If reviewing the 2020 Proposed Plan, no threshold failures will register until the participant performs edits.
	<b>Import County Zip</b>	Click the <b>Import County Zip</b> button to import a participant's "DataDirectory" output .zip file into GUPS for further review and update. Refer to <a href="#">Table 23</a> for details on its use.  <b>Note:</b> GUPS generates this "DataDirectory" .zip file as part of the <b>Export to Zip → Share with Another Participant</b> function described in <a href="#">Table 24</a> .
	<b>Export to Zip</b>	Click the <b>Export to Zip</b> button to create the .zip file containing all required data and shapefiles for submission to the Census Bureau or to share with another participant. Refer to <a href="#">Table 24</a> for details on its use.
	<b>Print Map to File</b>	Click the <b>Print Map to File</b> button export a printable map in .pdf, png, .tif, or jpeg format. Refer to <a href="#">Table 25</a> for details on its use.
	<b>Internet Map Service</b>	Click the <b>Internet Map Service</b> button to load a GIS map service from the internet into GUPS to assist with overlaying external source visuals/data.  <b>Note:</b> An internet connection is required for this button to function.
	<b>Add Imagery</b>	Click the <b>Add Imagery</b> button to add either USGS or Esri imagery to overlay the working county shapefiles. Remove imagery using the same button. Refer to <a href="#">Table 26</a> for details on its use.
	<b>Undo</b>	Click the <b>Undo</b> button to revert the last change made by the participant. After making the layer where the change occurred active in the <b>Table of Contents</b> , this button activates on the <b>Advanced Digitizing toolbar</b> and in the <b>Edit</b> menu if the <b>Undo</b> action is permissible.  <b>Note:</b> This button (and action) is very important for a participant to utilize prior to saving any changes. Participants should be confident with the change they have made prior to saving. If not, they should perform the <b>Undo</b> action.
	<b>Redo</b>	Click the <b>Redo</b> button to restores the last change made by the participant. This button activates on the <b>Advanced Digitizing toolbar</b> if a redo action is permissible.

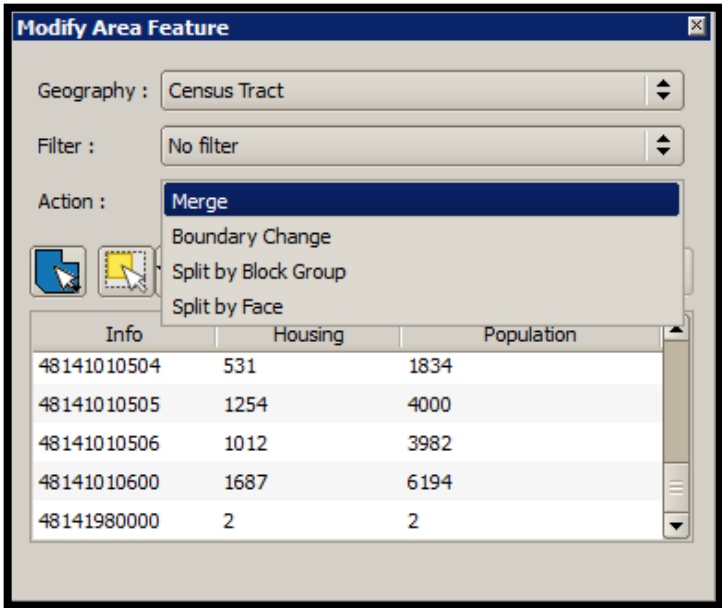
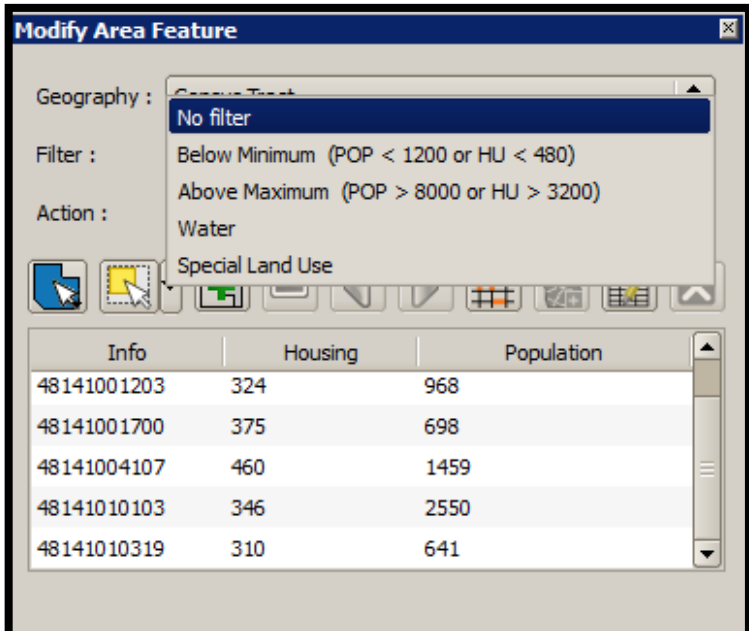
### 8.4.2.1 Modify Area Feature Button

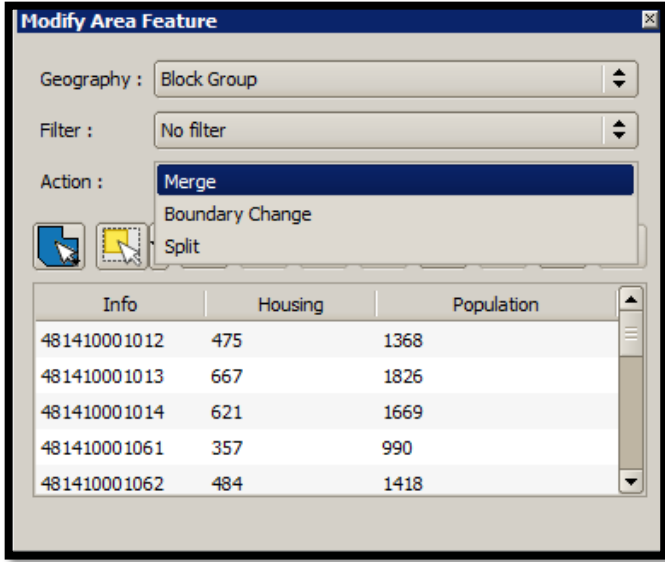
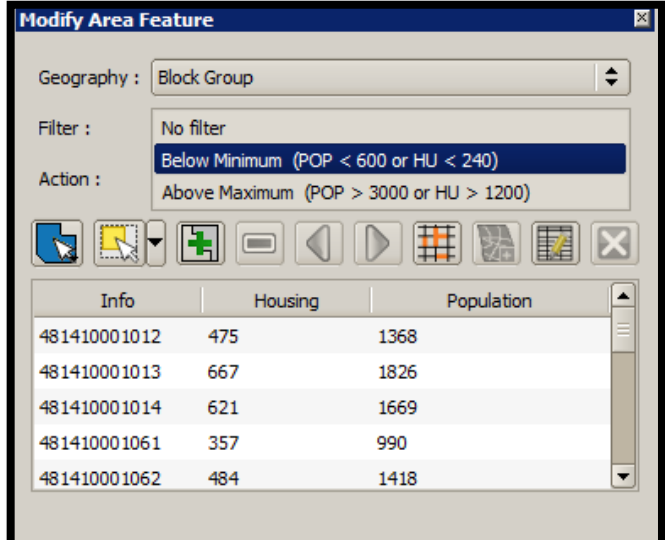
The **Modify Area Feature** button allows participants to review and update census tracts, block groups, census designated places (CDPs), and census county divisions (CCDs) in applicable states. Please refer to [Chapter 9](#) for detailed review and update instructions of each statistical area. The following section discusses the mechanics of the tool itself, not the criteria for which to use the tool.

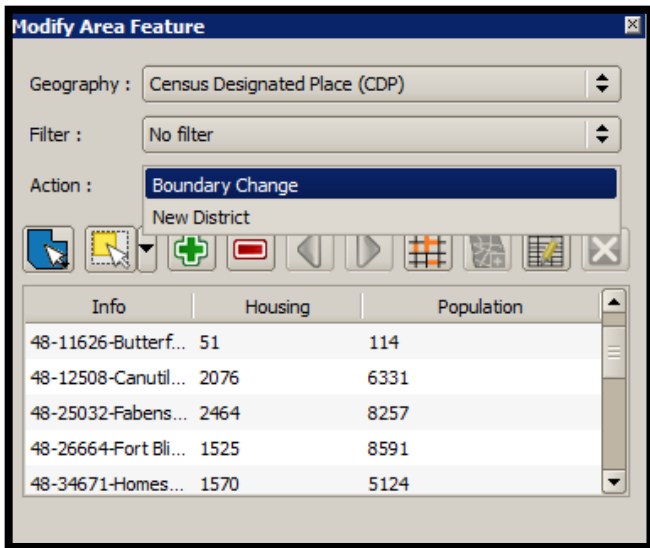
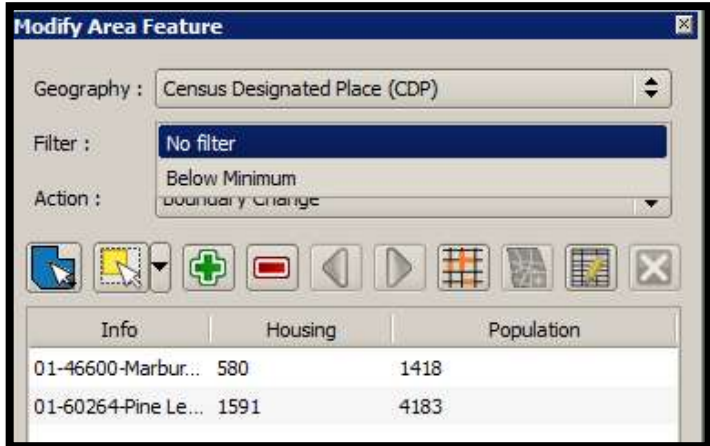
**Table 18: Modify Area Feature Button**

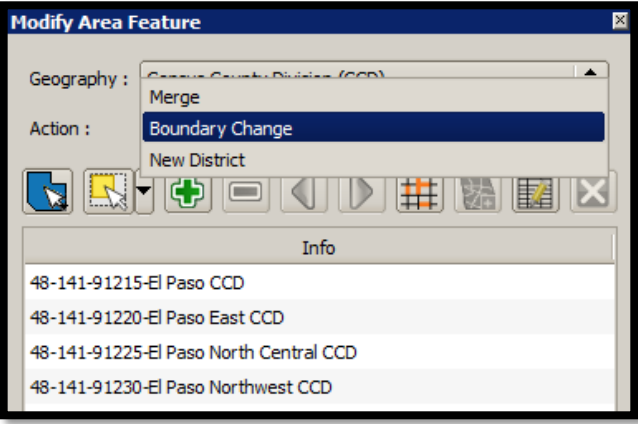
Step	Action and Result																		
Step 1	<p>Click the <b>Modify Area Feature</b> button.</p> <div></div> <p><b>IMPORTANT:</b> The first time use of this button in the working county launches the <b>Select Editable Layer</b> window. The window shows two editable layer choices (2020 Proposed Plan and 2010 Geographies). This window only appears with the initial launch of the button in any given working county. Once selected, GUPS remembers the geography chosen in this window. If a participant wants to start over, they must initiate the <b>GUPS Data Settings</b> button to delete the current project. See <a href="#">Table 14</a> for details on deleting a project and starting again.</p> <div></div>																		
Step 2	<p>After selection of the editable layers, the <b>Modify Area Feature</b> dialog box opens. Click the <b>Geography</b> drop-down menu to select the geography to review and update.</p> <div><table><thead><tr><th>Info</th><th>Housing</th><th>Population</th></tr></thead><tbody><tr><td>48251130100</td><td>1591</td><td>4035</td></tr><tr><td>48251130204</td><td>3526</td><td>9890</td></tr><tr><td>48251130205</td><td>1611</td><td>3745</td></tr><tr><td>48251130207</td><td>2440</td><td>6347</td></tr><tr><td>48251130208</td><td>2154</td><td>5539</td></tr></tbody></table></div> <p>Geographies that appear in the <b>Geography</b> drop-down menu are editable with the tools located above the information window; however, those tools change based upon the geography selected.</p> <p><b>Note:</b> For the 21 states with CCDs, the <b>Census County Division (CCD)</b> choice appears in the <b>Geography</b> drop-down menu.</p>	Info	Housing	Population	48251130100	1591	4035	48251130204	3526	9890	48251130205	1611	3745	48251130207	2440	6347	48251130208	2154	5539
Info	Housing	Population																	
48251130100	1591	4035																	
48251130204	3526	9890																	
48251130205	1611	3745																	
48251130207	2440	6347																	
48251130208	2154	5539																	

Step	Action and Result																		
Step 3	<p>Choose <b>Census Tract</b> from the <b>Geography</b> drop-down menu. The default filter, <b>No filter</b>, displays all census tracts in the information window.</p>  <table><thead><tr><th>Info</th><th>Housing</th><th>Population</th></tr></thead><tbody><tr><td>48141010504</td><td>531</td><td>1834</td></tr><tr><td>48141010505</td><td>1254</td><td>4000</td></tr><tr><td>48141010506</td><td>1012</td><td>3982</td></tr><tr><td>48141010600</td><td>1687</td><td>6194</td></tr><tr><td>48141980000</td><td>2</td><td>2</td></tr></tbody></table>	Info	Housing	Population	48141010504	531	1834	48141010505	1254	4000	48141010506	1012	3982	48141010600	1687	6194	48141980000	2	2
Info	Housing	Population																	
48141010504	531	1834																	
48141010505	1254	4000																	
48141010506	1012	3982																	
48141010600	1687	6194																	
48141980000	2	2																	
Step 4	<p>Double click on a row in the list to select a census tract. <i>The map zooms to the selected tract.</i></p>  <table><thead><tr><th>Info</th><th>Housing</th><th>Population</th></tr></thead><tbody><tr><td>48141010504</td><td>531</td><td>1834</td></tr><tr><td>48141010505</td><td>1254</td><td>4000</td></tr><tr><td>48141010506</td><td>1012</td><td>3982</td></tr><tr><td>48141010600</td><td>1687</td><td>6194</td></tr></tbody></table> <p><b>Housing : 1254      Population : 4000</b></p>	Info	Housing	Population	48141010504	531	1834	48141010505	1254	4000	48141010506	1012	3982	48141010600	1687	6194			
Info	Housing	Population																	
48141010504	531	1834																	
48141010505	1254	4000																	
48141010506	1012	3982																	
48141010600	1687	6194																	

Step	Action and Result																		
Step 5	<p>The <b>Action</b> drop-down menu activates four separate types of updates, <b>Merge</b>, <b>Boundary Change</b>, <b>Split by Block Group</b>, or <b>Split by Face</b>.</p>  <table><thead><tr><th>Info</th><th>Housing</th><th>Population</th></tr></thead><tbody><tr><td>48141010504</td><td>531</td><td>1834</td></tr><tr><td>48141010505</td><td>1254</td><td>4000</td></tr><tr><td>48141010506</td><td>1012</td><td>3982</td></tr><tr><td>48141010600</td><td>1687</td><td>6194</td></tr><tr><td>48141980000</td><td>2</td><td>2</td></tr></tbody></table>	Info	Housing	Population	48141010504	531	1834	48141010505	1254	4000	48141010506	1012	3982	48141010600	1687	6194	48141980000	2	2
Info	Housing	Population																	
48141010504	531	1834																	
48141010505	1254	4000																	
48141010506	1012	3982																	
48141010600	1687	6194																	
48141980000	2	2																	
Step 6	<p>With <b>Census Tract</b> selected, click the <b>Filter</b> drop-down menu to view census tracts that do not meet the population and housing unit criteria - (<b>below minimum</b> – numbers are below the minimum population and housing thresholds and <b>above maximum</b> – numbers are above the maximum population and housing thresholds). Refer to <a href="#">Table 3</a> for the 2020 population and housing unit criteria for tracts.</p> <p>If present in the working county, participants can also select and view, <b>water tracts</b> (assigned tract codes in the 9900 series) and <b>special land use tracts</b> (assigned tract codes in the 9800 series).</p>  <table><thead><tr><th>Info</th><th>Housing</th><th>Population</th></tr></thead><tbody><tr><td>48141001203</td><td>324</td><td>968</td></tr><tr><td>48141001700</td><td>375</td><td>698</td></tr><tr><td>48141004107</td><td>460</td><td>1459</td></tr><tr><td>48141010103</td><td>346</td><td>2550</td></tr><tr><td>48141010319</td><td>310</td><td>641</td></tr></tbody></table>	Info	Housing	Population	48141001203	324	968	48141001700	375	698	48141004107	460	1459	48141010103	346	2550	48141010319	310	641
Info	Housing	Population																	
48141001203	324	968																	
48141001700	375	698																	
48141004107	460	1459																	
48141010103	346	2550																	
48141010319	310	641																	

Step	Action and Result																		
Step 7	<p>Selection of <b>Block Group</b> from the <b>Geography</b> drop-down menu enables three actions in the <b>Action</b> drop-down menu, <b>Merge</b>, <b>Boundary Change</b>, and <b>Split</b>.</p>  <table><thead><tr><th>Info</th><th>Housing</th><th>Population</th></tr></thead><tbody><tr><td>481410001012</td><td>475</td><td>1368</td></tr><tr><td>481410001013</td><td>667</td><td>1826</td></tr><tr><td>481410001014</td><td>621</td><td>1669</td></tr><tr><td>481410001061</td><td>357</td><td>990</td></tr><tr><td>481410001062</td><td>484</td><td>1418</td></tr></tbody></table>	Info	Housing	Population	481410001012	475	1368	481410001013	667	1826	481410001014	621	1669	481410001061	357	990	481410001062	484	1418
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Step 8	<p>As described above for census tracts, with <b>Block Group</b> selected, click the <b>Filter</b> drop-down menu to view the block groups that do not meet the population and housing unit criteria - (<b>below minimum</b> – numbers are below the minimum population and housing thresholds and <b>above maximum</b> – numbers are above the maximum population and housing thresholds). Refer to <a href="#">Table 5</a> for the 2020 population and housing unit criteria for block groups.</p>  <table><thead><tr><th>Info</th><th>Housing</th><th>Population</th></tr></thead><tbody><tr><td>481410001012</td><td>475</td><td>1368</td></tr><tr><td>481410001013</td><td>667</td><td>1826</td></tr><tr><td>481410001014</td><td>621</td><td>1669</td></tr><tr><td>481410001061</td><td>357</td><td>990</td></tr><tr><td>481410001062</td><td>484</td><td>1418</td></tr></tbody></table>	Info	Housing	Population	481410001012	475	1368	481410001013	667	1826	481410001014	621	1669	481410001061	357	990	481410001062	484	1418
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Step	Action and Result																		
Step 9	<p>Selection of <b>Census Designated Place (CDP)</b> from the <b>Geography</b> drop-down menu enables two actions in the <b>Action</b> drop-down menu, <b>Boundary Change</b> and <b>New District</b>.</p>  <table><thead><tr><th>Info</th><th>Housing</th><th>Population</th></tr></thead><tbody><tr><td>48-11626-Butterf...</td><td>51</td><td>114</td></tr><tr><td>48-12508-Canutil...</td><td>2076</td><td>6331</td></tr><tr><td>48-25032-Fabens...</td><td>2464</td><td>8257</td></tr><tr><td>48-26664-Fort Bli...</td><td>1525</td><td>8591</td></tr><tr><td>48-34671-Homes...</td><td>1570</td><td>5124</td></tr></tbody></table>	Info	Housing	Population	48-11626-Butterf...	51	114	48-12508-Canutil...	2076	6331	48-25032-Fabens...	2464	8257	48-26664-Fort Bli...	1525	8591	48-34671-Homes...	1570	5124
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48-34671-Homes...	1570	5124																	
Step 10	<p>With <b>Census Designated Place (CDP)</b> selected, leave the <b>Filter</b> drop-down menu set to <b>No Filter</b> to view all of the CDPs in the working county with their population and housing unit information. Recall there are no minimum population and housing thresholds, but a CDP cannot have zero population and zero housing units. Refer to <a href="#">Appendix B</a> for a summary of threshold criteria.</p>  <table><thead><tr><th>Info</th><th>Housing</th><th>Population</th></tr></thead><tbody><tr><td>01-46600-Marbur...</td><td>580</td><td>1418</td></tr><tr><td>01-60264-Pine Le...</td><td>1591</td><td>4183</td></tr></tbody></table>	Info	Housing	Population	01-46600-Marbur...	580	1418	01-60264-Pine Le...	1591	4183									
Info	Housing	Population																	
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01-60264-Pine Le...	1591	4183																	

Step	Action and Result
Step 11	<p>With <b>Census County Division (CCD)</b> selected, click the <b>Action</b> drop-down menu to see the three actions available, <b>Merge</b>, <b>Boundary Change</b>, and <b>New District</b>. There is no <b>Filter</b> menu visible for CCDs since no threshold requirements exist.</p> <p><b>Note:</b> The 21 states with CCDs may review and update those statistical geographies using the <b>Modify Area Feature</b> tool. States without CCDs will not see this choice in the <b>Geography</b> drop-down menu.</p>  <p>As shown in <a href="#">Appendix B</a>, there are no population or housing criteria for CCDs. As a result, edits to them are rare. The intentions of the CCD menu functionality are primarily to align the CCD boundaries to census tract boundaries (using the <b>Boundary Change</b> action). Use local knowledge to make modifications to ensure the sub-county level of geography remains sound and accurate. Do not eliminate CCDs, but ensure their boundaries are valid. If a census tract boundary changed that is also a CCD boundary, review the CCD boundary to determine if it should change as well. Though rare, the Census Bureau permits the creation of new CCDs (using the <b>New District</b> action) for high-level planning purposes. Refer to <a href="#">Chapter 5</a> for guidance.</p>

Within the **Modify Area Feature** dialog box is a section of additional buttons used to implement changes to the various statistical geographies. [Figure 16](#) highlights the section of additional buttons while [Table 19](#) describes these buttons and their functionality in detail.

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**Note:** The buttons that appear in this toolbar change depending on the geography and action chosen by the participant; therefore, [Figure 16](#) does not depict all of the potential buttons, but only those that appear with Census Tract and Boundary Change selections. [Table 19](#) discusses all the buttons that appear at any point during a participant’s PSAP review.

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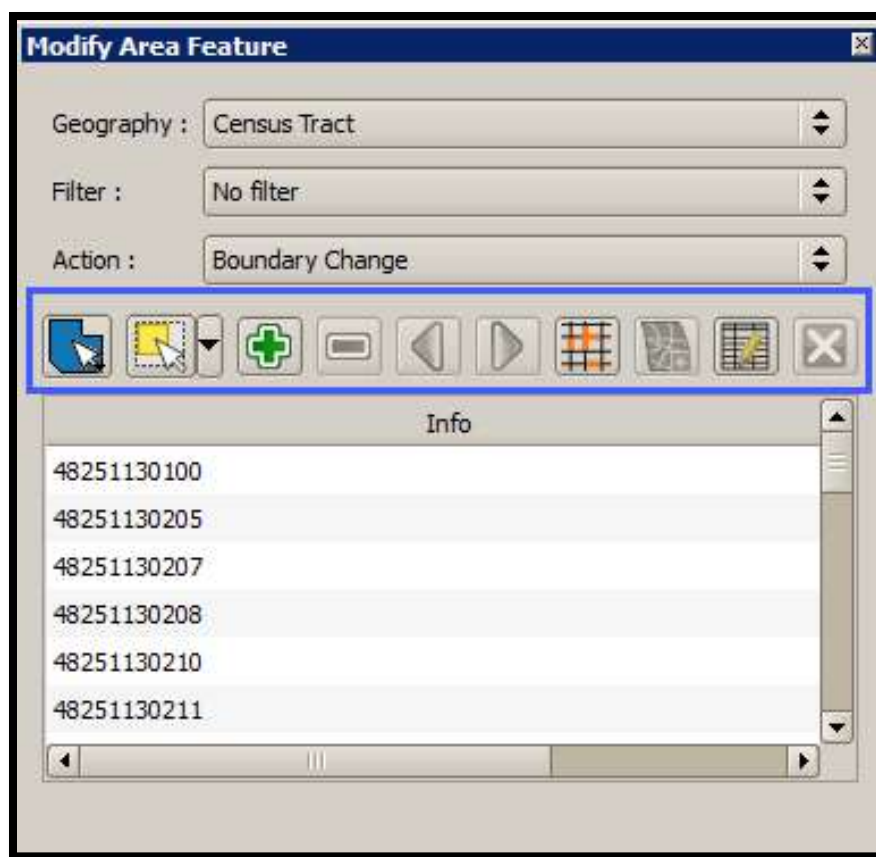














Figure 16. Modify Area Feature Buttons: Census Tract – Boundary Change

Table 19: Modify Area Feature Buttons Detail

Button	Name	Function
	<b>Select Target Area</b>	Allows the participant to select the geographic area (selected from the Geography drop-down menu) by clicking on the map.
	<b>Select Features</b>	Allows the participant to select/deselect layer features in the map window with a single click, dragging the cursor, or drawing graphics on the screen.
	<b>Merge</b>	<p>Select <b>Merge</b> from the <b>Action</b> drop-down menu to activate this button. The <b>Merge</b> button combines multiple geographic entities.</p> <p><b>Note:</b> Be aware this button is very similar in appearance to the <b>Add Area</b> button activated by the <b>Boundary Change Action</b> selection.</p>

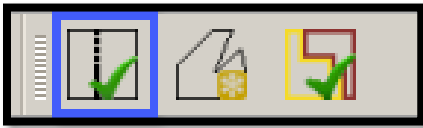
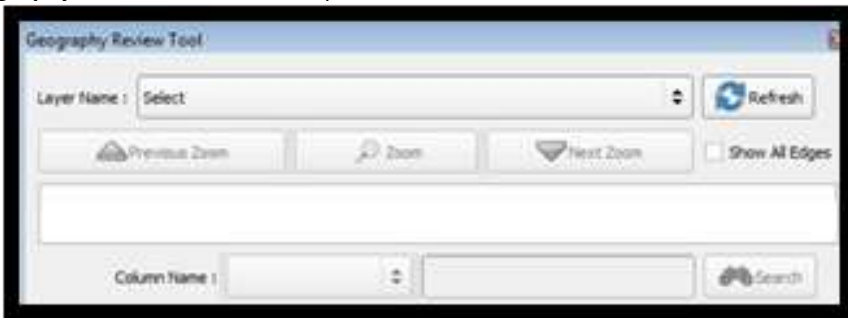
Button	Name	Function
	<b>Add Area</b>	<p>Select <b>Boundary Change</b> from the <b>Action</b> drop-down menu to activate this button. The Add Area button adds smaller geographic entities (faces or block groups) to the geographic area selected on the map. To add more than one face, click on the first face, hold down the Ctrl key, and continue clicking on the other faces until complete.</p> <p><b>Note:</b> Be aware this button is very similar in appearance to the <b>Merge</b> button activated by the <b>Merge Action</b> selection. Locate the definition of faces in <a href="#">Appendix A</a>.</p>
	<b>Split by Block Group or Split by Face (Census Tract) and Split (Block Group)</b>	<p>Once selected, the selected geographic entity is split by the entire block group or individual faces of the geographic area selected on the map.</p> <p><b>Note:</b> Be aware this button activates in both the Census Tract and Block Group geography drop-down menus. With <b>Census Tract</b> geography chosen, select <b>Split by Block Group</b> or <b>Split by Face</b> from the <b>Action</b> drop-down menu to activate this button. From <b>Block Group</b> geography, select <b>Split</b> from the <b>Action</b> drop-down menu.</p>
	<b>Remove Area</b>	<p>Select <b>Boundary Change</b> from the <b>Action</b> drop-down menu. Remove smaller geographic entities (Face and Block Group) from the geographic entity selected on the map by using this button. This button only activates for CDPs.</p>
	<b>Previous Non-contiguous Area</b>	<p>Button activates if the selected statistical geographic area is not contiguous and provides a means to pan back to each noncontiguous piece.</p>
	<b>Next Non-contiguous Area</b>	<p>Button activates if the selected statistical geographic area is not contiguous and provides a means to pan forward to each noncontiguous piece.</p>
	<b>Show / Hide Boundary Eligibility Theme</b>	<p>Displays the features on the map that have questionable boundaries (dashed yellow line) and not acceptable boundaries (dashed red line).</p>
	<b>Add Entity</b>	<p>Select <b>New District</b> from the <b>Action</b> drop-down menu of either CDP or CCD <b>Geography</b> drop-down menu. Add select faces to create a new geographic entity.</p>

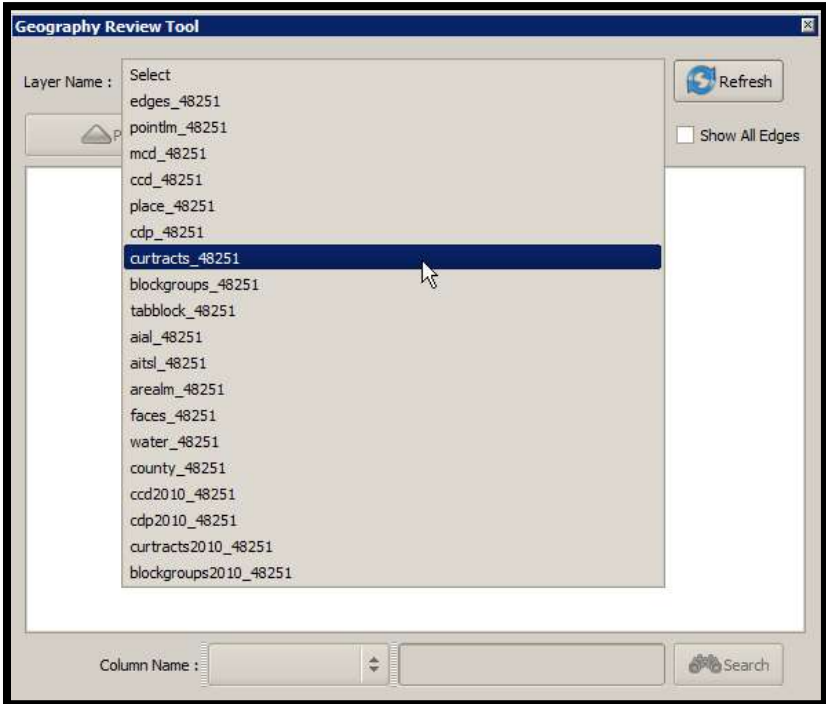
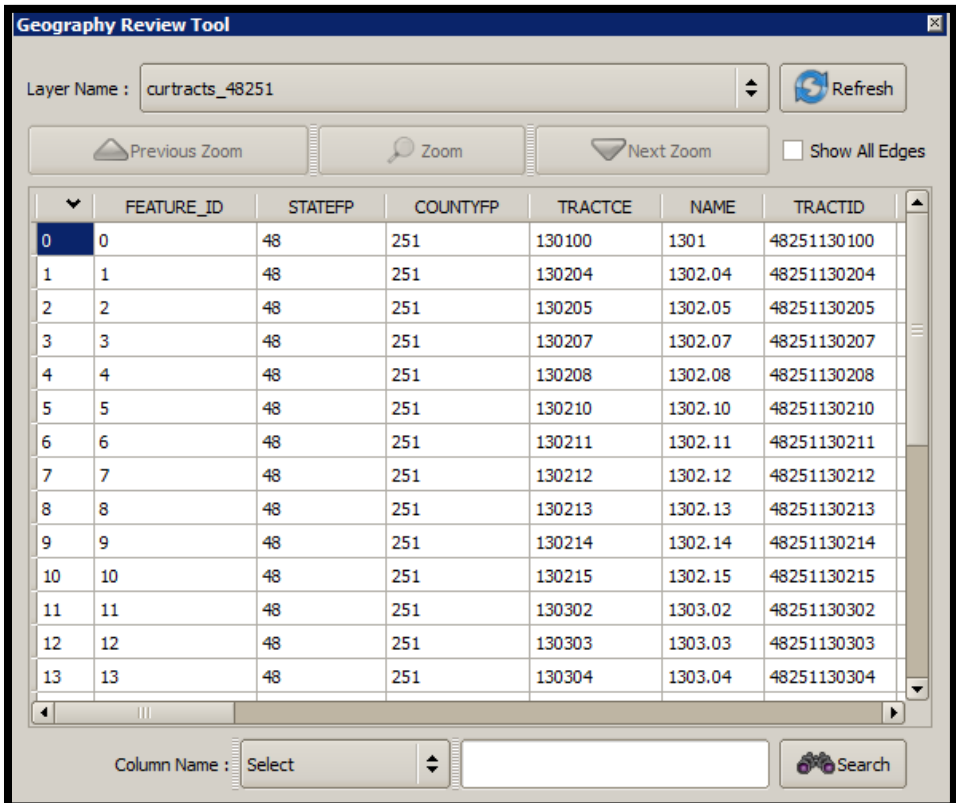
Button	Name	Function
	<b>Change Attributes</b>	Edits the attributes of a selected feature. For census tracts, a participant may edit Tract Code (TRACTCE), Tract Type (TRACTTYP) and Tract Name (SITE_NAME) fields. These fields activate depending on selections and change made in the Change Attributes window. TRACTTYP and SITE_NAME exist for special use census tracts.  Similar to census tracts, for block groups, a participant can edit Block Group Code (BLKGRPCE), Block Group Type (BGTY), and Block Group Name (SITE_NAME).
	<b>Delete Area Feature</b>	Select <b>Boundary Change</b> from the <b>Action</b> drop-down menu. The <b>Delete Area Feature</b> button deletes an area feature. This is used only for CDPs.

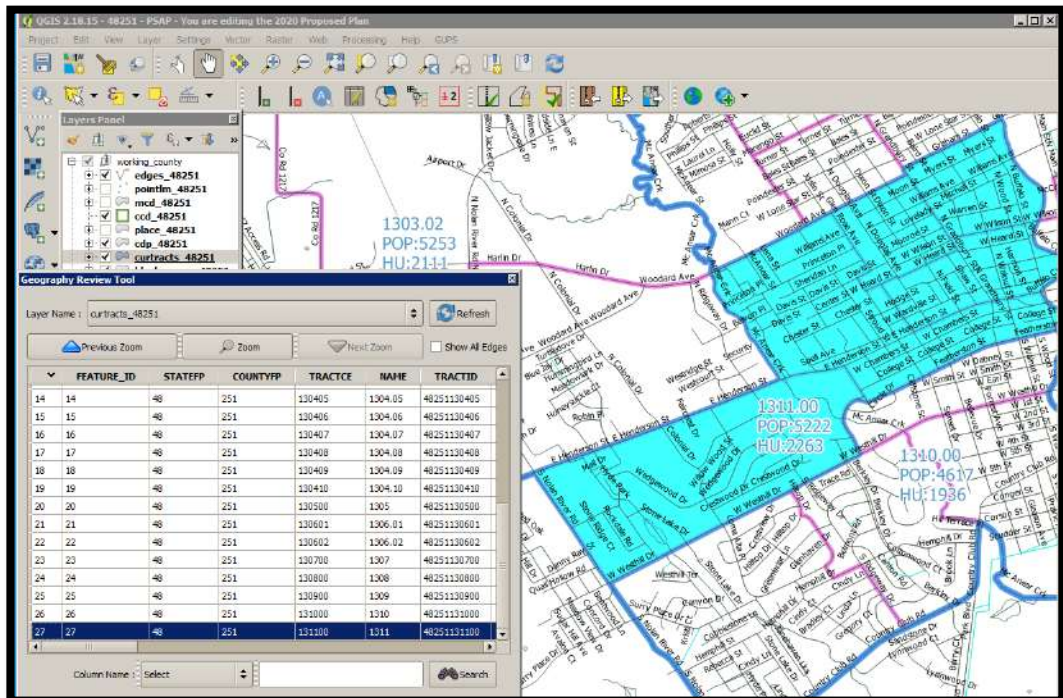
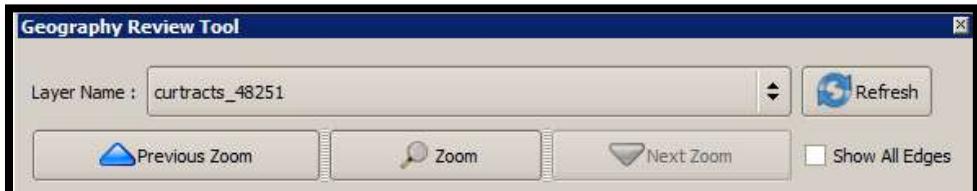
#### 8.4.2.2 Geography Review Tool Button

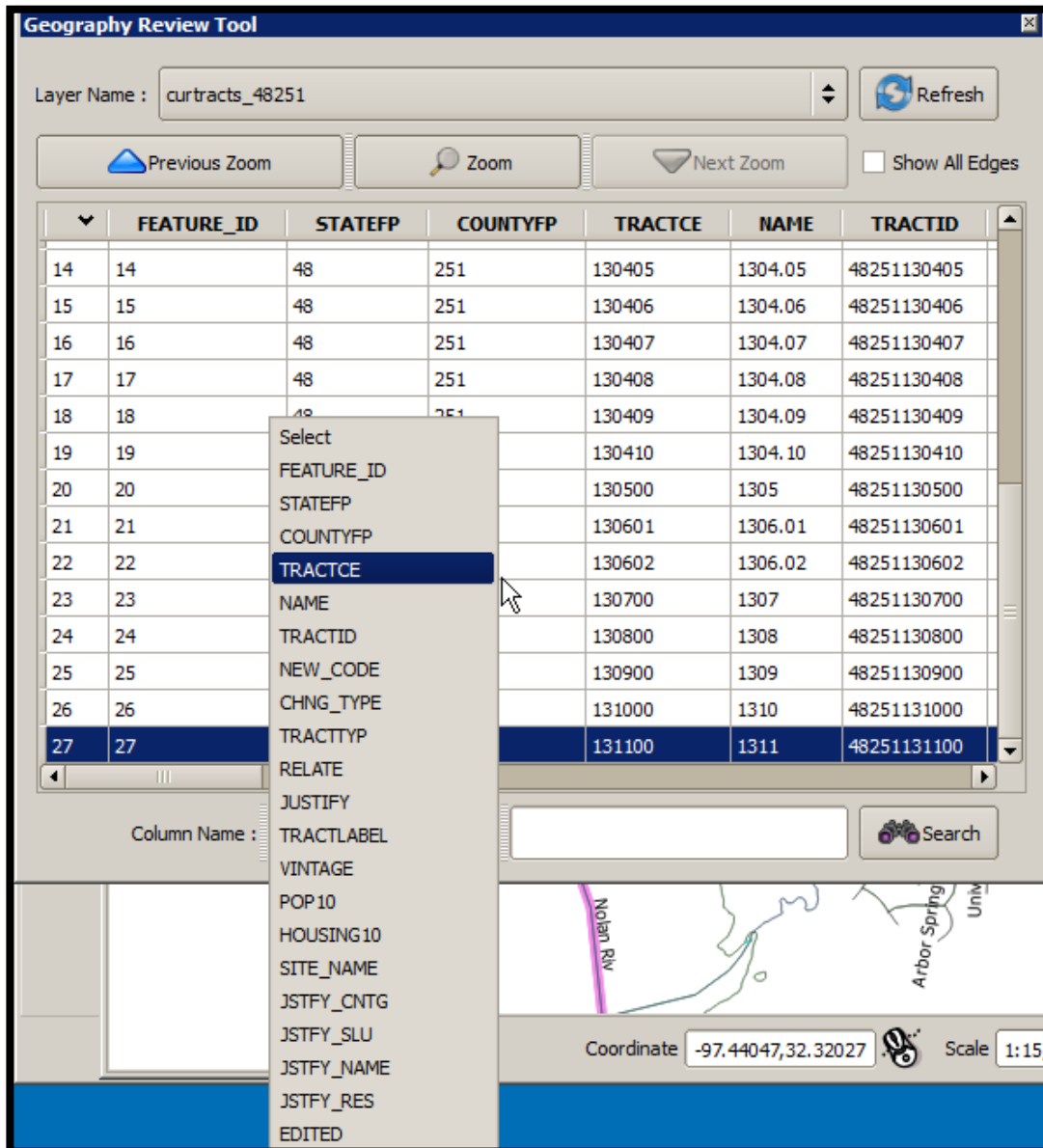
The **Geography Review Tool** button provides access to the attribute tables of some of the layers displayed in the **Table of Contents**. The layers of interest for PSAP are the curtracts, blockgroups, ccd, and cdp layers. It filters map layers based on field values in the attribute table. This tool provides an overall review of the new or deleted entities, or the entities with boundary changes. Participants choosing to conduct their review from the 2020 proposed plan utilize this tool to locate the changes made to census tracts and block groups during the Census Bureau's internal review. [Section 9.1.1](#) discusses that process while [Table 20](#) includes information for executing this button. [Section 10.3](#) provides detailed information and examples.


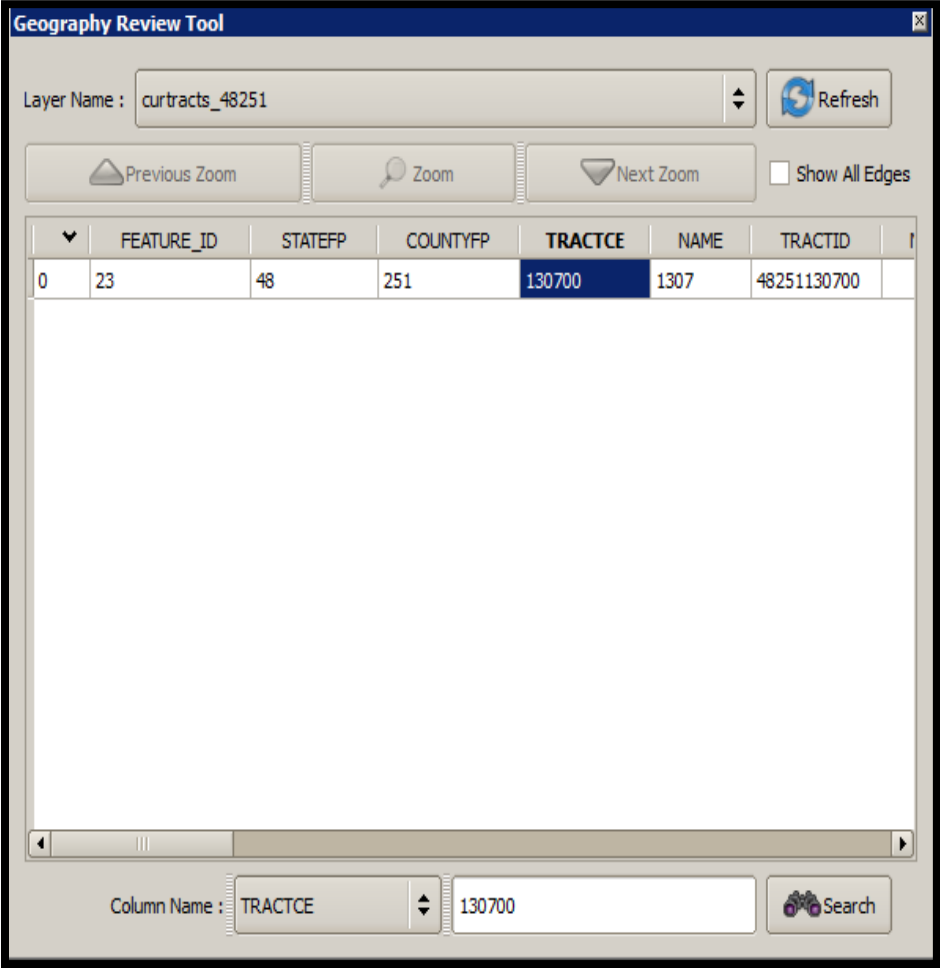
**Table 20: Geography Review Tool Button**

Step	Action and Result
<b>Step 1</b>	<p>Click the <b>Geography Review Tool</b> button.</p>  <p><i>The <b>Geography Review Tool</b> window opens.</i></p> 

Step	Action and Result																																																																																																									
Step 2	<p>Select the layer to review from the <b>Layer Name</b> drop-down menu.</p>  <p>The screenshot shows the 'Geography Review Tool' window. The 'Layer Name' drop-down menu is open, displaying a list of layers. The layer 'curtracts_48251' is highlighted. Other visible layers include 'edges_48251', 'pointlm_48251', 'mcd_48251', 'ccd_48251', 'place_48251', 'cdp_48251', 'blockgroups_48251', 'tabblock_48251', 'aial_48251', 'aitsl_48251', 'arealm_48251', 'faces_48251', 'water_48251', 'county_48251', 'ccd2010_48251', 'cdp2010_48251', 'curtracts2010_48251', and 'blockgroups2010_48251'. The 'Refresh' button is visible in the top right, and the 'Show All Edges' checkbox is unchecked. The 'Column Name' field at the bottom is empty.</p>																																																																																																									
Step 3	<p>After making layer selection, the attribute table for the layer opens, with the attributes for each of the current census tracts.</p>  <p>The screenshot shows the 'Geography Review Tool' window with the attribute table for the 'curtracts_48251' layer open. The table has the following columns: FEATURE_ID, STATEFP, COUNTYFP, TRACTCE, NAME, and TRACTID. The table contains 14 rows of data, indexed from 0 to 13. The 'Layer Name' field now displays 'curtracts_48251'. The 'Previous Zoom', 'Zoom', and 'Next Zoom' buttons are visible above the table. The 'Show All Edges' checkbox remains unchecked. The 'Column Name' field at the bottom is set to 'Select'.</p> <table><thead><tr><th></th><th>FEATURE_ID</th><th>STATEFP</th><th>COUNTYFP</th><th>TRACTCE</th><th>NAME</th><th>TRACTID</th></tr></thead><tbody><tr><td>0</td><td>0</td><td>48</td><td>251</td><td>130100</td><td>1301</td><td>48251130100</td></tr><tr><td>1</td><td>1</td><td>48</td><td>251</td><td>130204</td><td>1302.04</td><td>48251130204</td></tr><tr><td>2</td><td>2</td><td>48</td><td>251</td><td>130205</td><td>1302.05</td><td>48251130205</td></tr><tr><td>3</td><td>3</td><td>48</td><td>251</td><td>130207</td><td>1302.07</td><td>48251130207</td></tr><tr><td>4</td><td>4</td><td>48</td><td>251</td><td>130208</td><td>1302.08</td><td>48251130208</td></tr><tr><td>5</td><td>5</td><td>48</td><td>251</td><td>130210</td><td>1302.10</td><td>48251130210</td></tr><tr><td>6</td><td>6</td><td>48</td><td>251</td><td>130211</td><td>1302.11</td><td>48251130211</td></tr><tr><td>7</td><td>7</td><td>48</td><td>251</td><td>130212</td><td>1302.12</td><td>48251130212</td></tr><tr><td>8</td><td>8</td><td>48</td><td>251</td><td>130213</td><td>1302.13</td><td>48251130213</td></tr><tr><td>9</td><td>9</td><td>48</td><td>251</td><td>130214</td><td>1302.14</td><td>48251130214</td></tr><tr><td>10</td><td>10</td><td>48</td><td>251</td><td>130215</td><td>1302.15</td><td>48251130215</td></tr><tr><td>11</td><td>11</td><td>48</td><td>251</td><td>130302</td><td>1303.02</td><td>48251130302</td></tr><tr><td>12</td><td>12</td><td>48</td><td>251</td><td>130303</td><td>1303.03</td><td>48251130303</td></tr><tr><td>13</td><td>13</td><td>48</td><td>251</td><td>130304</td><td>1303.04</td><td>48251130304</td></tr></tbody></table>		FEATURE_ID	STATEFP	COUNTYFP	TRACTCE	NAME	TRACTID	0	0	48	251	130100	1301	48251130100	1	1	48	251	130204	1302.04	48251130204	2	2	48	251	130205	1302.05	48251130205	3	3	48	251	130207	1302.07	48251130207	4	4	48	251	130208	1302.08	48251130208	5	5	48	251	130210	1302.10	48251130210	6	6	48	251	130211	1302.11	48251130211	7	7	48	251	130212	1302.12	48251130212	8	8	48	251	130213	1302.13	48251130213	9	9	48	251	130214	1302.14	48251130214	10	10	48	251	130215	1302.15	48251130215	11	11	48	251	130302	1303.02	48251130302	12	12	48	251	130303	1303.03	48251130303	13	13	48	251	130304	1303.04	48251130304
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Step	Action and Result																																																																																										
Step 4	<p>To see a census tract on the map, click its row in the attribute table list and then click <b>Zoom</b> or double click the row. <i>The map automatically zooms to the selected census tract.</i></p>  <table border="1"><thead><tr><th>FEATURE_ID</th><th>STATEFP</th><th>COUNTYFP</th><th>TRACTCE</th><th>NAME</th><th>TRACTID</th></tr></thead><tbody><tr><td>14</td><td>48</td><td>251</td><td>130405</td><td>1304.05</td><td>4825130405</td></tr><tr><td>15</td><td>48</td><td>251</td><td>130406</td><td>1304.06</td><td>4825130406</td></tr><tr><td>16</td><td>48</td><td>251</td><td>130407</td><td>1304.07</td><td>4825130407</td></tr><tr><td>17</td><td>48</td><td>251</td><td>130408</td><td>1304.08</td><td>4825130408</td></tr><tr><td>18</td><td>48</td><td>251</td><td>130409</td><td>1304.09</td><td>4825130409</td></tr><tr><td>19</td><td>48</td><td>251</td><td>130410</td><td>1304.10</td><td>4825130410</td></tr><tr><td>20</td><td>48</td><td>251</td><td>130500</td><td>1305</td><td>4825130500</td></tr><tr><td>21</td><td>48</td><td>251</td><td>130601</td><td>1306.01</td><td>4825130601</td></tr><tr><td>22</td><td>48</td><td>251</td><td>130602</td><td>1306.02</td><td>4825130602</td></tr><tr><td>23</td><td>48</td><td>251</td><td>130700</td><td>1307</td><td>4825130700</td></tr><tr><td>24</td><td>48</td><td>251</td><td>130800</td><td>1308</td><td>4825130800</td></tr><tr><td>25</td><td>48</td><td>251</td><td>130900</td><td>1309</td><td>4825130900</td></tr><tr><td>26</td><td>48</td><td>251</td><td>131000</td><td>1310</td><td>4825131000</td></tr><tr><td>27</td><td>48</td><td>251</td><td>131100</td><td>1311</td><td>4825131100</td></tr></tbody></table>	FEATURE_ID	STATEFP	COUNTYFP	TRACTCE	NAME	TRACTID	14	48	251	130405	1304.05	4825130405	15	48	251	130406	1304.06	4825130406	16	48	251	130407	1304.07	4825130407	17	48	251	130408	1304.08	4825130408	18	48	251	130409	1304.09	4825130409	19	48	251	130410	1304.10	4825130410	20	48	251	130500	1305	4825130500	21	48	251	130601	1306.01	4825130601	22	48	251	130602	1306.02	4825130602	23	48	251	130700	1307	4825130700	24	48	251	130800	1308	4825130800	25	48	251	130900	1309	4825130900	26	48	251	131000	1310	4825131000	27	48	251	131100	1311	4825131100
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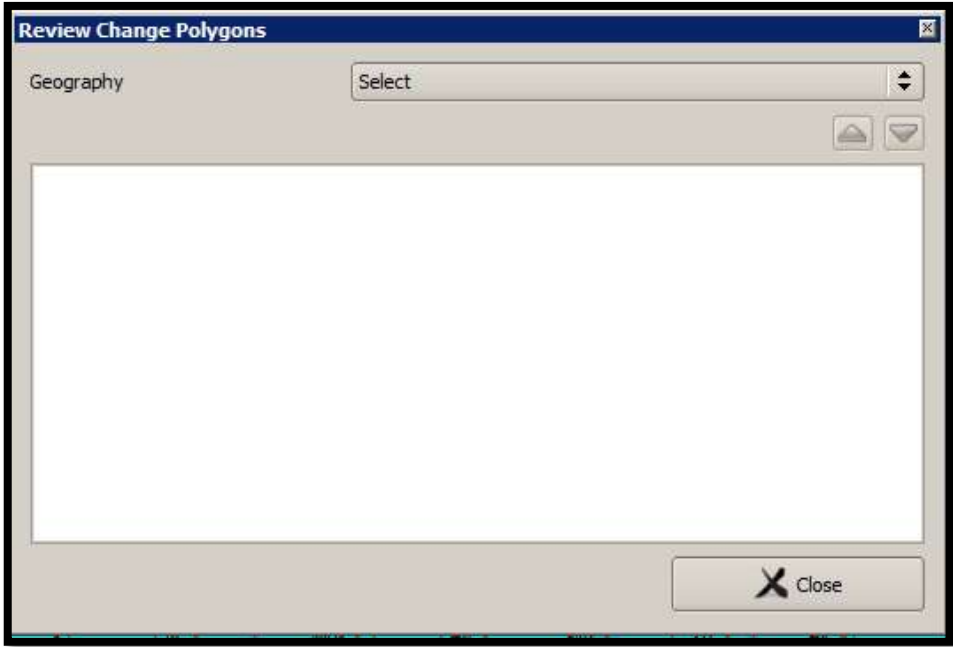
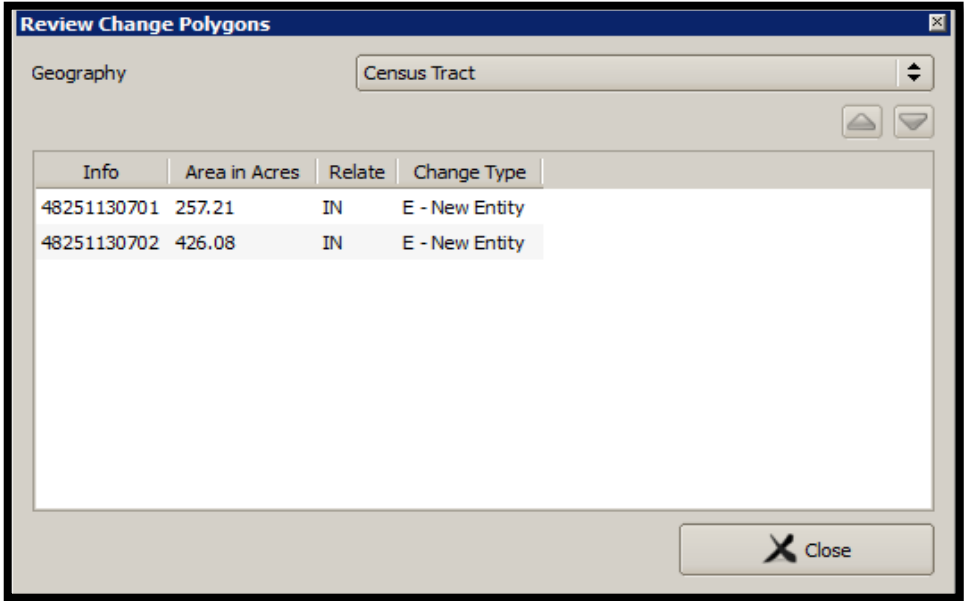
Step	Action and Result
Step 6	<p>Use the <b>Column Name</b> drop-down menu at the bottom of the dialog box to filter the table layers by specific attributes ( i.e., TRACTCE, CHNG_TYPE, etc.). In this example, select <b>TRACTCE</b>.</p> 

Step	Action and Result
<b>Step 7</b>	<p>Once TRACTCE displays in the <b>Column Name</b> field, type in the census tract code in the Search box and then click on the <b>Search</b> button.</p>  <p>This filters the attribute table to display just the one tract.</p> 
<b>Step 8</b>	<p>Selecting the one tract from the attribute table activates the <b>Zoom</b> menu that allows for quick zoom to the selected tract. Clicking the <b>Refresh</b> button restores the attribute table to display all records for the chosen layer name.</p>

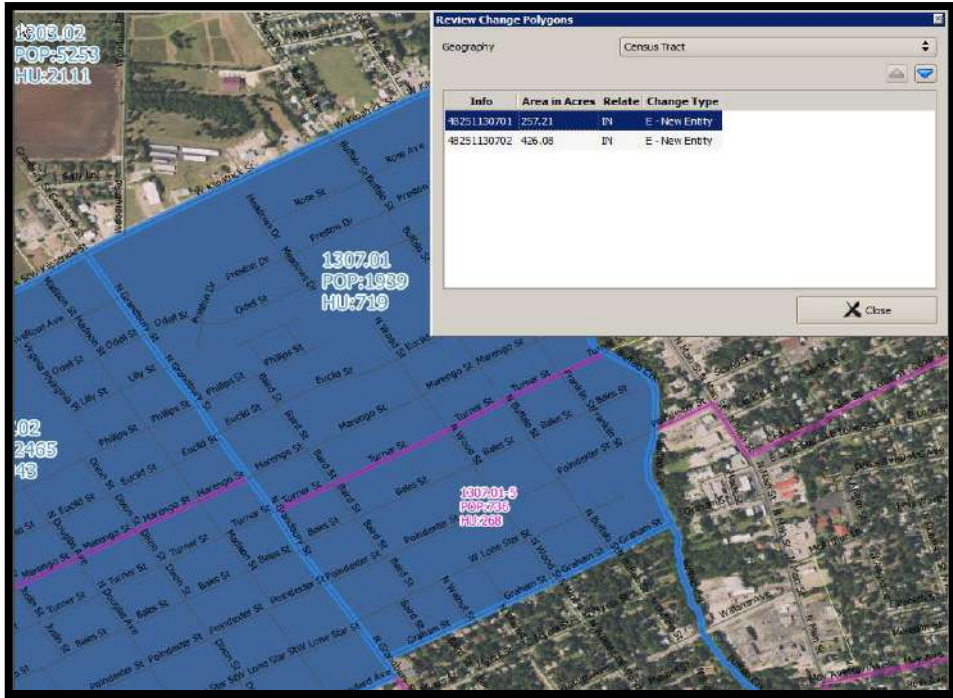
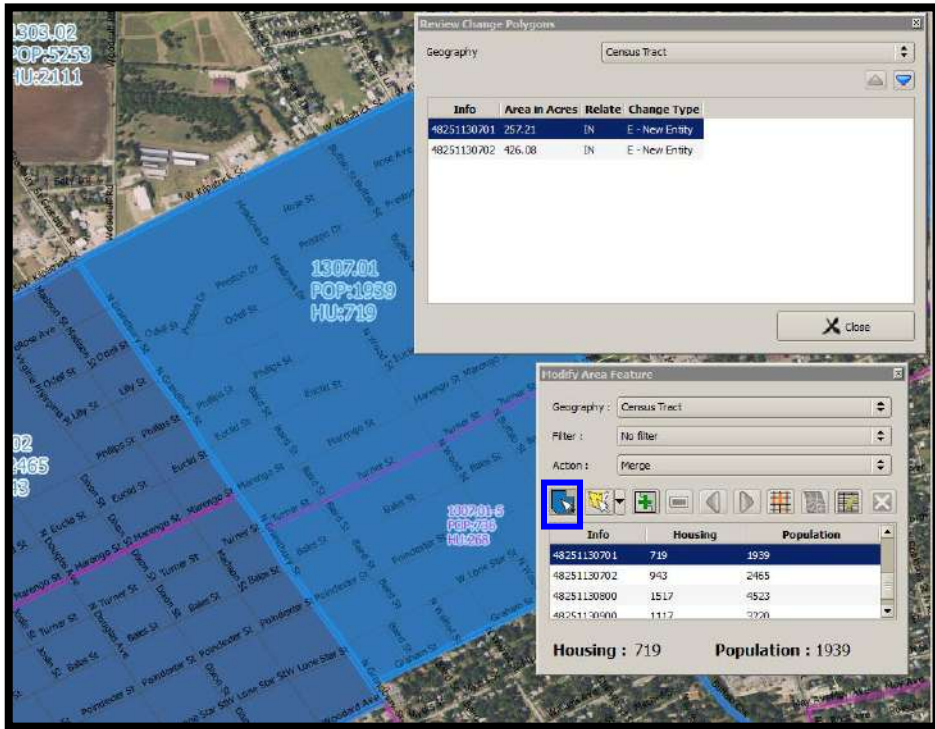
### 8.4.2.3 Review Change Polygons Button

The **Review Change Polygons** button reviews transaction, or change polygons, for census tracts, block groups, CDPs, and CCDs. This tool may be helpful for participants to use as part of their quality check of the work they performed to modify the statistical geographies. The execution of this tool is not required to make a submission to the Census Bureau. Information for executing this button are in [Table 21](#), while [Section 10.2](#) provides detailed information and examples.

**Table 21: Review Change Polygons Button**

Step	Action and Result												
Step 1	<p>Click the <b>Review Change Polygons</b> button.</p> 												
Step 2	<p>The <b>Review Change Polygons</b> window appears.</p> 												
Step 3	<p>Choose the statistical geography to review from the <b>Geography</b> drop-down menu, <i>in this example Census Tract</i>.</p>  <table><tr><th>Info</th><th>Area in Acres</th><th>Relate</th><th>Change Type</th></tr><tr><td>48251130701</td><td>257.21</td><td>IN</td><td>E - New Entity</td></tr><tr><td>48251130702</td><td>426.08</td><td>IN</td><td>E - New Entity</td></tr></table>	Info	Area in Acres	Relate	Change Type	48251130701	257.21	IN	E - New Entity	48251130702	426.08	IN	E - New Entity
Info	Area in Acres	Relate	Change Type										
48251130701	257.21	IN	E - New Entity										
48251130702	426.08	IN	E - New Entity										

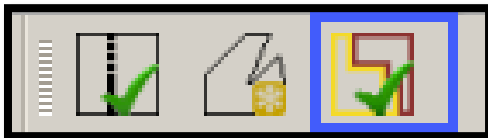
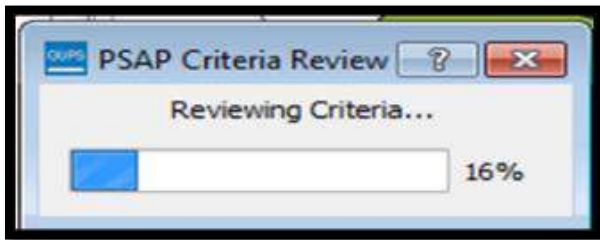
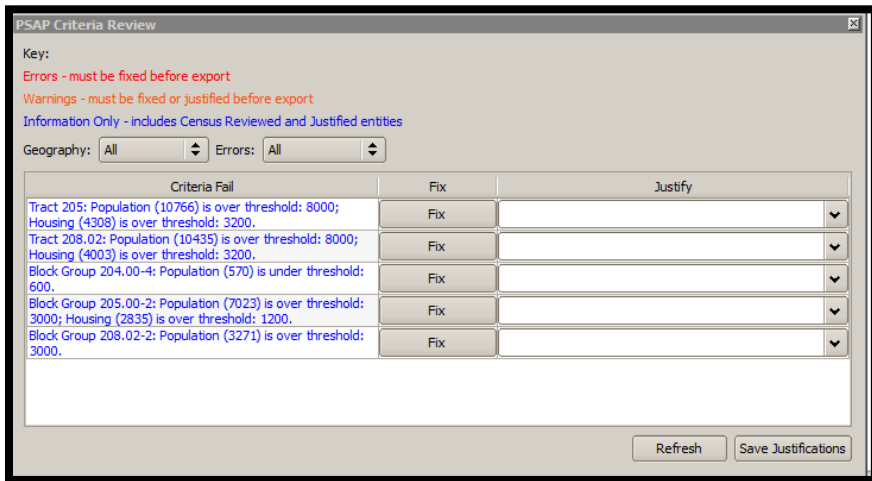
*The **Review Change Polygons** window populates with the geographies to review.*

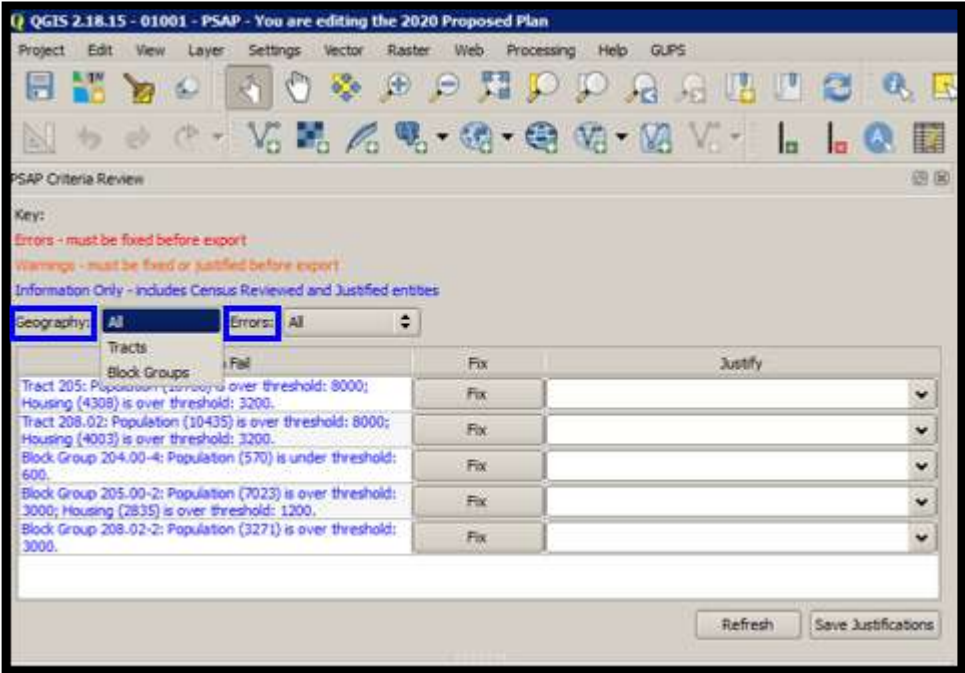
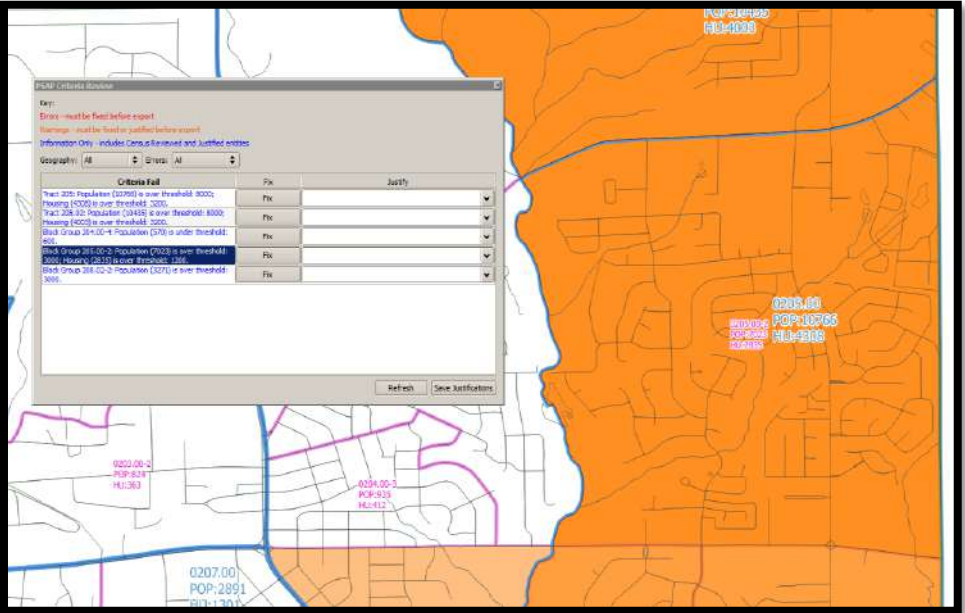
Step	Action and Result															
Step 4	<p>Click on a row in the list. The <b>Map View</b> zooms to the selected entity.</p>  <p>The screenshot shows a map view of a census tract with a blue boundary. A 'Review Change Polygons' dialog box is open, displaying a table of changes:</p> <table><thead><tr><th>Info</th><th>Area in Acres</th><th>Relate</th><th>Change Type</th></tr></thead><tbody><tr><td>48251130701</td><td>257.21</td><td>IN</td><td>E - New Entity</td></tr><tr><td>48251130702</td><td>426.08</td><td>IN</td><td>E - New Entity</td></tr></tbody></table> <p>The map view shows several entities with their respective population and housing counts:</p> <ul style="list-style-type: none"><li>1303.02 POP:5253 HU:2111</li><li>1307.01 POP:1939 HU:719</li><li>02 2465 48</li><li>1307.01-6 POP:2465 HU:428</li></ul>	Info	Area in Acres	Relate	Change Type	48251130701	257.21	IN	E - New Entity	48251130702	426.08	IN	E - New Entity			
Info	Area in Acres	Relate	Change Type													
48251130701	257.21	IN	E - New Entity													
48251130702	426.08	IN	E - New Entity													
Step 5	<p>To correct a change, activate the <b>Modify Area Feature</b> tool and click on the <b>Select Target Area</b> button to highlight the geography to edit. Dependent on the type of geography selected, the <b>Action</b> menus; and therefore the update update potential, vary.</p>  <p>The screenshot shows the same map view as Step 4, but with the 'Modify Area Feature' dialog box open. The dialog box has a 'Geography' dropdown set to 'Census Tract', a 'Filter' dropdown set to 'No filter', and an 'Action' dropdown set to 'Merge'. The 'Select Target Area' button is highlighted. Below the dialog box, a table shows the current data for the selected entity:</p> <table><thead><tr><th>Info</th><th>Housing</th><th>Population</th></tr></thead><tbody><tr><td>48251130701</td><td>719</td><td>1939</td></tr><tr><td>48251130702</td><td>943</td><td>2465</td></tr><tr><td>48251130800</td><td>1517</td><td>4523</td></tr><tr><td>48251130900</td><td>1117</td><td>2720</td></tr></tbody></table> <p>Below the table, the current values are displayed: <b>Housing : 719</b> and <b>Population : 1939</b>.</p> <p><b>Note:</b> These edits modify the entity selected, not the specific change polygon. The change polygon simply provides a record of the action(s) taken on each entity and is not editable.</p>	Info	Housing	Population	48251130701	719	1939	48251130702	943	2465	48251130800	1517	4523	48251130900	1117	2720
Info	Housing	Population														
48251130701	719	1939														
48251130702	943	2465														
48251130800	1517	4523														
48251130900	1117	2720														

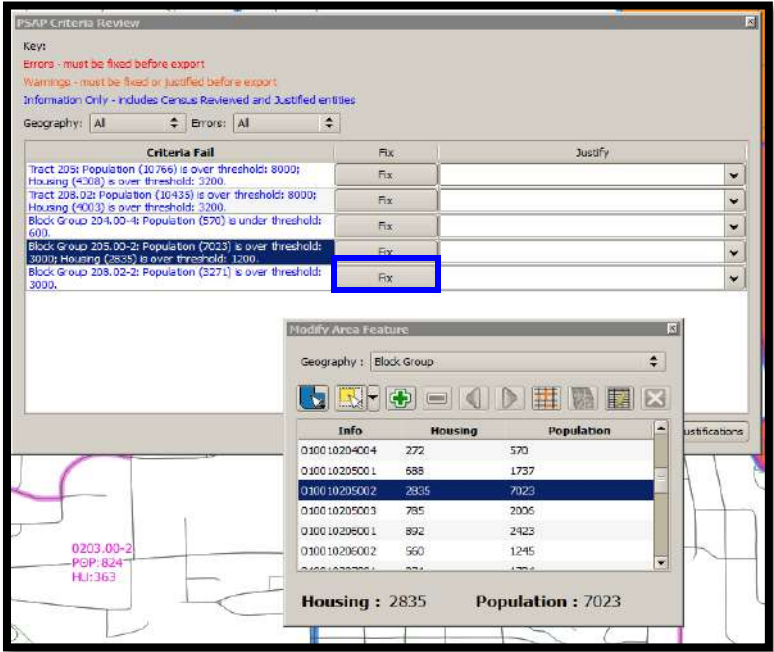
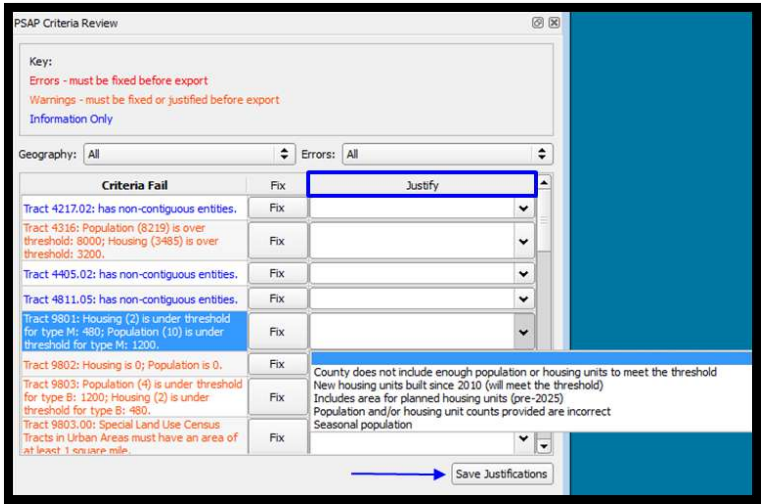
#### 8.4.2.4 PSAP Criteria Review Button

Click the **PSAP Criteria Review** button to generate a list of threshold failures and correct the failures or provide a justification for the failure. Participants must run this required check before creating a data output file for submission to the Census Bureau. **Table 22** includes information for executing this button. **Section 10.1** provides detailed information and examples.

**Table 22: PSAP Criteria Review Button**

Step	Action and Result
Step 1	<p>Click the <b>PSAP Criteria Review</b> button.</p>  <p>A <b>PSAP Criteria Review</b> dialog box opens to inform participants that it is actively reviewing the population and housing unit criteria for all the Geographic entities in the working county.</p>  <p>After the <b>PSAP Criteria Review</b> completes, a comprehensive list of the failed entities (i.e., those entities that do not meet the established population and housing unit criteria) generates. In addition, the list of noncontiguous areas generates if they exist in the working county. As shown in the next image, <i>the errors to fix appear in red color while the warnings to fix or justify appear in orange</i>.</p> 

Step	Action and Result
<p><b>Step 2</b></p>	<p>Select the geography to review from the <b>Geography</b> drop-down menu or leave set to <b>All</b> to display both geographies at once. This list is dependent on the failing geographies in the working county. Participants can also filter the errors by selecting the error type from the <b>Errors</b> drop-down menu.</p> 
<p><b>Step 3</b></p>	<p>Click on an entity in the <b>Criteria Fail</b> list to zoom to that geography on the map.</p> 

Step	Action and Result
<p><b>Step 4</b></p>	<p>Click <b>Fix</b> to open the <b>Modify Area Feature</b> tool. Participants use the actions available in the <b>Modify Feature Area</b> tool to modify and apply changes to the problematic geography or they provide justification for the geography to remain as-is.</p>  <p><b>Note:</b> Clicking the <b>Fix</b> button in the <b>Criteria Fail</b> list selects the same geography in the <b>Modify Area Feature</b> tool.</p>
<p><b>Step 5</b></p>	<p>Click the <b>Justify</b> drop-down menu to see the default justification choices. If none of the choices applies, or if justification that is more detailed is available, participants can type their own justification. Character limit is 150.</p>  <p>Click <b>Save Justifications</b> button to save and remove the failure from the list. A save is necessary after each justification.</p> <p><b>Note:</b> Attempting to perform another <b>Fix</b> before saving the justification invokes a confirmation dialog box that warns participants of the loss of information. Click <b>OK</b> to proceed and lose the justification information or click <b>Cancel</b> to return and save the last justification.</p>

Step	Action and Result
Step 6	<b>Save</b> all changes and execute the <b>PSAP Criteria Review</b> tool again to ensure no failures remain without justification.

#### 8.4.2.5 Import County Zip Button


The **Import County Zip** button imports a zipped PSAP project shared by another user. The file exported for sharing with another participant, described in [Section 8.4.2.6](#) is the file imported with this button. The “DataDirectory.zip” file becomes the working county. This file contains all the layers for the new project and includes the work performed by the other person in the form of “change layers.” Participants use this tool if they intend to have more than one-person review and update the same working county of if the supervisor/manager wants to review all work prior to making a submission to the Census Bureau. The functionality of the **Import Project ZIP file** button mimics the functionality of the information below; it merely presents the start-up process in a different manner, prior to opening a county. [Table 23](#) includes information for executing the button from the PSAP toolbar and shows an image of the **Import Project ZIP file** button.

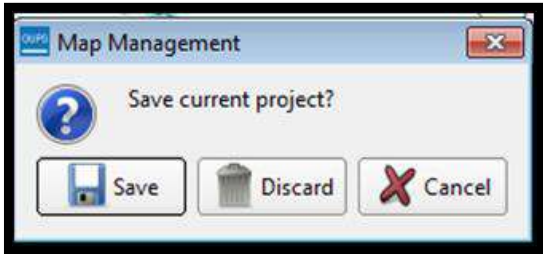
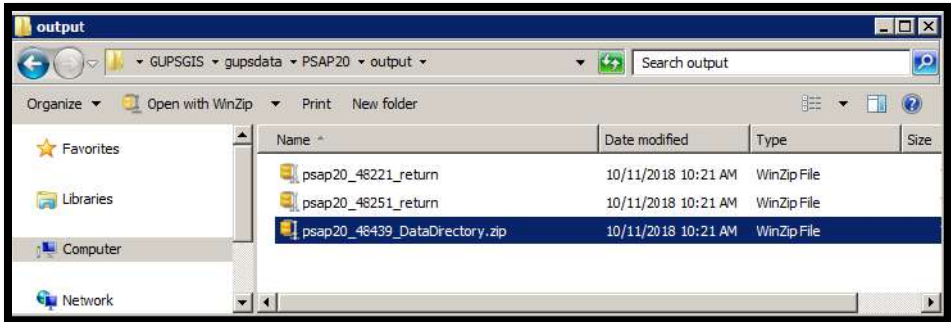

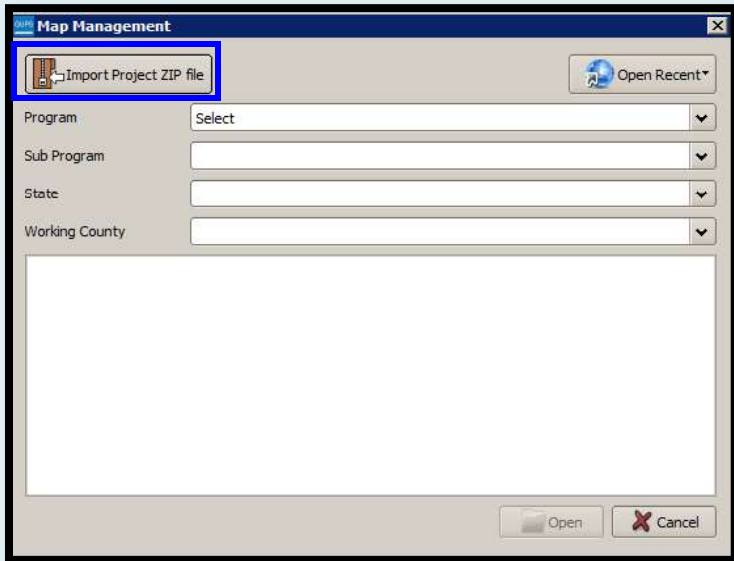
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**IMPORTANT:** Using this tool for a participant’s initial review and update means that work must occur sequentially, not concurrently. Parallel work (i.e., work performed independently by two or more people in the same county) cannot be reconciled in GUPS. As a result, this method of work may not be viable for the initial review and update. A decision on this work method is required prior to beginning work on a county. It likely is most useful for conducting quality checks after a working county is complete, prior to submitting it to the Census Bureau.

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**Table 23: Import County Zip Button**

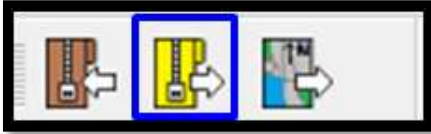

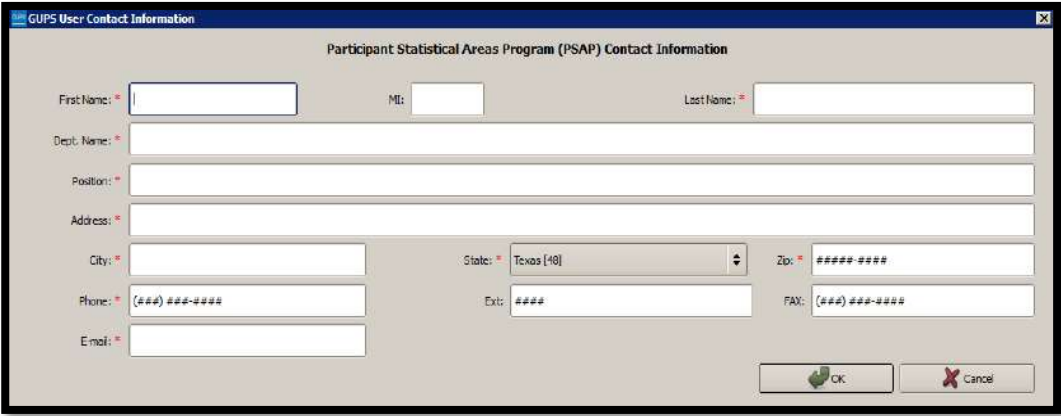
Step	Action and Result
Step 1	<p>Click the <b>Import County Zip</b> button. Because the imported file becomes the working county, the Census Bureau suggests no project be open within GUPS.</p> 



Step	Action and Result
<b>Step 2</b>	<p>If a project is open, a <b>Map Management</b> dialog box opens to either <b>Save</b> or <b>Discard</b> the current project.</p>  <p>After saving or discarding the project, a file explorer window appears allowing participants to navigate to the “output” directory where the .zip file to import is stored.</p>  <p>This is the file created by using the <b>Export to Zip</b> button, <b>Share with Another Participant</b> choice. After importing, participants are able to see the work performed by the previous reviewer and can begin their review and update.</p>
	<p>This image depicts the <b>Import Project ZIP file</b> button in the <b>Map Management</b> window.</p>  <p>As mentioned in the introductory portion of this section, this button mimics the <b>Import County Zip</b> button functionality on the <b>PSAP toolbar</b>. It is available upon initial start-up of a GUPS session. This is the best way to import the shared .zip file rather than using the <b>Import County Zip</b> button from within a working county. Opening by this manner eliminates the Save/Discard window that appears in <b>Step 2</b>.</p>

### 8.4.2.6 Export to Zip Button

The **Export to Zip** button creates a .zip file containing all the required data and shapefiles for submission to the Census Bureau or to share with other reviewers. Participants that intend to make any change to either the 2020 proposed plan or the 2010 geographies must use this button to create the zip file for submission or for sharing. [Table 24](#) includes information for executing this button. [Section 10.4](#) repeats much of the same information, but serves to provide closure to the review and update process at the end of the documentation.

**Table 24: Export to Zip Button**

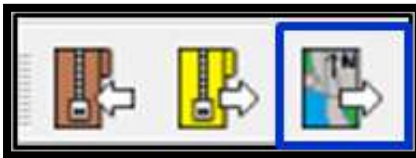
Step	Action and Result
Step 1	<p>Click the <b>Export to Zip</b> button.</p> 
Step 2	<p>A <b>Select Output Type</b> dialog box opens with two options: <b>Export for Census</b> and <b>Share with Another Participant</b>.</p>  <p>To share the final edits/changes with the Census Bureau, choose the <b>Export for Census</b> option. To share with other participants to complete edits on the same county, choose <b>Share with Another Participant</b>. The <b>OK</b> button activates upon selection of either choice. The <b>Cancel</b> button activates with the <b>Select Output Type</b> window.</p>
Step 3	<p>A <b>GUPS User Contact Information</b> window opens with the <b>Export for Census</b> option. It requests contact information from the participant. All fields denoted with a red star are required for submission.</p> 

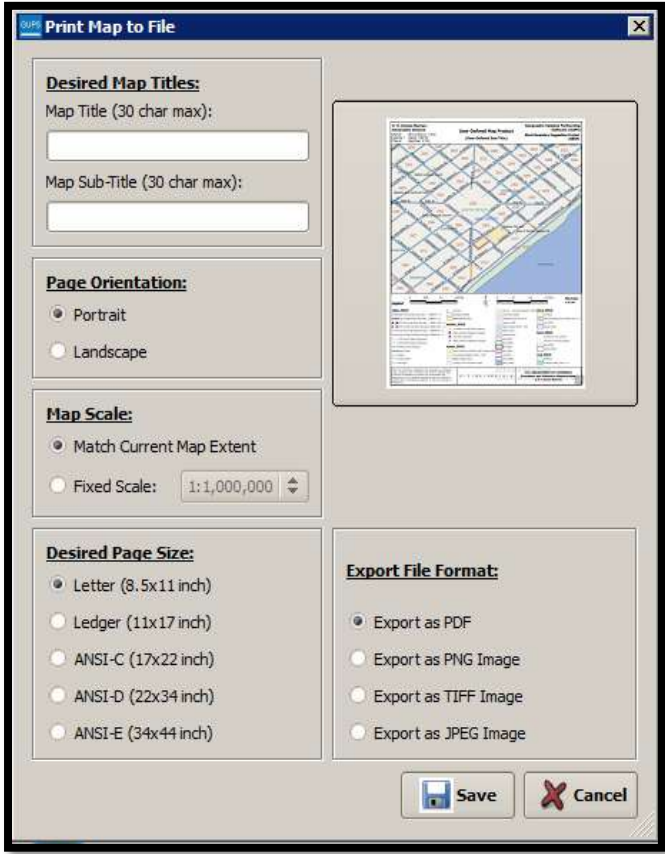
Step	Action and Result
Step 4	<p>Following the completion of the <b>GUPS User Contact Information</b>, the <b>Export to Zip</b> dialog box opens. GUPS generates the .zip file and gives it a name that defines the name of the program (psap20), the working county FIPS ID (48251), and “return” to differentiate the final zip from the zip created for sharing. GUPS automatically saves all exported data within the .zip file in the output directory (e.g., H:\GUPSGIS\gupsdata\PSAP20\output).</p>  <p>For participants choosing to <b>Share with Another Participant</b>, GUPS generates a .zip file, stores it in the output directory, and <i>gives it a name similar to the <b>Export for Census</b> file, but uses “DataDirectory” rather than “return.”</i> All of the project files necessary for GUPS to operate correctly bundle together as a result of using this option, while the ‘Export to Census’ bundles only a few layers necessary for processing. Participants must decide early whether they wish to use this functionality, as it does not allow for a concurrent review of a county. Two or more people cannot conduct independent reviews of the same county because their parallel work cannot be reconciled within GUPS.</p> 

#### 8.4.2.7 Print Map to File Button

The **Print Map to File** button exports and saves a printable map in .pdf, .png, .tif, or jpeg format. [Table 25](#) includes information for executing this button.

**Table 25: Print Map to File Button**

Step	Action and Result
Step 1	<p>Click the <b>Print Map to File</b> button</p> 

Step	Action and Result
Step 2	<p>The <b>Print Map to File</b> dialog box opens.</p>  <p>Enter the <b>Map Title</b> and <b>Map Sub-Title</b> under <b>Desired Map Titles:</b> section.</p> <p>Click the radio button for <b>Portrait</b> or <b>Landscape</b> under <b>Page Orientation:</b> section.</p> <p>Set the map scale to <b>Match Current Map Extent</b> or <b>Fixed Scale</b> in the <b>Map Scale:</b> section.</p> <p>Choose the page size in the <b>Desired Page Size:</b> section and the file format in the <b>Export File Format:</b> section. Click <b>Save</b> to create a map or <b>Cancel</b> to close the window.</p> <p>If choose to <b>Save</b>, a <i>Windows Explorer</i> window opens to specify a file name for the exported map. As with the .zip file export described in the previous section, GUPS automatically saves all exported map files in the same output directory (e.g., H:\GUPSGIS\gupsgisdata\PSAP20\output), but participants can change the destination folder to their preference.</p>

#### 8.4.2.8 Add Imagery Button

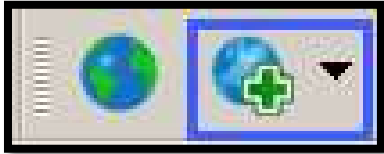

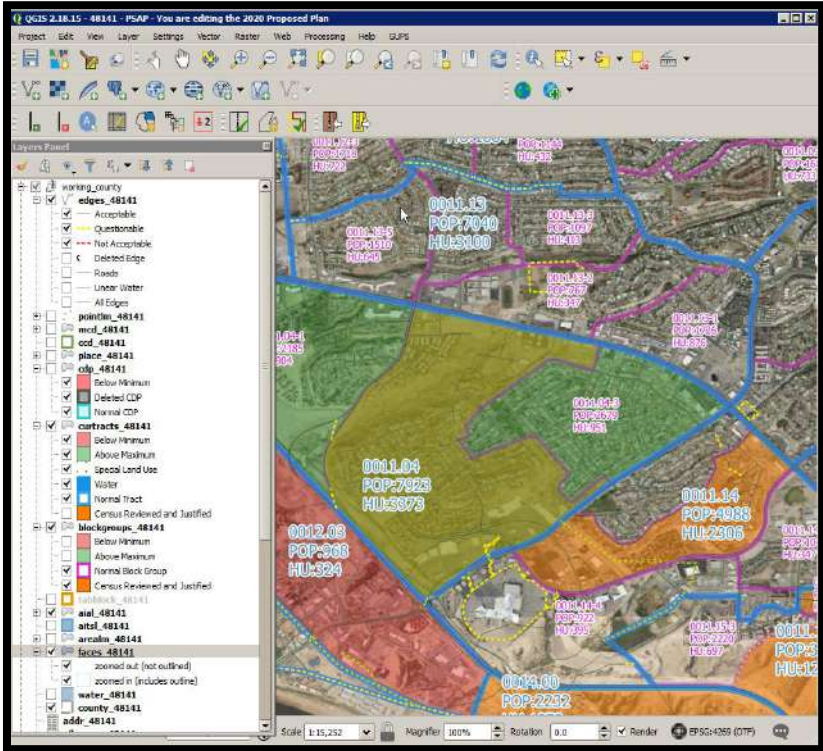
The **Add Imagery** button adds imagery to the GUPS map view. An internet connection is required. [Table 26](#) includes information for executing this button.

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**IMPORTANT:** The Census Bureau strongly encourages participants to utilize this tool in order to visualize the boundaries of the statistical geographies and orient participants to the area under review.

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Table 26: Add Imagery Button

Step	Action and Result
Step 1	<p>Click the <b>Add Imagery</b> button.</p> 
Step 2	<p>Participants choose to add USGS or Esri imagery.</p> 
Step 3	<p>After selecting imagery, it appears in the <b>Map View</b> beneath the displayed geographies.</p>  <p><b>Note:</b> The Census Bureau requests the use of imagery in order to provide the visual reference necessary to orient participants and to initiate any changes to the statistical geographies.</p>










### 8.4.3 Manage Layers Toolbar

The **Manage Layers toolbar**, shown below in [Figure 17](#), supplements the **Add Imagery** button within the **PSAP toolbar**. It offers additional QGIS functionality that allows participants to import their own imagery, geodatabase, web mapping service, or other data layers into the GUPS. [Table 27](#) describes these buttons, but for exact detail on the functionality refer to the QGIS website provided in Part Two.



Figure 17. Manage Layers Toolbar

Table 27: Manage Layers Toolbar Buttons, Names, and Functions/Descriptions

Button	Name	Function / Description
	<b>Add Vector Layer</b>	Click the <b>Add Vector Layer</b> button to add shapefile and geodatabase files to the GUPS project.
	<b>Add Raster Layer</b>	Click the <b>Add Raster Layer</b> button to add raster datasets such as imagery to the GUPS project.
	<b>Add SpatialLite Layer</b>	Click the <b>Add SpatialLite Layer</b> button to add data from a SpatialLite database.
	<b>Add PostGIS Layers</b>	Click the <b>Add PostGIS Layers</b> button to add data from a PostGIS layer, a MSSQL spatial layer, a DB2 spatial layer, or an Oracle spatial layer.
	<b>Add WMS/WMTS Layer</b>	Click the <b>Add WMS/WMTS Layer</b> button to add data from Web Mapping Services (WMS), Web Mapping Tile Services (WMTS), or from ArcGIS MapServer. GUPS supports publicly accessible and secured map services.
	<b>Add WCS Layer</b>	Click the <b>Add WCS Layer</b> button to add data from Web Coverage Services, which provide access to raster data useful for client-side map rendering.
	<b>Add WFS Layer</b>	Click the <b>Add WFS Layer</b> button to add data from Web Feature Services or from ArcGIS FeatureServer.
	<b>Add/Edit Virtual Layer</b>	Click the <b>Add/Edit Virtual Layer</b> button to add or edit a virtual layer. PSAP does not use.
	<b>New Shapefile Layer</b>	Click the <b>New Shapefile Layer</b> button to create a new shapefile layer or new temporary scratch layer. This button is inactive and not useful for PSAP.

GUPS supports vector data in a number of formats, including those supported by the OGR library data provider plugin, such as Esri shapefiles, MapInfo MIF (interchange format), and MapInfo TAB (native format). It also supports PostGIS layers in a PostgreSQL database and SpatialLite layers. Additional data provider plugins provide the support for additional data types (e.g., delimited text).

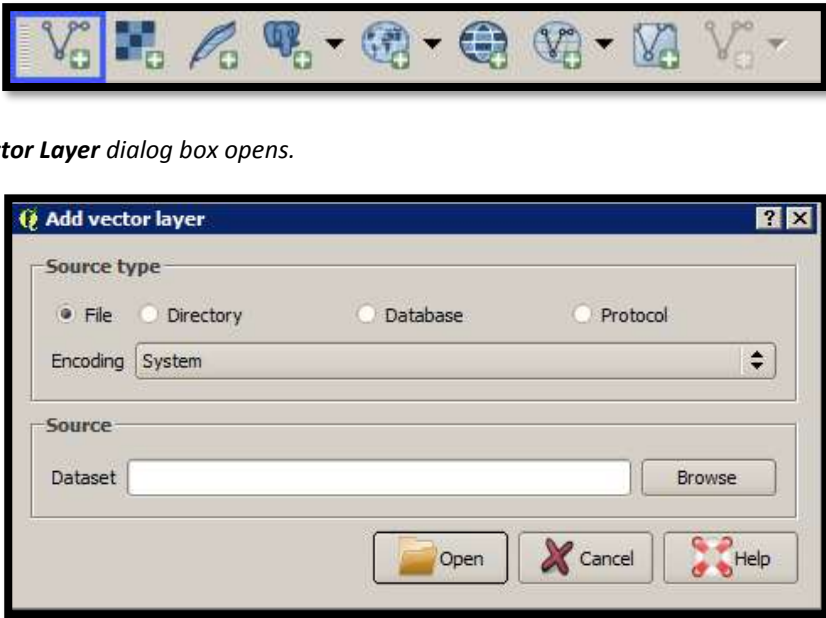
Participants may only upload one participant-provided data layer at a time. Participants with multiple data layers to upload must work with one and close it before loading another. Below are the steps to import the most commonly used data formats.

#### 8.4.3.1 Add Vector Layer Button

The **Add Vector Layer** button described in [Table 28](#) allows participants to add shapefile or geodatabase data layers.

Table 28: Add Vector Layer Button

Step	Action and Result
<b>Step 1</b>	Click the <b>Add Vector Layer</b> button on the Manage Layers toolbar.

Step	Action and Result
	 <p>The <b>Add Vector Layer</b> dialog box opens.</p>
<b>Step 2</b>	In the <b>Encoding</b> drop-down menu, the default value is <b>System</b> . If an error message is received, use the drop-down to select <b>UTF-8</b> .
<b>Step 3</b>	Click the <b>Browse</b> button in the <b>Source</b> section to navigate to the folder and locate the shapefile or geodatabase to select. Click the filename to populate the <b>Dataset</b> field.
<b>Step 4</b>	Click the <b>Open</b> button to add the shapefile/geodatabase to the <b>Table of Contents</b> and to the <b>Map View</b> window and <b>Table of Contents</b> .

#### 8.4.3.2 Add WMS/WMTS Layer Button

The **Add WMS/WMTS Layer** button allows participants to load data from a web mapping service, web mapping tile service, or ArcGIS MapServer. [Table 29](#) describes the steps for using the button below.

**Table 29: Add WMS/WMTS Layer Button**

Step	Action and Result
<b>Step 1</b>	Click the <b>Add WMS/WMTS Layer</b> button on the <b>Manage Layers toolbar</b> . Dependent on the service selected, either the <b>Add Layer(s) from a WM(T)S Server</b> or the <b>Add ArcGIS MapServer Layer</b> dialog box opens. This example depicts adding a WMS.
<b>Step 2</b>	Select the WMS to add. Click the <b>Layers</b> tab and click the <b>New</b> button under the tab. The <b>Create a new WMS Connection</b> dialog box opens.
<b>Step 3</b>	<p>In the <b>Name</b> field, type a name for the web mapping imagery service. In the <b>URL</b> field, type (or copy/paste) the URL for the service. If the service requires a user name and password, type them in the fields provided. Click <b>OK</b>. The service adds to the drop-down menu for web mapping services appearing just below the <b>Labels</b> tab.</p> <p><b>Note:</b> If working inside a firewall, the system may prompt for a user name and password to obtain resources from outside the firewall.</p>
<b>Step 4</b>	Select the imagery service from the drop-down menu. The available layers appear in the <b>ID/Name/Title/Abstract</b> box.

Step	Action and Result
<b>Step 5</b>	<p>Click on the layer to display, then click the <b>Add</b> button to add the service to the <b>Table of Contents</b> and to the <b>Map View</b> window.</p> <p><b>Note:</b> The WMS displays on top of the other layers selected in the <b>Map View</b>, but participants can move it by clicking the WMS layer and, while holding down the mouse button, dragging it to the bottom of the <b>Table of Contents</b>.</p>

If participants do not have access to a web mapping service, have a poor Internet connection, or work under a restrictive firewall, they can still add other types of imagery files to GUPS (e.g., a county or state imagery dataset). The **Add Imagery** button automatically links to the USGS and Esri imagery. [Table 26](#) discusses its use.

#### 8.4.3.3 Add Raster Layer Button

The **Add Raster Layer** button allows participants to add imagery files they may have on their own system. [Table 30](#) covers the few steps necessary to add raster data, i.e., imagery files.

**Table 30: Add Raster Layer Button**

Step	Action and Result
<b>Step 1</b>	Click the <b>Add Raster Layer</b> button on the Manage Layers toolbar. <i>The <b>Open a GDAL Supported Raster Data Source</b> dialog box opens.</i>
<b>Step 2</b>	Navigate to the folder on the computer (or network) where the imagery file is stored.
<b>Step 3</b>	Select the file and click <b>Open</b> . <i>The file loads into the GUPS.</i>

## **PART 3    USING GUPS FOR 2020 CENSUS PSAP**

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This portion of the Respondent Guide includes guidance for the use of GUPS to conduct PSAP review from either the 2020 proposed plan or the 2010 geographies. It provides specific instructions for using the GUPS tools to review and perform updates on the relevant geographies. The methods for reviewing and updating boundaries for census tracts, block groups, and CCDs are the same.

The next three chapters cover the following content:

### **Chapter 9 Review and Update of PSAP Geographies**

- Guidance for the review PSAP geographies.
- Instruction for the update of each of the four standard PSAP geographies.
  - Census tracts.
  - Block groups.
  - Census designated places (CDPs).
  - Census county divisions (CCDs).

### **Chapter 10 Validate Data and Prepare Files for Submission**

- Instructions for using the GUPS review tools to validate data.
  - PSAP Criteria Review Tool.
  - Geography Review Tool.
  - Review Change Polygon Tool.
- Instructions to prepare files for submission.
  - Export .zip files to share.
  - Export .zip files to submit.

### **Chapter 11 Secure Web Incoming Module (SWIM)**

- Instructions to establish account.
- Instructions to submit files.

## CHAPTER 9. REVIEW AND UPDATE OF PSAP GEOGRAPHIES

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The Census Bureau requests participants evaluate land use characteristics and settlement patterns to make informed decisions to resolve any issues with existing statistical geographies. The Census Bureau recommends using two primary datasets within GUPS to perform the PSAP review: the edges layer to determine the type of linear features used for boundaries and aerial imagery to clarify questions on land use and settlement patterns.

A linear feature in the edges layer can be visible, such as a road or a shoreline, or non-visible, such as the legal limits of a city or a parcel property line. Linear features are coded by type in the MAF/TIGER database with an 'MTFCC', a 5-digit alphanumeric string such as 'S1400' (Local Road) or 'H3010' (Stream/River), and are named where applicable (e.g. 'Harley Ave.' or 'Little Bend River'). While review is subjective, normalizing the methods of evaluation and features for consideration help provide a framework for a consistent review and lays the foundation for consistently reviewed geographies.

Mentioned in [Table 26](#), aerial imagery is a background layer that pulls tiles from either the National Agriculture Imagery Program (NAIP) or Esri into the extent of the working county in GUPS. The NAIP dataset originates from the USGS National Map Orthoimagery service. Both USGS and Esri imagery loads dynamically at the viewable scale in the QGIS map canvas. These images are typically one-meter resolution, with some areas having access to sub-foot resolution imagery and a few very remote places (typically interior Alaska) having coarser or even no available imagery. With each pixel in the image corresponding to one square meter of ground surface, determining land use classification through the presence or absence of vegetation, the type and distribution of structures through identification of roofs, and major landmarks such as stadiums is possible. At this resolution, participants are also able to verify placement of visible linear features in the edge layer in most cases.

As important as understanding the GUPS mechanics and the PSAP criteria, the basic concepts of utilizing imagery and understanding the linear features that comprise the statistical geographies is vital to a successful 2020 Census PSAP.

### 9.1 Review of PSAP Geographies

For 2020, the Census Bureau offers two approaches for the review and update of statistical geographies. Participants can review the 2020 proposed plan or they can review the 2010 geographies. The next two sub-sections describe each of these approaches in order for participants to decide which approach best fits their situation.

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**IMPORTANT:** After reviewing the statistical geographies in GUPS and determining the update status of the materials, please complete the postcard (P-300) included with the delineation materials indicating whether changes are forthcoming. The receipt of this postcard assists the Census Bureau with planning for incoming submissions. The Census Bureau requests the return of this postcard within a month of receipt of the materials.

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### 9.1.1 Review from the 2020 Proposed Plan

Though the Census Bureau generated the 2020 proposed plan to alleviate PSAP respondent burden, the 2020 proposed plan also serves as a means to encourage a thorough review and program participation. The two specific geographies, census tracts and block groups, comprise the 2020 proposed plans. No 2020 proposed changes are included for CDPs or CCDs. The Census Bureau anticipates proposed CDP changes will appear in the verification phase materials.

Be aware the Census Bureau used estimates (population and housing) to prepare the 2020 proposed plans. The Census Bureau encourages participants to review the proposed plan closely and update it based on their local knowledge, historical insight of the area(s), and other key factors of which they may only be aware.

To begin a review of the 2020 proposed plan, GUPS functionality facilitates comparison with the 2010 geography using the supplemental reference layers and symbolization when creating the GUPS project (e.g., “2010\_Geographies” layers). Refer to [Appendix E](#) for details on various supplemental sources that can assist participants during 2020 Census PSAP. The [Geography Review Tool](#) Button described in [Section 8.4.2.2](#) (to browse the 2020 layers) and a county level list of entities that have changed significantly from 2010 are leveraged during the review of the 2020 proposed geographies. To use these tools and data, after selecting the 2020 proposed plan when opening the [Modify Area Feature Button](#) detailed in [Section 8.4.2.1](#), the Census Bureau suggests participants:

- Open the list of changed entities (e.g., psap20\_proposed\_changes\_<SSCCC>.xlsx) described in [Section 1.1](#) outside of GUPS. Copy the first value in the TRACTCE field.
- In GUPS, open the **Geography Review Tool** and execute the following four steps:
  - Select “curtracts\_STCOU” layer from the **Layer Name** drop-down menu.
  - Select “TRACTCE” from the **Column Name** drop-down menu. Paste the TRACTCE value copied from the list of changed entities Microsoft Excel file into the search field at the bottom of the screen and click the **Search** button.
  - Highlight the row with the TRACTCE value in the table view.
  - Click **Zoom**.
- Once located, click the Deselect Features from all Layers button from the Attributes toolbar.
- Scroll to the **2010\_Geographies** layer in the **Table of Contents** and expand it by clicking the ‘+’ to the left of the layer name.
- Check the “curtracts2010\_STCOU” to display the 2010 census tract geography.
- Correct any changes made by Census Bureau based on local knowledge and experience by using the **Modify Area Feature** tool and repeat the process for every record with a TRACTCE value and an empty BLKGRPID value.
- Repeat the previous **Geography Review Tool** steps replacing census tracts for the block groups.
  - Copy the first value present in the BLKGRPID field from the list of changed entities file.
  - Select “blockgroups\_STCOU” layer from the **Layer Name** drop-down menu.
  - Select “BLKGRPID” from the **Column Name** drop-down menu. Paste the BLKGRPID value copied from the list of changed entities into the search field at the bottom of the screen and click the **Search** button.
  - Highlight the row with the BLKGRPID in the table view.
  - Click **Zoom**.
- Once located, click the **Deselect Features from all Layers** button from the **Attributes toolbar**.

- Scroll to the **2010\_Geographies** layer in the **Table of Contents** and expand it by clicking the ‘+’ to the left of the layer name.
- Check the “blockgroups2010\_STCOU” to display the 2010 block group geography.
- Correct any changes made by Census Bureau based on local knowledge and experience by using the **Modify Area Feature** tool and repeat the process for every record with a BLKGRPID value. No action is necessary if the change made by the Census Bureau is agreeable to the participant.

With all the changed census tracts and block groups reviewed, perform the following steps:

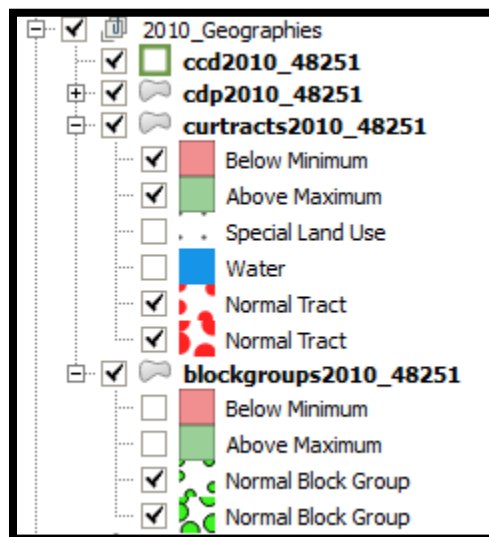
- Execute the **PSAP Criteria Review** tool to see any new threshold failures introduced by the participant updates
  - Begin with the census tracts. Review, edit, or justify the failures that are above the criteria thresholds and then those that are below thresholds. Conduct the same review for the block groups, then review and update the CDPs and finish with the CCDs.
- Execute the **Review Change Polygons** tool to review changes introduced by the participant and make additional adjustments if necessary.
- Execute the **Geography Review Tool** again to provide another overall review of the new or deleted entities, or the entities with boundary changes.

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**IMPORTANT:** If a participant disagrees with a majority of the changes in the 2020 proposed plan or if they want to work fresh from the 2010 data, they **MUST** launch the **GUPS Data Settings** tool described in [Table 14](#) to execute a “Clean by Project” task. GUPS does not overwrite a working county that has begun review in GUPS. The initial launch of the **Modify Area Feature** tool sets the geography selection that cannot be reset without a “clean.”

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In addition to using the list of changed entities to focus a participants’ review, an initial review of the curtracts2010\_STCOU and blockgroups2010\_STCOU layers is possible by visually reviewing the below minimum (red shading) and above maximum (green shading) geographies. “Normal” census tracts and block groups will be absent of shading. See [Figure 18](#) for a visual from the **Table of Contents** in county 48251 for 2010\_Geographies.



**Figure 18. 2010 Geographies in the Table of Contents**

Clearing the threshold failures (above maximum thresholds and below minimum thresholds of each of the statistical geographies) is the minimum required to participate in PSAP. If time permits, the Census Bureau encourages the review of all remaining geographies.

Once satisfied with the geographies, export the files for submission to the Census Bureau. [Chapter 10](#) within this part of the Respondent Guide describes the use of the aforementioned tools.

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**Note:** Participants visualize the threshold failures in the **Map View** and in the **Table of Contents** depicted in red (below threshold criteria) and green (above threshold criteria).

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### 9.1.2 Review from the 2010 Geographies

Beginning the PSAP review from the 2010 geographies instead of the 2020 proposed plan means that participants must resolve all threshold failures that exist within the working county, or provide justifications for not correcting the failures. As with a review and update from the 2020 proposed plan, clearing the threshold failures (above maximum thresholds and below minimum thresholds of each of the statistical geographies) is the minimum required to participate in PSAP. If time permits, a review of all of the statistical geographies is encouraged as a form of validation of the existing statistical geographies.

To begin a review of the 2010 geographies, the Census Bureau suggests participants use the **Modify Area Feature** tool, described in [Section 9.2.1](#), to review and update the statistical geographies that do not meet the required thresholds (whether population and/or housing).

- Begin the review with census tracts. Review and update the failures that are above the criteria thresholds and then those that are below thresholds. Conduct the same review for the block groups, then review and update the CDPs and finish with the CCDs. Use the instructions mentioned in [Section 9.1.1](#) regarding a review of the 2010 layers to assist with locating the failing geographies or simply let the GUPS tools locate the problem geographies.
- Time permitting, review the boundaries of the statistical geographies.
- Execute the same three validation tools described in [Section 9.1.1](#), the PSAP Criteria Review tool, the Review Change Polygons tool, and the Geography Review Tool.
- Once satisfied with the geographies, export the files for submission to the Census Bureau.

[Section 9.2](#) details the various steps necessary for updating the four standard statistical geographies.

## 9.2 Update of PSAP Geographies

Once the decision on which version of geography to review is made, the update process can begin. The content in this section is prepared and presented from the perspective of making changes, regardless of the source of the geography. There may be some variance on functionality and guidance dependent on the source of the geography under review; i.e., review of 2020 proposed plan vs. review of 2010 geographies. Focus on the function of the tool, not the version of geography used to apply the change.

Although this section of the guide focuses on updating statistical geographies to meet criteria thresholds, there are some scenarios where it is better to maintain the existing geography regardless of any changes that may have occurred since the last decennial census. Some situations where this may be appropriate include the following:

- Existing special land use areas.
- Areas of seasonal or vacation housing (usually with skewed population and housing ratios).
- Ultra-high density urban areas with the inability for further splitting.
- Underlying problem with legal boundaries used as statistical boundaries.

### 9.2.1 Modify Area Feature Tool

The **Modify Area Feature** tool introduced in [Section 8.4.2.1](#) enables participants to apply a search filter to each PSAP geography to locate the entities that do not meet specified criteria such as below minimum, above maximum, water, special land use, and AIR/ORTL/Hawaiian Home Lands (HHL). It enables participants to perform specified actions such as merge, boundary change and split to entities to meet criteria and thresholds.

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**IMPORTANT:** The Modify Area Feature tool is the main tool participants use to make changes to the statistical geographies. All of the upcoming sections in this chapter reference use of this tool.

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**Table 31** summarizes the different actions that the GUPS participant will be able to apply to each of the geographies as well as the filter options and definitions of the population and housing unit criteria.

**Table 31: Modify Area Feature Actions by Statistical Geography**

Geography	Action	Filter Options	Population and Housing Units Criteria	Change Types
<b>Census tract</b>	Merge, Boundary Change, Split by Block Group, Split by Face, and Change Attributes.	No filter, Below Minimum, Above Maximum, Water, Special Land Use	Census tract is BELOW the minimum population (<1,200) OR housing unit (< 480) threshold. Census tract is ABOVE the maximum population (> 8,000) or housing unit (> 3,200) threshold.	<b>M</b> for Merge, <b>B</b> for Boundary Change, <b>E</b> for Split, and <b>G</b> for Attribute Change. These codes manifest most notably in the <b>Review Change Polygons</b> tool.
<b>Block group</b>	Merge, Boundary Change, Split, and Change Attributes.	No filter, Below Minimum, Above Maximum	Block group is BELOW the minimum population (<600) OR housing unit (< 240) threshold. Block group is ABOVE the maximum population (> 3,000) or housing unit (> 1,200) threshold.	<b>M</b> for Merge, <b>B</b> for Boundary Change, <b>E</b> for Split, and <b>G</b> for Attribute Change. These codes manifest most notably in the <b>Review Change Polygons</b> tool.

Geography	Action	Filter Options	Population and Housing Units Criteria	Change Types
<b>Census designated place (CDP)</b>	Boundary Change, New District, and Change Attributes.	No filter, Below Minimum	None, but must contain some population, housing units, or both.	<b>B</b> for Boundary Change, <b>E</b> for New District (CDP), <b>G</b> for Attribute Change, and <b>X</b> for Deleted CDP. These codes manifest most notably in the <b>Review Change Polygons</b> tool.
<b>Census county division (CCD)</b>	Merge, Boundary Change, New District, and Change Attributes.	The Filter option section does not exist for CCDs	None, but since comprised of census tracts the housing and population totals mimic those of that geography.	<b>M</b> for Merge, <b>B</b> for Boundary Change, <b>E</b> for New District (CCD), and <b>G</b> for Attribute Change. These codes manifest most notably in the <b>Review Change Polygons</b> tool.

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**Note:** The **Change Attributes** choice is not within the **Action** drop-down menu, but appears within the **Modify Area Feature** tool window above the **Information** section after a participant selects the **Geography** and **Action**.

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## 9.3 Census Tract Update Instructions

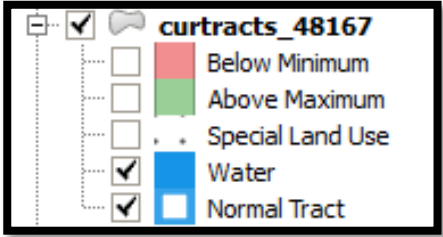

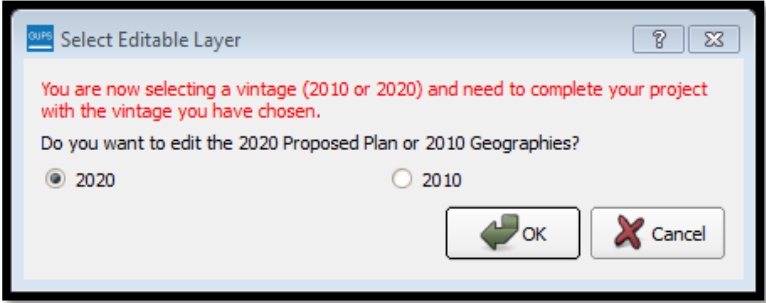
A century of census tract use, along with the ACS and the averaging of sample data for tracts over a five-year span, has shown that continuity and comparability in tracts and their boundaries over time are of considerable importance to data users. Pursuant to this goal, the Census Bureau requests that where a census tract must be updated, for example to meet the minimum or maximum population or housing unit thresholds, that the outer boundaries of the tract not be changed, but rather that a tract be split into two or more tracts, or merged with an adjacent tract. Over time, the Census Bureau developed a set of standards to guide the establishment and revision of census tracts. These practices and rules promote census tract consistency nationwide, and serve to meet local needs for small-area data.

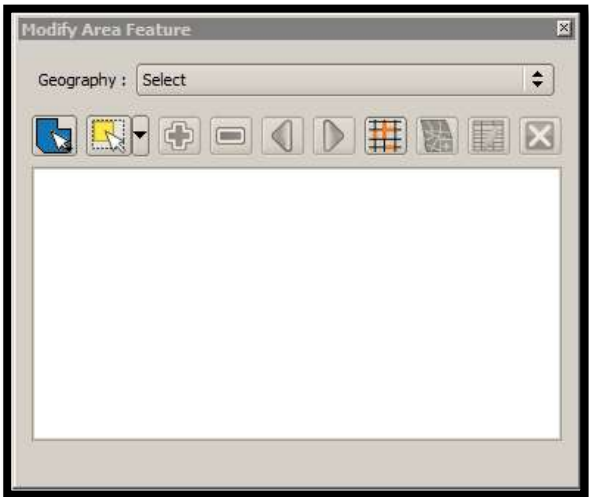
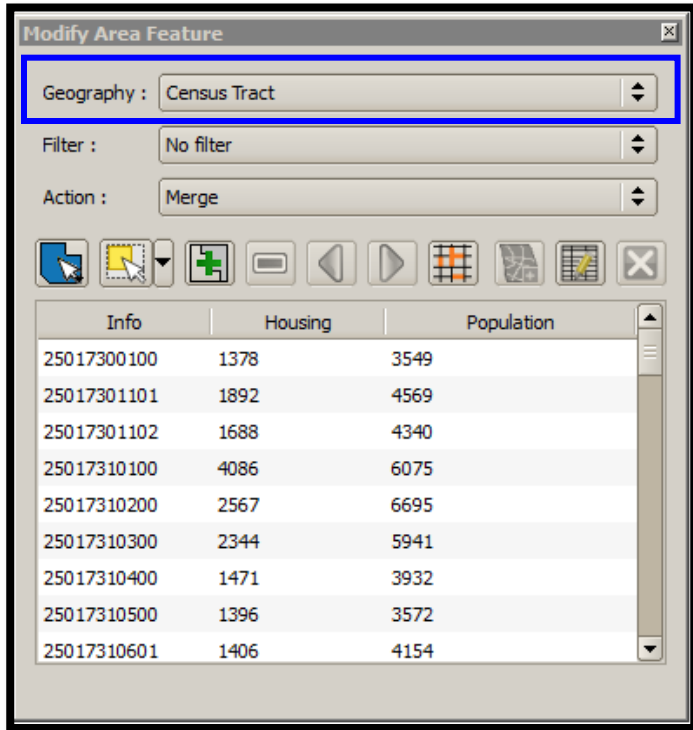
For 2020 Census PSAP, participants can split census tracts, either by using whole block groups or by using individual faces (areas). They can merge census tracts and change census tract boundaries, where the boundary has become errant. The Census Bureau discourages drastic changes to tract boundaries (that is, “retracting”), except in specified circumstances, which the Census Bureau will review on a case-by-case basis. It is not the recommended to modify the external boundary of a census tract to resolve a threshold problem.

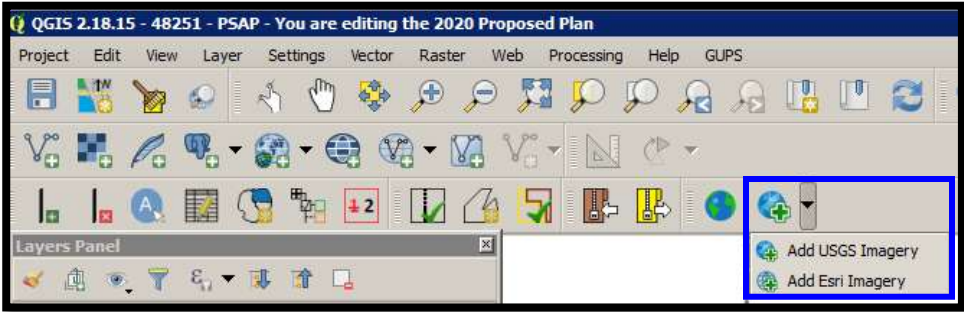
### 9.3.1 Select Census Tracts

Participants can change and modify census tracts, which modifies block groups automatically. Steps to select census tracts are included in [Table 32](#).

**Table 32: Select Census Tracts**

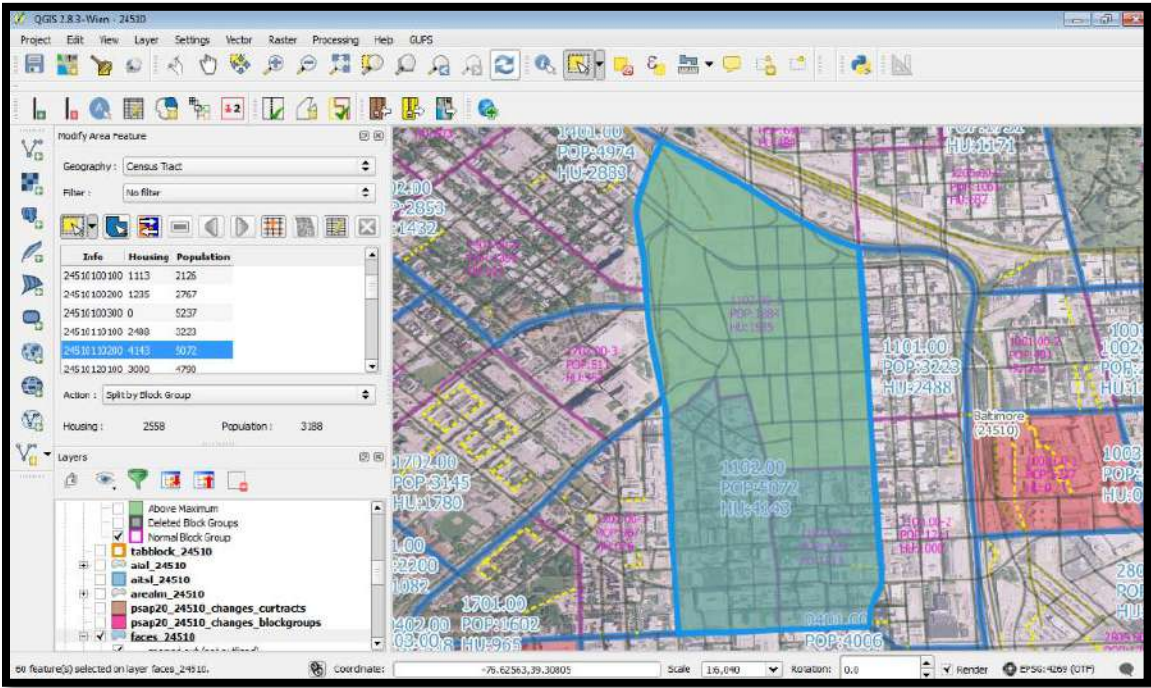
Step	Action and Result
<b>Step 1</b>	Download and review the data as described in <a href="#">Section 7.2, Open GUPS and Start a New Project</a> .
<b>Step 2</b>	<p>Once loaded, GUPS displays all the data layers on the <b>Map View</b> formatted with color, style and labels. For this example, the “curtracts” is the Census Tract layer, has five different categories: Below Minimum and Above Maximum (both based on the total population and number of housing units); Special Land Use; Water; and Normal Tract.</p>  <p>GUPS uses assorted colors to classify the census tracts by housing units and population counts. The red fill indicates census tracts below minimum housing units and population counts. The green fill indicates census tracts above the maximum thresholds. The census tracts with no fill are “Normal Tracts” within the thresholds desired by the PSAP program.</p> <p>The entities grouped under Below Minimum and Above Maximum category require local knowledge of the land use, housing units’ type and population characteristics. Participants are required to further review and either apply the necessary actions to change entities using the Census requirements and guidelines. If no action is applied, participants must provide a Justification to maintain the entity.</p>
<b>Step 3</b>	<p>Click the <b>Modify Area Feature</b> button to start editing the layers within the selected county.</p> 
<b>Step 4</b>	<p>The <b>Select Editable Layers</b> window appears to choose the vintage to edit. The 2020 vintage is stored in the 2020 Proposed Plan. The 2010 vintage is stored in the 2010 geographies. Select the vintage radio button and then click <b>OK</b> button.</p>  <p><b>Note:</b> This action occurs with the initial launch of the <b>Modify Area Feature</b> tool in the working county. This menu does not reappear with subsequent launch of the tool.</p>

Step	Action and Result																														
Step 5	<p>The <b>Modify Area Feature</b> dialog box displays in the center of the screen.</p>  <p>The Census Bureau suggests participants move the <b>Modify Area Feature</b> window to the upper left corner of the <b>Map View</b>. Moving the window allows the participant to have a full view of the map.</p>																														
Step 6	<p>Within the <b>Modify Area Feature</b> window, click the <b>Geography</b> drop-down menu to select <b>Census Tract</b>.</p>  <table><thead><tr><th>Info</th><th>Housing</th><th>Population</th></tr></thead><tbody><tr><td>25017300100</td><td>1378</td><td>3549</td></tr><tr><td>25017301101</td><td>1892</td><td>4569</td></tr><tr><td>25017301102</td><td>1688</td><td>4340</td></tr><tr><td>25017310100</td><td>4086</td><td>6075</td></tr><tr><td>25017310200</td><td>2567</td><td>6695</td></tr><tr><td>25017310300</td><td>2344</td><td>5941</td></tr><tr><td>25017310400</td><td>1471</td><td>3932</td></tr><tr><td>25017310500</td><td>1396</td><td>3572</td></tr><tr><td>25017310601</td><td>1406</td><td>4154</td></tr></tbody></table> <p>Regardless if participants selected 2020 vintage or 2010 vintage as the editable layer they should start reviewing and editing first, the Census Tracts layer with above maximum population counts or housing units. Second, the Census Tracts layer with below minimum population counts or housing units. Third, the Block Groups layer with above maximum population counts or housing units. Fourth, the Block Groups layer with below minimum population counts or housing units. Then the participants can move to reviewing the CDPs and the CCDs.</p>	Info	Housing	Population	25017300100	1378	3549	25017301101	1892	4569	25017301102	1688	4340	25017310100	4086	6075	25017310200	2567	6695	25017310300	2344	5941	25017310400	1471	3932	25017310500	1396	3572	25017310601	1406	4154
Info	Housing	Population																													
25017300100	1378	3549																													
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25017310400	1471	3932																													
25017310500	1396	3572																													
25017310601	1406	4154																													

Step	Action and Result
Step 7	<p>As noted earlier in <a href="#">Section 8.4.2.8</a> , the Census Bureau strongly encourages the use of imagery to review and update the geographies. To enable imagery, click the <b>Add Imagery</b> button and choose the imagery source to display in the <b>Map View</b>.</p>  <p>Once selected the imagery displays in the <b>Map View</b>.</p>

### 9.3.2 Split Census Tracts by Block Group

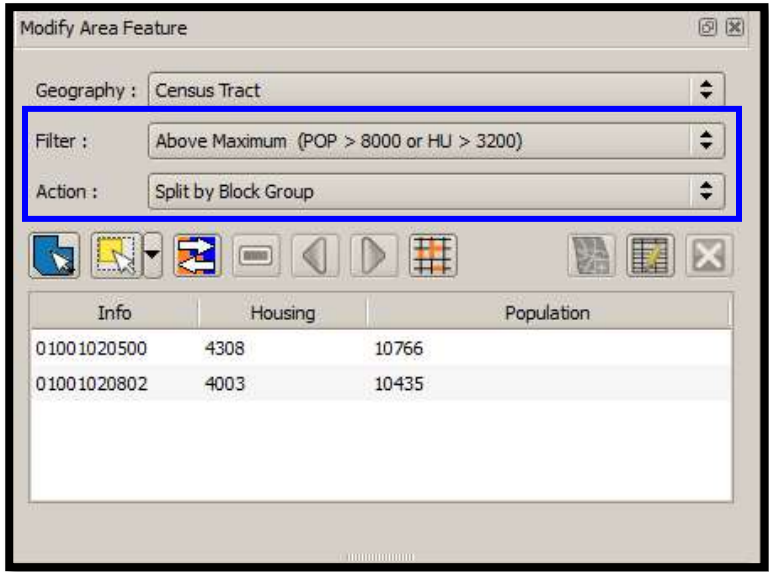
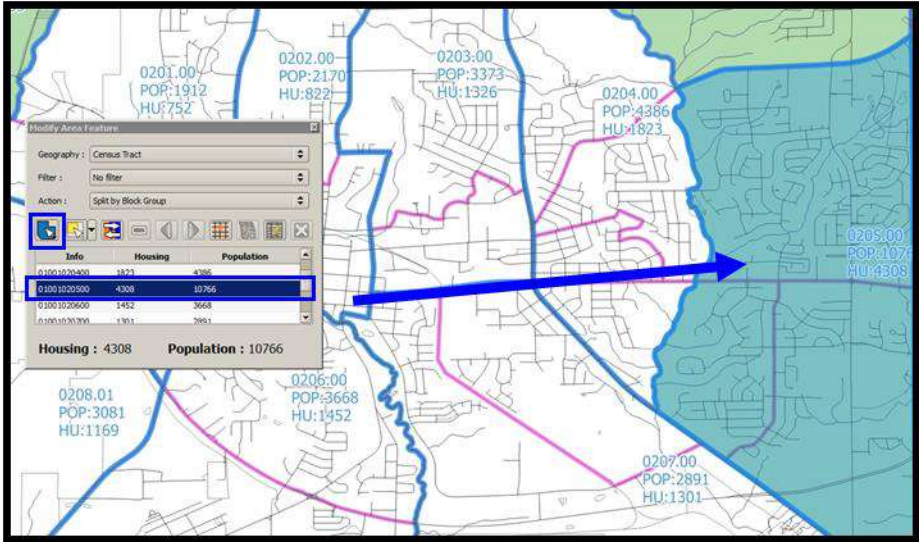
To resolve the census tracts above the maximum threshold, participants can split census tracts by block group within the failing census tract. Splitting by block group is the first preference for splitting a census tract because it retains the boundaries of the new tract on features already in use for statistical geographies (block groups). See [Figure 19](#) for an example that depicts three total block groups, one split from the other two to form a new census tract.

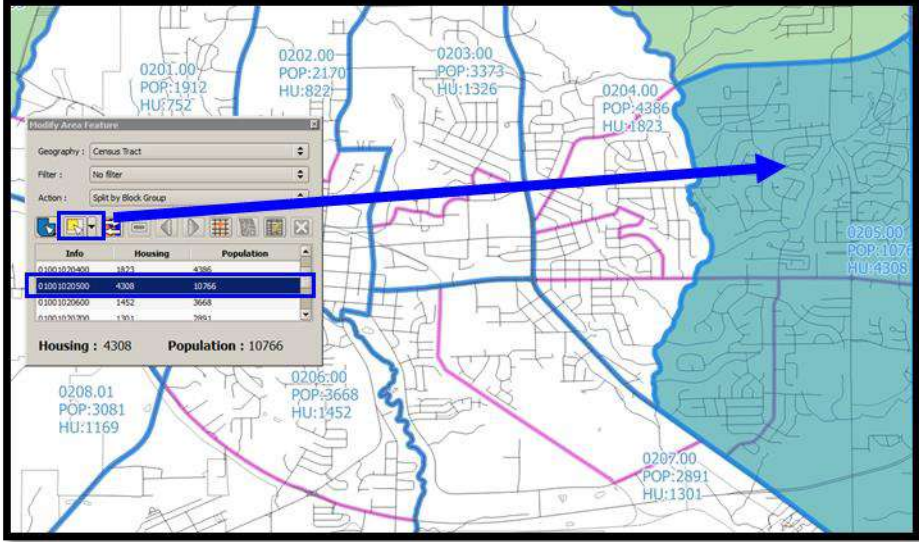

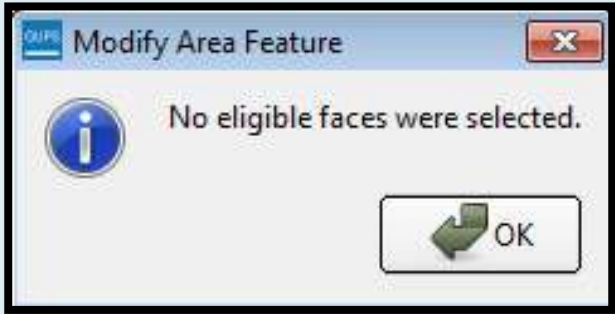


**Figure 19. Splitting a Census Tract by Block Group Example**

[Table 33](#) explains the steps to split a census tract by block group(s).

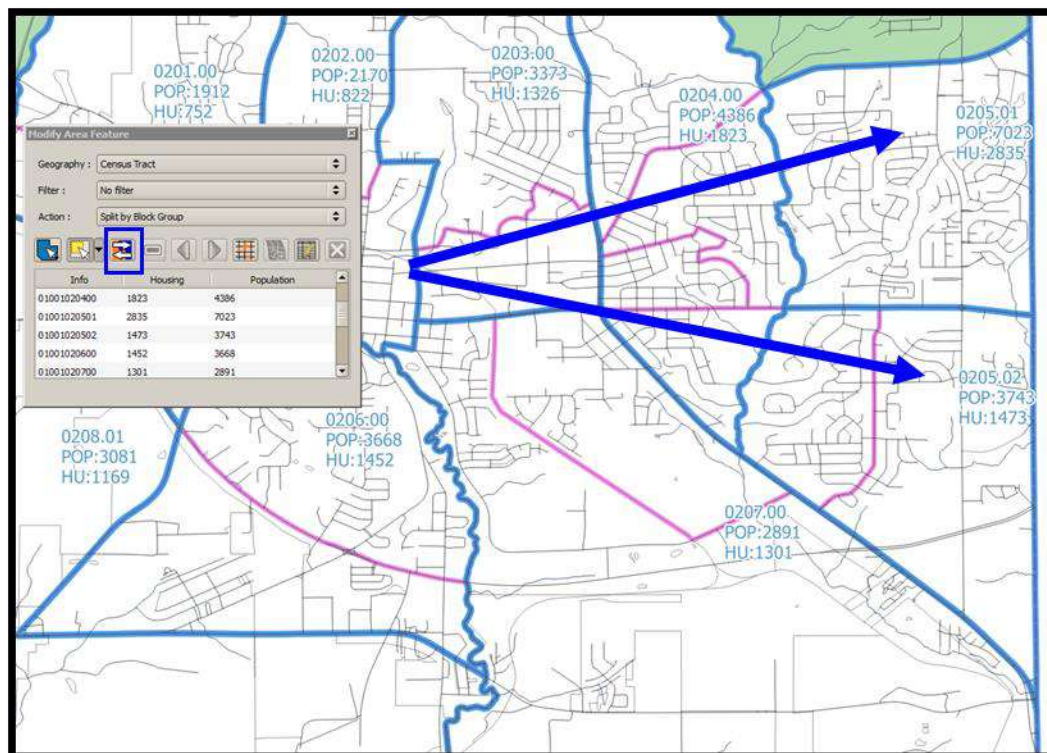
**Table 33: Split Census Tracts by Block Group**

Step	Action and Result
Step 1	Follow steps from <a href="#">Table 32: Select Census Tracts</a> to open the project and select a census tract for editing.
Step 2	<p>Within the <b>Modify Area Feature</b> window, click the <b>Filter</b> drop-down menu to select <b>Above Maximum (POP &gt; 8000 or HU &gt; 3200)</b>. <i>This selects all census tracts that have more than the maximum number of housing units or total population.</i> Change the <b>Action</b> drop-down to <b>Split by Block Group</b>. <i>This allows participants to split the census tract by block group(s).</i></p> 
Step 3	<p>Click <b>Select Target Area</b> button and click on the map to select a census tract OR double click to select a census tract from the <b>Info</b> column within the <b>Modify Area Feature</b> window. <i>The <b>Map View</b> zooms to the selected census tract to review for potential splitting and highlights it in light blue/green color.</i></p>  <p><i>The housing and population totals displays on the bottom of the <b>Modify Area Feature</b> tool.</i></p>

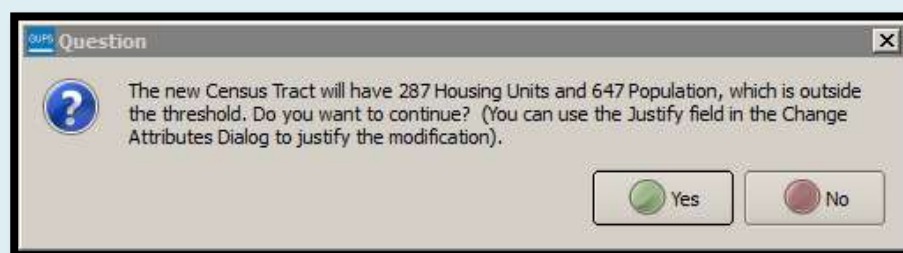
Step	Action and Result
<b>Step 4</b>	<p>Click the <b>Select Features by Area</b> button with a single click on the <b>Map View</b> to select a single block group. Hold down the Ctrl key on the keyboard and then click to select additional block groups as needed. Participants can also click the <b>Map View</b> and drag the mouse to select multiple block groups. <i>The selected block group(s) highlight and the housing units and population numbers change dynamically.</i></p>  <p><b>IMPORTANT:</b> Remember to keep the census tract threshold numbers in mind:  Population: 1,200 – 8,000 <b>Optimum: 4,000</b>  Housing: 480 – 3,200 <b>Optimum: 1,600</b></p>
	<p>Participants are only able to select block group(s) within the highlighted census tract. <i>Selecting block group(s) outside the highlighted area will result in an error message.</i></p>  <p>Click <b>OK</b> to dismiss the error and continue.</p>

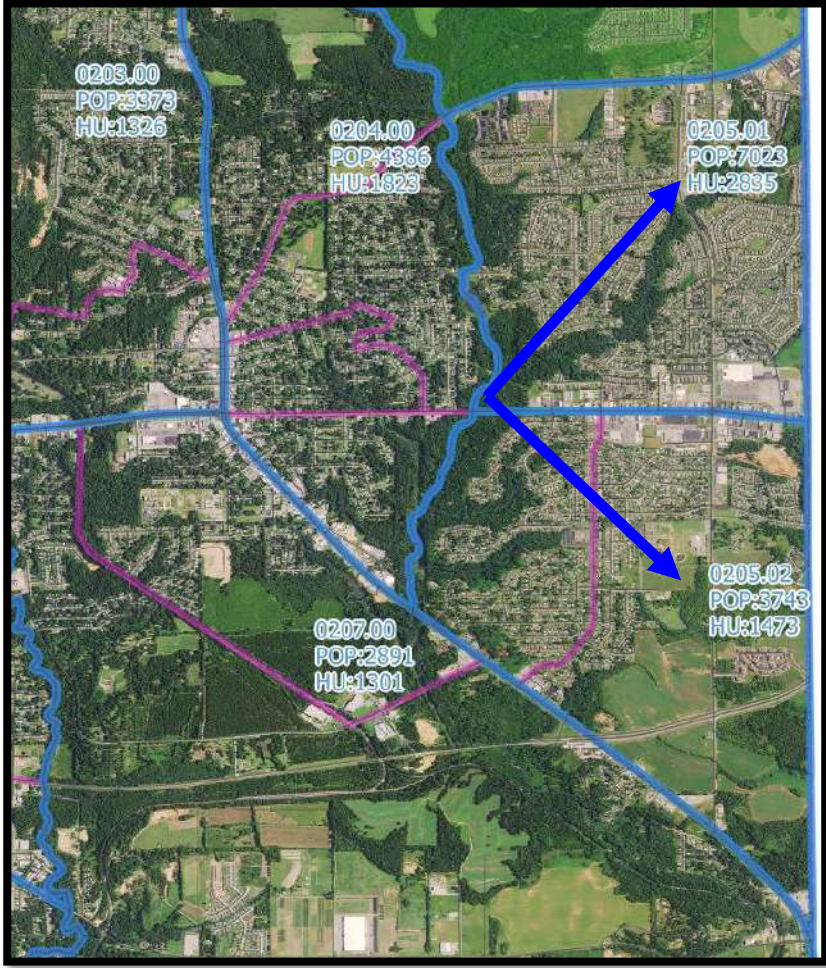
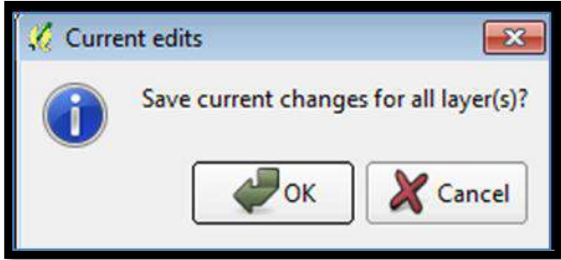
Step	Action and Result
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<b>Step 5</b>	If the selected block groups generate a valid new census tract, click the <b>Split by Block Group</b> button to create two new census tracts.
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If a **Question** window displays showing that the selection is outside the threshold of acceptable ranges, participants need to either justify this threshold violation or select additional geographies to meet the required threshold. Click **YES** if satisfied with new census tracts. Click **NO** if not satisfied and would like to revise.

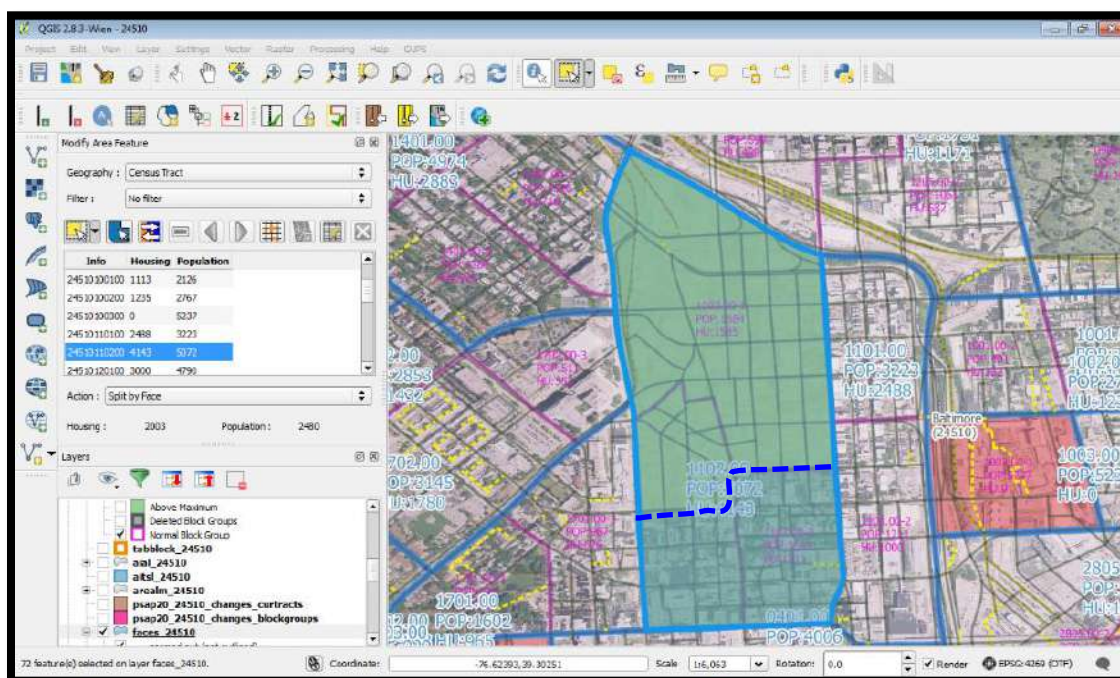


Step	Action and Result
<p><b>Step 6</b></p>	<p>Refer to the <b>Map View</b> to verify that GUPS created the new census tracts with new census tract numbers. If completed successfully, the two new tracts have no shading (no red or green) unless they fall outside the acceptable ranges of population or housing unit counts.  <i>This step depicts imagery.</i></p>  <p>To reverse the split, prior to saving use the <b>Undo</b> button. Refer to <a href="#">Table 12</a> and <a href="#">Table 17</a> for instructions on the Undo functionality.</p>
<p><b>Step 7</b></p>	<p>Click the <b>Save</b> button to save the edits and update the project. <i>The <b>Current edits</b> confirmation dialog box asks to save the changes for all layer(s).</i> For more information on saving, please refer to <a href="#">Section 7.3, Save a Project in GUPS</a>.</p>  <p>Click <b>OK</b> to save or <b>Cancel</b> to return to the <b>Map View</b> without saving.</p>

### 9.3.3 Split Census Tract by Face

To resolve the census tracts above the maximum threshold, participants can split census tracts by faces within the failing census tract instead of by entire block groups. Locate the definition of faces in [Appendix A](#). When there is only one block group in a tract or where the block groups do not reflect distinct land use areas, selecting a split by faces is preferred.

When using this method for splitting a census tract, there are two considerations. First, determine if there are clear land use distinctions within a tract (e.g., single-family homes on one side of the tract and multi-family apartments on the other). Conversely, there may be no significant difference in the land use or land use may not be the primary consideration because of overriding historical or linear feature factors. Either way, identifying a significant, visible, relatively permanent feature to use to split is important. See [Appendix G](#) for information regarding acceptable features for use in splitting tracts. See [Figure 20](#) that depicts the same tract shown in [Figure 19](#), but with the split using faces rather than block groups.

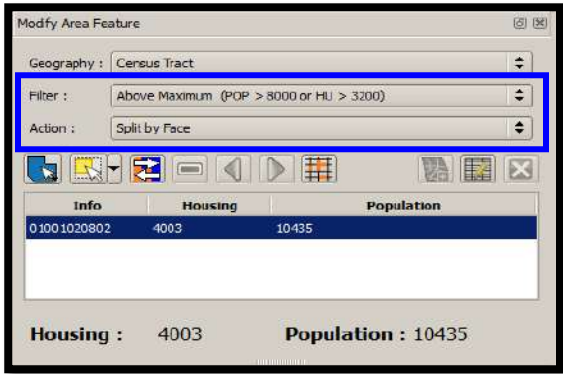
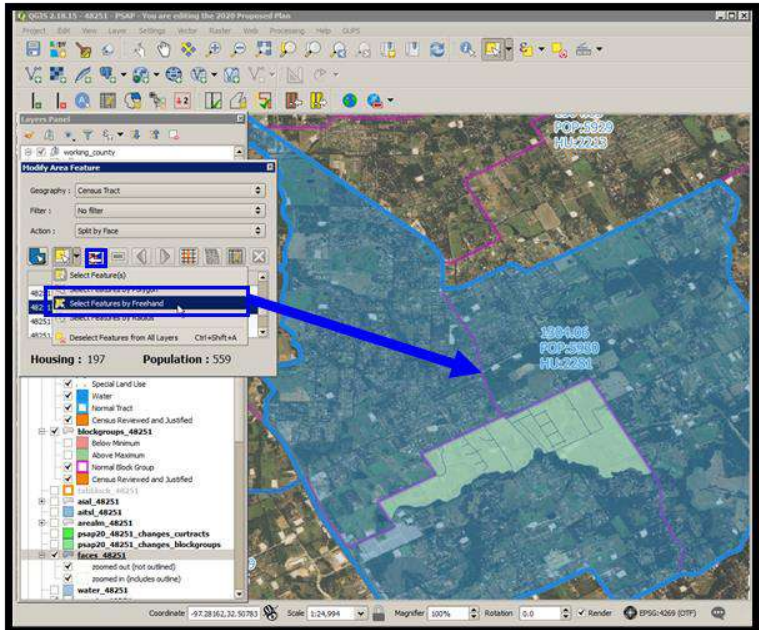



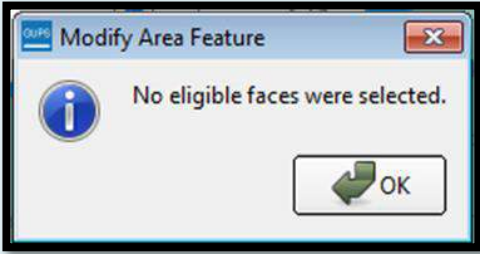
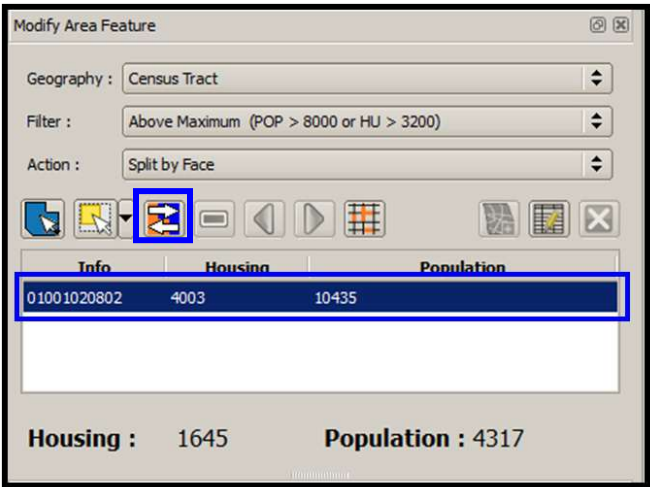

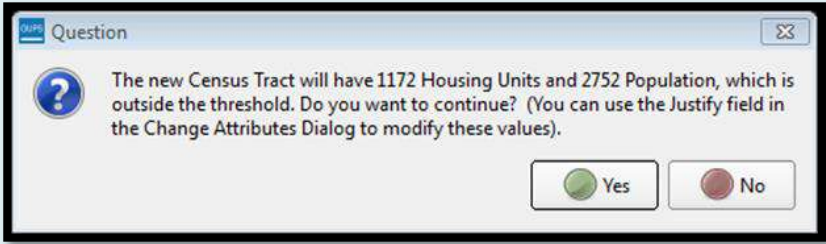
**Figure 20. Splitting a Census Tract by Face Example**


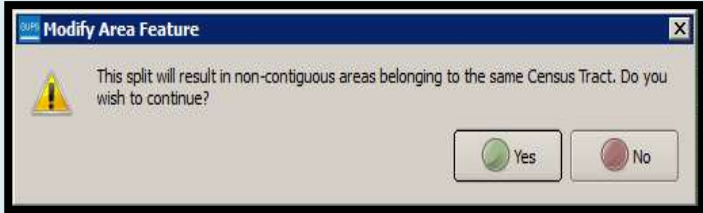
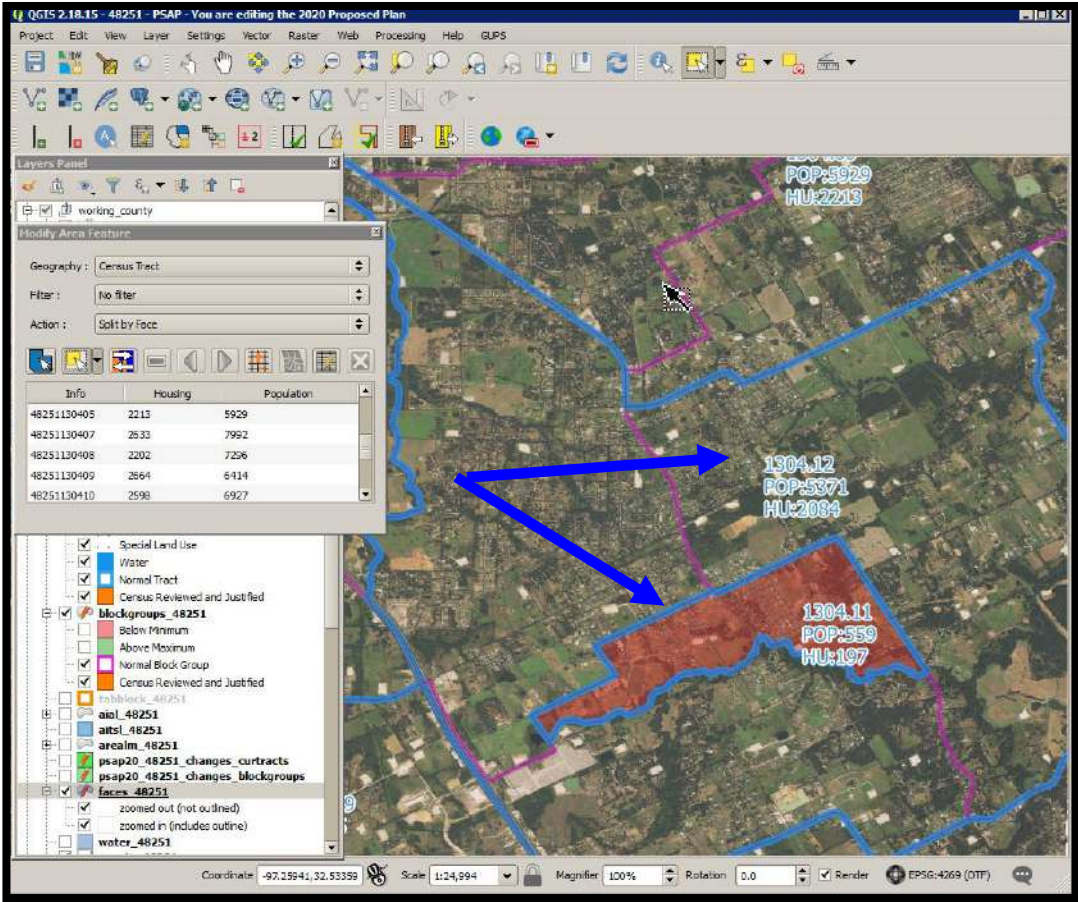
[Table 34](#) explains the steps to split a census tract by faces.

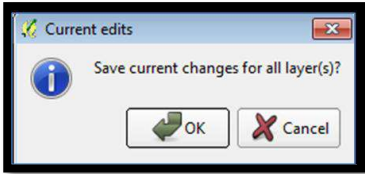
**Table 34: Split Census Tract by Face**

Step	Action and Result
Step 1	Follow steps from <a href="#">Table 32: Select Census Tracts</a> to open the project and select a census tract for editing.

Step	Action and Result
<p><b>Step 2</b></p>	<p>Within the <b>Modify Area Feature</b> window, click the <b>Filter</b> drop-down menu to select <b>Above Maximum (POP &gt; 8000 or HU &gt; 3200)</b>. <i>This selects all census tracts that have more than the maximum number of housing units or total population. Change the <b>Action</b> drop-down to <b>Split by Face</b>. This allows participants to split the census tract by faces (areas).</i></p>  <p><i>The housing and population totals displays on the bottom of the <b>Modify Area Feature</b> tool.</i></p>
<p><b>Step 3</b></p>	<p>As with the <b>Split by Block Group</b> step, click <b>Select Target Area</b> button and click on the map to select a census tract OR double click to select a census tract from the <b>Info</b> column within the <b>Modify Area Feature</b> window. <i>The <b>Map View</b> zooms to the selected census tract to review for potential splitting and highlights it in light blue/green color.</i></p>
<p><b>Step 4</b></p>	<p>Click the <b>Select Features by Freehand</b> button to select the faces (areas) to split the census tract. Left click the mouse on the starting point and drag the chasing line around the targeted area then right-click the mouse to end the review the selected area or simply let go of the left. <i>The selected faces highlight with a yellow/green shade.</i></p> <p>Hold the Ctrl key on the keyboard and single click to select and add any missing faces. Also, hold the Ctrl key and single click to unselect unnecessary selected faces. The use of the Shift key may also prove beneficial when adding to an existing set of faces, as it works similarly to the Ctrl key. <i>This step depicts imagery.</i></p> 

Step	Action and Result
	<p><b>IMPORTANT:</b> Remember to keep the census tract threshold numbers in mind:  Population: 1,200 – 8,000 <b>Optimum: 4,000</b>  Housing: 480 – 3,200 <b>Optimum: 1,600</b></p>
	<p>Participants are only able to select faces (areas) within the highlighted census tract. <i>Selecting faces outside the highlighted area will result in an error message.</i></p> 
<p><b>Step 5</b></p>	<p>If the selected faces generate a valid new census tract, click the <b>Split by Face</b> button to create two new census tracts.</p> 
	<p>If a <b>Question</b> window displays showing that the selection is outside the threshold of acceptable ranges, participants need to either justify this threshold violation or select additional geographies to meet the required threshold. Click <b>YES</b> if satisfied with new census tract. Click <b>NO</b> if not satisfied and would like to revise.</p> 

Step	Action and Result
	<p>If a <b>Question</b> window displays showing that the split will result in noncontiguous areas belonging to the same census tract, participants need to either select <b>Yes</b> to continue and fix the non-continuous areas or select again to make sure all necessary faces are selected.</p> 
<p><b>Step 6</b></p>	<p>Refer to the <b>Map View</b> to verify that GUPS created the new census tracts with new census tract numbers. If completed successfully, the two new tracts have no shading (no red or green) unless they fall outside the acceptable ranges of population or housing unit counts. <i>This step depicts imagery.</i></p>  <p>To reverse the split, prior to saving use the <b>Undo</b> button. Refer to <a href="#">Table 12</a> and <a href="#">Table 17</a> for instructions on the Undo functionality.</p>
<p><b>Step 7</b></p>	<p>Click the <b>Save</b> button to save the edits and update the project. <i>The <b>Current edits</b> confirmation dialog box asks to save the changes for all layer(s).</i> For more information on saving, please refer to <a href="#">Section 7.3, Save a Project in GUPS</a>.</p>

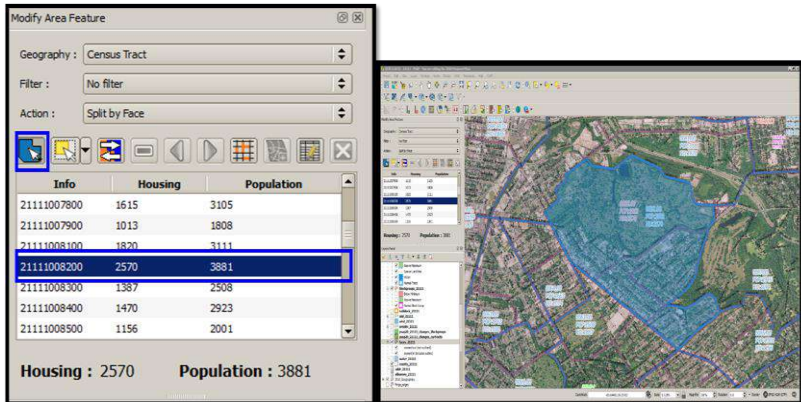
Step	Action and Result
	 <p>Click <b>OK</b> to save or <b>Cancel</b> to return to the <b>Map View</b> without saving.</p>

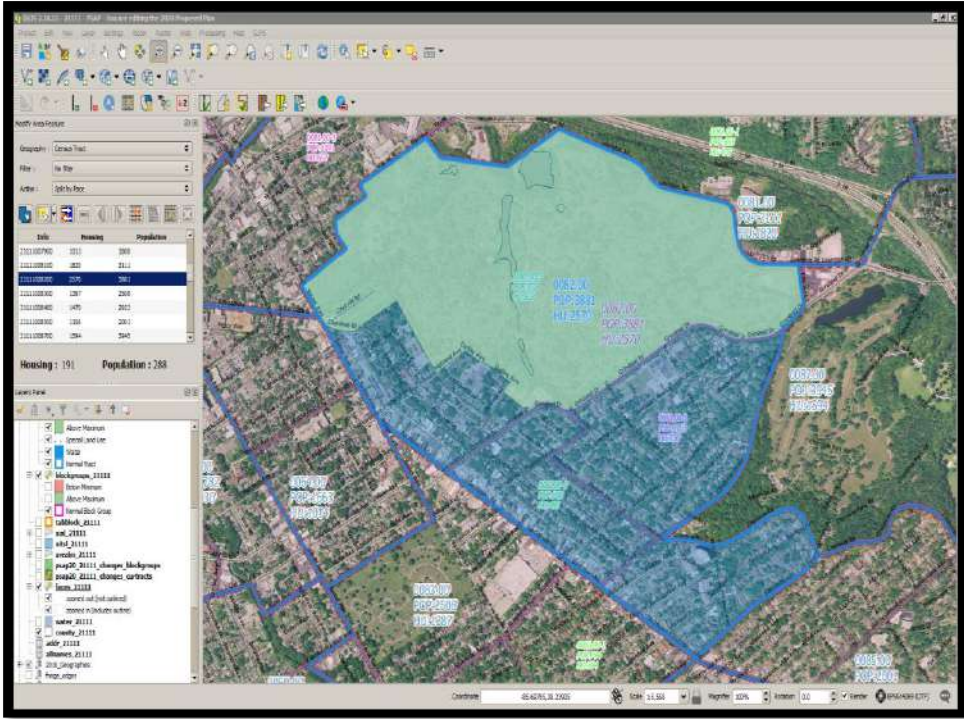

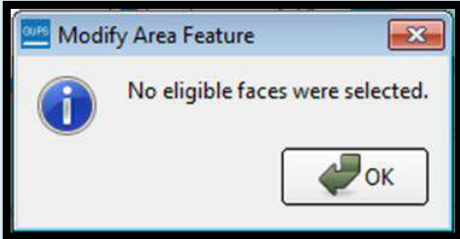
### 9.3.4 Creating a Special Use Census Tract

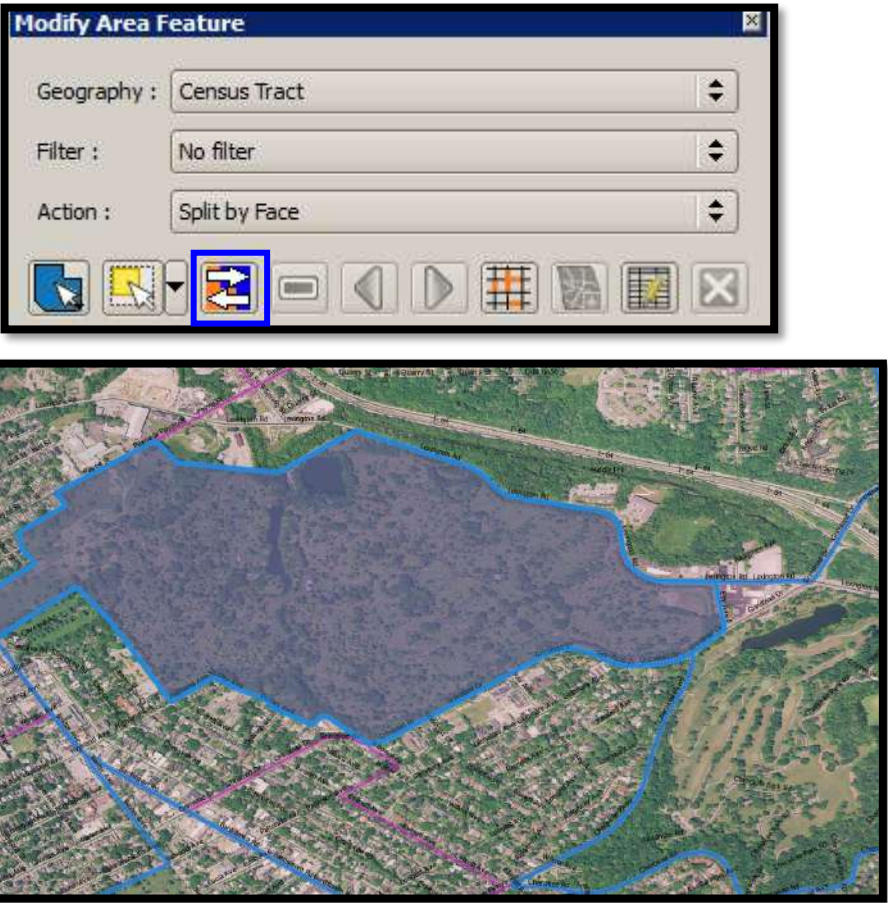

Participants may create special use census tracts for large land areas that exclude housing units or population (e.g., large public parks, forests, large bodies of water, airports). These may also include geographic areas characterized by unique populations (e.g., prisons or universities). Special use census tracts are optional. If delineated, they must be designated with a specific type of special use, have an official name, and ideally have no residential population or housing units (or at the least meet all the minimum population and housing thresholds for a special use census tract. They also must not create noncontiguous census tracts. Participants, along with the Census Bureau, decide if the presence of a special use census tract would be useful to help provide high quality, statistical data. Refer to [Chapter 2](#) for the special use census tract criteria and detailed threshold information. Review [Table 35](#) for an example of using GUPS tools to create a special use census tract.

**Note:** As with special use census tracts, refer to [Chapter 3](#) for the special use block group criteria and detailed threshold information. Special use block groups are coextensive with special use census tracts. Special use block groups can exist within standard census tracts if there is not enough population or housing to support a special use census tract.

**Table 35: Creating a Special Use Census Tract**

Step	Action and Result
<b>Step 1</b>	<p>As with the <b>Split Census Tract by Face</b> example, click <b>Select Target Area</b> button and click on the map to select a census tract OR double click to select a census tract from the <b>Info</b> column within the <b>Modify Area Feature</b> window.</p>  <p>The <b>Map View</b> zooms to the selected census tract to review for potential splitting and highlights it in light blue/green color.</p>

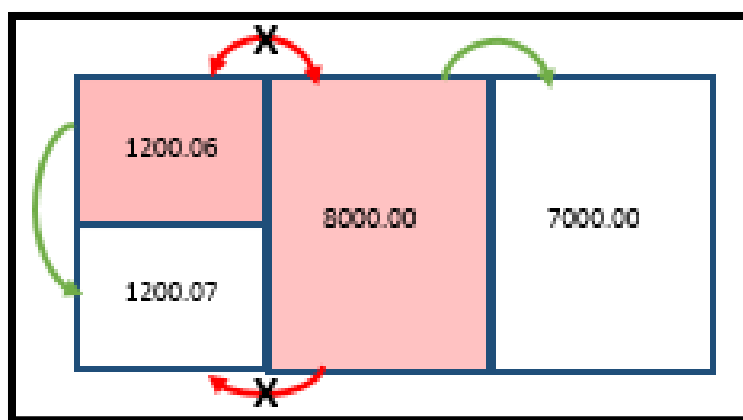
Step	Action and Result
Step 2	Ensure the <b>Action</b> field is <b>Split by Face</b> .
Step 3	<p>Click the <b>Select Features by Freehand</b> button to select the faces (areas) to split the census tract. Left click the mouse on the starting point and drag the chasing line around the targeted area then right-click the mouse to end the review the selected area.</p> <p><i>The selected faces highlight with a yellow/green shade.</i></p> <p>Hold the Ctrl key on the keyboard and single click to select and add any missing faces. Also, hold the Ctrl key and single click to unselect unnecessary selected faces. The use of the Shift key may also prove beneficial when adding to an existing set of faces, as it works similarly to the Ctrl key. <i>This step depicts imagery.</i></p> 
	<p>Participants are only able to select faces (areas) within the highlighted census tract. <i>Selecting faces outside the highlighted area will result in an error message.</i></p> 

Step	Action and Result
<b>Step 4</b>	<p>If the selected faces generate a valid new special use census tract, click the <b>Split by Face</b> button to create two new census tracts. <i>The new special use tract appears below.</i></p>  <p>The screenshot shows the 'Modify Area Feature' dialog box with the following settings: Geography: Census Tract, Filter: No filter, and Action: Split by Face. The 'Split by Face' button in the toolbar is highlighted with a blue box. Below the dialog box is a map showing a large, irregularly shaped area (the new special use tract) highlighted in blue, surrounded by a green landscape with roads and buildings.</p>
<b>Step 5</b>	<p>Click the <b>Change Attributes</b> button in the <b>Modify Area Feature</b> window.</p>  <p>The screenshot shows the 'Modify Area Feature' dialog box with the same settings as in Step 4. The 'Change Attributes' button in the toolbar is highlighted with a blue box.</p>

Step	Action and Result
<b>Step 6</b>	<p>Change the <b>TRACTCE</b> field to a valid special use census tract number (e.g., first two digits begin with 98xx). <i>This example uses 980000 since there are no other special use census tracts in this working county.</i> Enter a <b>SITE_NAME</b> that represents the name of the special use area. <i>This example uses Cave Hill Cemetery.</i> Enter a justification (up to 150 characters) for the use of the name in the <b>JSTFY_NAME</b> field. <i>This example uses Old Historic Landmark.</i></p> <div> </div> <p>Click <b>OK</b> to accept the modifications.</p>
<b>Step 7</b>	<p>Click the <b>Save</b> button to save the edits and update the project.</p>

### 9.3.5 Merge Census Tracts

To resolve the census tracts below the minimum threshold, participants perform a merge action. Merging tracts of the same code series is the preferred approach (e.g., merge adjacent census tracts 1200.01 and 1200.02 instead of merging 1200.01 with adjacent census tract 2000). This is the best method for maintaining historical comparability between censuses. Census tracts in the same code series increment their coding by suffix (the final two digits), while tracts merged outside of the same series increment by the next available tract code in the county, with a default .00 suffix. See [Figure 21](#) for a visual of this description.



**Figure 21. Merging Census Tracts within Same Code Series Visual**

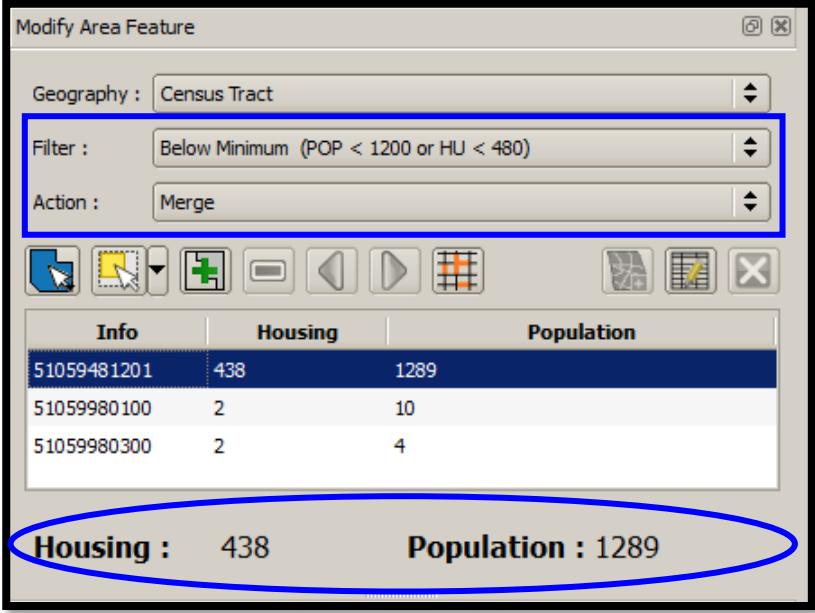
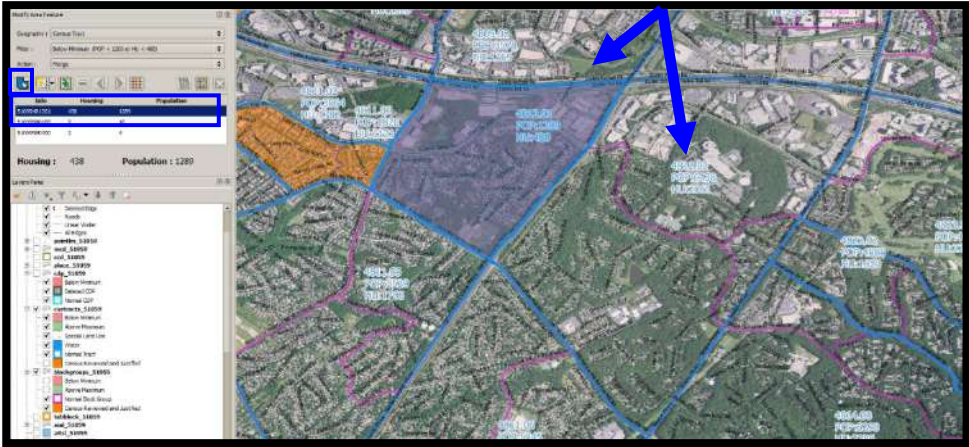
Other methods of merging, in order of priority, include:

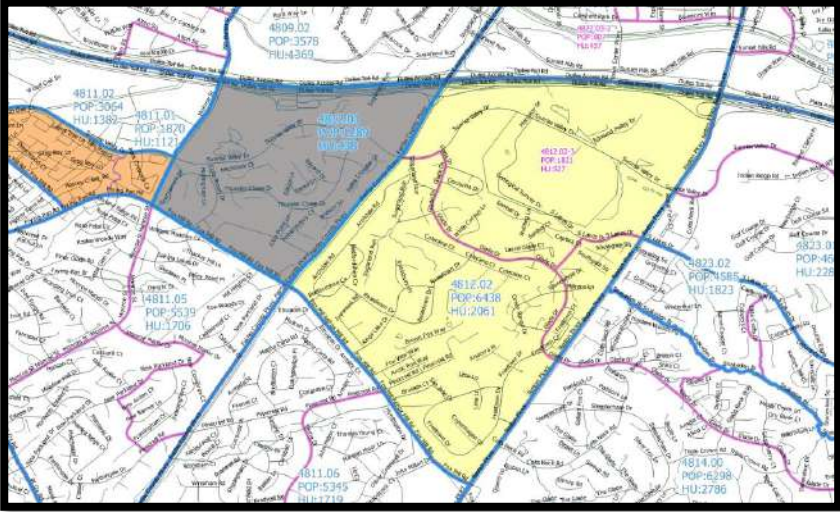
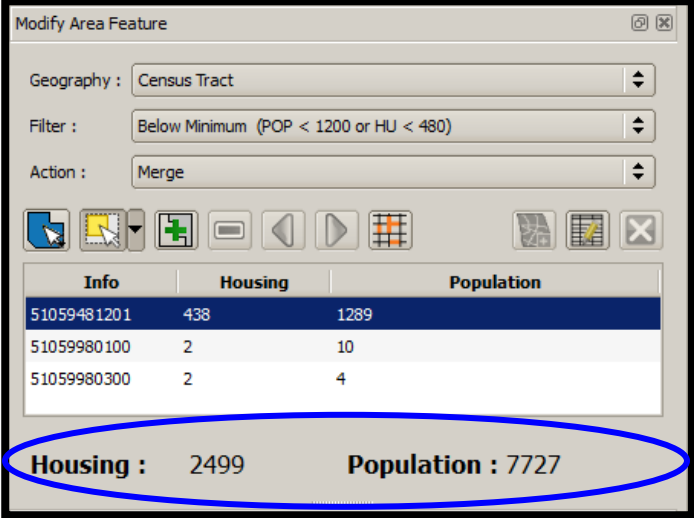

- Merge two tracts of similar land use across a minor feature. This retains outer boundaries for historical comparison and ideally maintains continuity of housing type and demographics.
- Merge two tracts of dissimilar land use across a minor feature. This is less than ideal, but avoids creating census tracts that span major landscape features.
- Merge two tracts of similar land use across a major feature. This is less than ideal, but may group areas of similar housing and demographic characteristics.
- Merge two tracts of dissimilar land use across a major feature. The main benefit is to maintain the outer boundaries for historical comparison, but runs the high risk of compromising comparability of housing and population data within the new tract.
- Alter boundary of below threshold tract to include block groups of neighboring tract(s). This method is highly discouraged because it changes the outer, historic boundaries of census tracts.

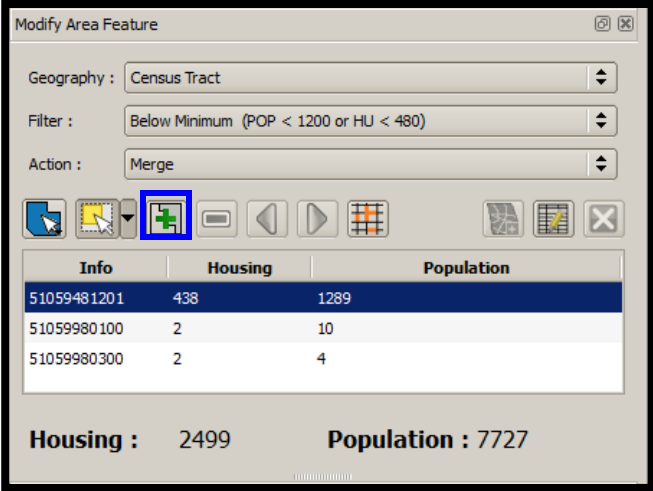

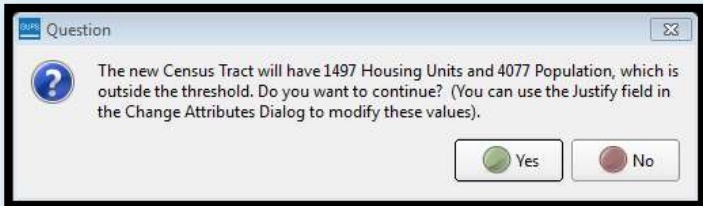
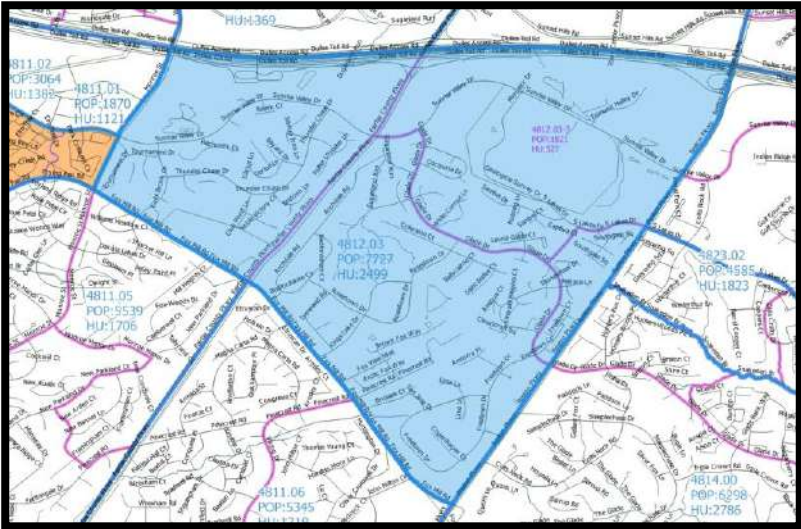
**Table 36** explains the steps to merge a census tract.

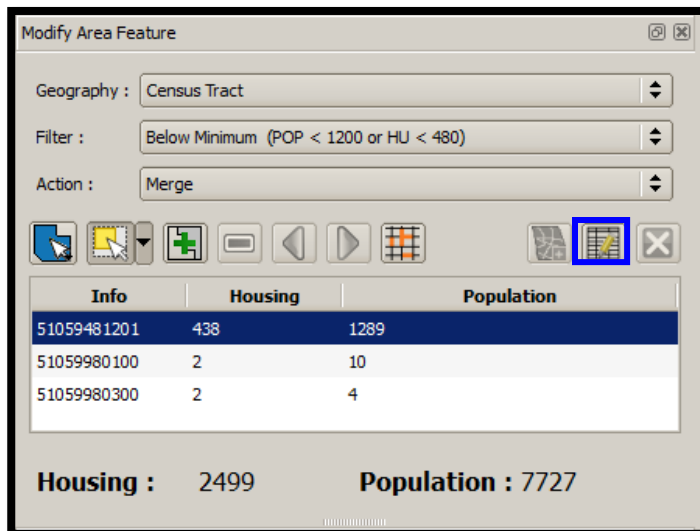
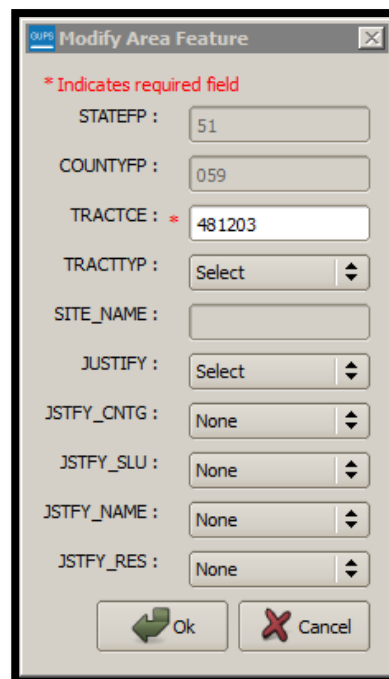
**Table 36: Merge Census Tracts**

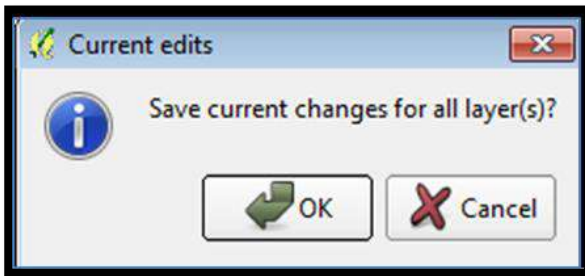
Step	Action and Result
<b>Step 1</b>	Follow steps from <b>Table 32: Select Census Tracts</b> to open the project and select a census tract for editing.

Step	Action and Result
<p><b>Step 2</b></p>	<p>Within the <b>Modify Area Feature</b> window, click the <b>Filter</b> drop-down menu to select <b>Below Minimum (POP &lt; 1200 or HU &lt; 480)</b>. This selects all census tracts that have less than the minimum number of housing units or total population. Change the <b>Action</b> drop-down to <b>Merge</b>. This allows participants to merge (or combine) the census tracts falling below the minimum requirements.</p>  <p>The housing and population totals displays on the bottom of the <b>Modify Area Feature</b> tool.</p>
<p><b>Step 3</b></p>	<p>Double click to select a census tract from the <b>Info</b> column within the <b>Modify Area Feature</b> window. The <b>Map View</b> zooms to the selected census tract to review for a potential merge and highlights it in light blue/green color. Navigate the <b>Map View</b> to locate the best neighboring census tract(s) to merge. Verify the census tracts for historic relationships when possible. This step depicts imagery.</p> 

Step	Action and Result
<b>Step 4</b>	<p>Click the <b>Select Features by Area</b> or <b>single click</b> button to select the census tract(s) to use to merge with the below minimum census tract. <i>The newly selected census tract(s) highlight in yellow.</i></p>  <p><b>IMPORTANT:</b> Remember to keep the census tract threshold numbers in mind:  Population: 1,200 – 8,000 <b>Optimum: 4,000</b>  Housing: 480 – 3,200 <b>Optimum: 1,600</b></p>  <p><i>The housing and population totals change dynamically while selecting tracts to merge, allowing participants to see the results of the merge, prior to actually merging the tracts.</i></p>
	<p>Selecting census tracts not contiguous with each other result in geographic errors. Participants must correct contiguity errors (or provide a justification for keeping the tracts noncontiguous) prior to submission to the Census Bureau. The <b>Modify Area Feature</b> tool does not allow a participant to select census tracts in different counties.</p>

Step	Action and Result
<b>Step 5</b>	<p>If the selected tract(s) generate a valid new census tract, click the <b>Merge</b> button to create a new census tract.</p> 
	<p>If a <b>Question</b> window displays showing that the selection is outside the threshold of acceptable ranges, participants need to either justify this threshold violation or select additional geographies to meet the required threshold. Click <b>YES</b> if satisfied with new census tract. Click <b>NO</b> if not satisfied and would like to revise.</p> 
<b>Step 6</b>	<p>Refer to the <b>Map View</b> to verify that GUPS created the new census tract with new census tract number. If completed successfully, the new tract has no shading (no red or green) unless it still falls outside the acceptable ranges of population or housing unit counts. To reverse the merge, prior to saving use the <b>Undo</b> button. Refer to <a href="#">Table 12</a> and <a href="#">Table 17</a> for instructions on the Undo functionality.</p> 

Step	Action and Result
Step 7	<p>Use the <b>Change Attributes</b> button to modify the merged tract number that GUPS automatically assigned if needed.</p> <div></div> <p>In the <b>Change Attributes</b> window, enter all the requested information for the following fields with a red asterisk. Required information varies based on the type of geography.</p> <div></div> <p>Click <b>OK</b> to save the attribute change or <b>Cancel</b> to return to close the window without saving.</p> <p><b>Note:</b> The <b>Justify</b> field exists in the <b>Modify Area Feature, Change Attributes</b> tool. This field also exists in the <b>PSAP Criteria Review</b> tool described in a later section. Character limit is 150 for this field.</p>

Step	Action and Result
Step 8	<p>Click the <b>Save</b> button to save the edits and update the project. The <b>Current edits confirmation dialog box</b> asks to save the changes for all layer(s). For more information on saving, please refer to <a href="#">Section 7.3, Save a Project in GUPS</a>.</p>  <p>Click <b>OK</b> to save or <b>Cancel</b> to return to the <b>Map View</b> without saving.</p>

### 9.3.6 Change Census Tract Boundaries

Participants apply boundary changes to census tracts in instances when the boundaries are errant and no longer accurately reflect the real boundary or when the boundary does not follow any visible features. Participants cannot change the census tract boundary where it follows an acceptable legal boundary as listed in [Section 2.3](#). If the boundary of the legal entity is incorrect, please report the boundary correction through the annual Boundary and Annexation Survey (BAS) program. Consult the [Part C](#) in the Introduction of this document for details on the BAS. Quality checks and comparisons of census tracts to the legal boundaries occur yearly to ensure the census tracts align with the boundary of the legal entity in the Census Bureau systems.

See [Section 9.3.6.1](#) for instructions to add linear features for use as census tract boundaries and [Section 9.3.6.3](#) for instructions to delete linear features. The **Boundary Change** action uses the faces layer to modify census tracts. Linear features create faces. [Table 37](#) explains the steps to change census tract boundaries.

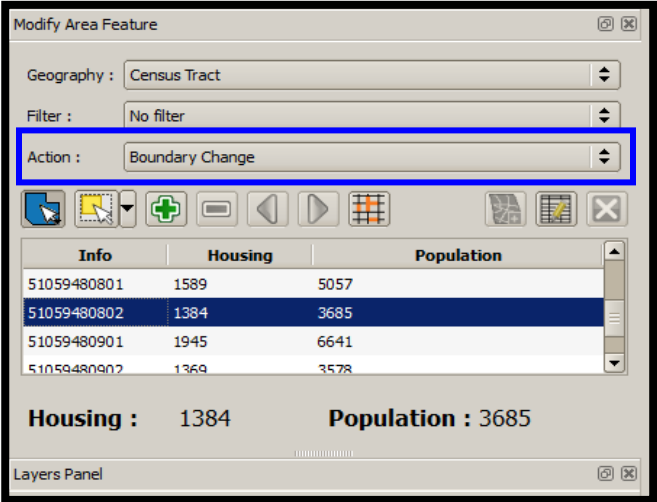
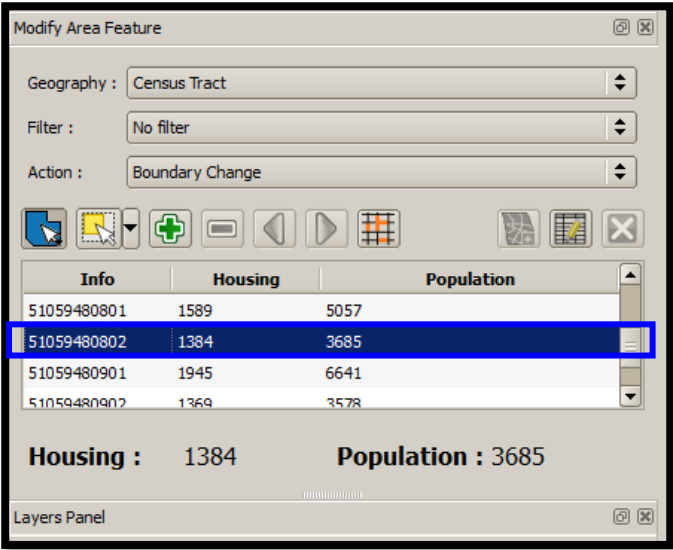
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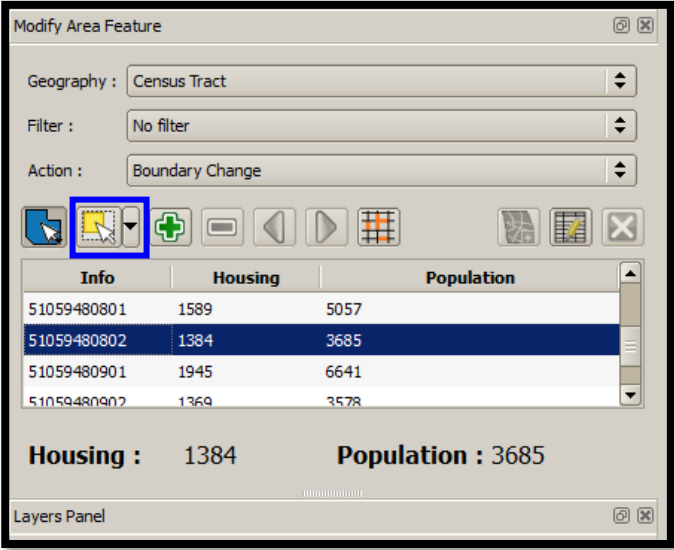
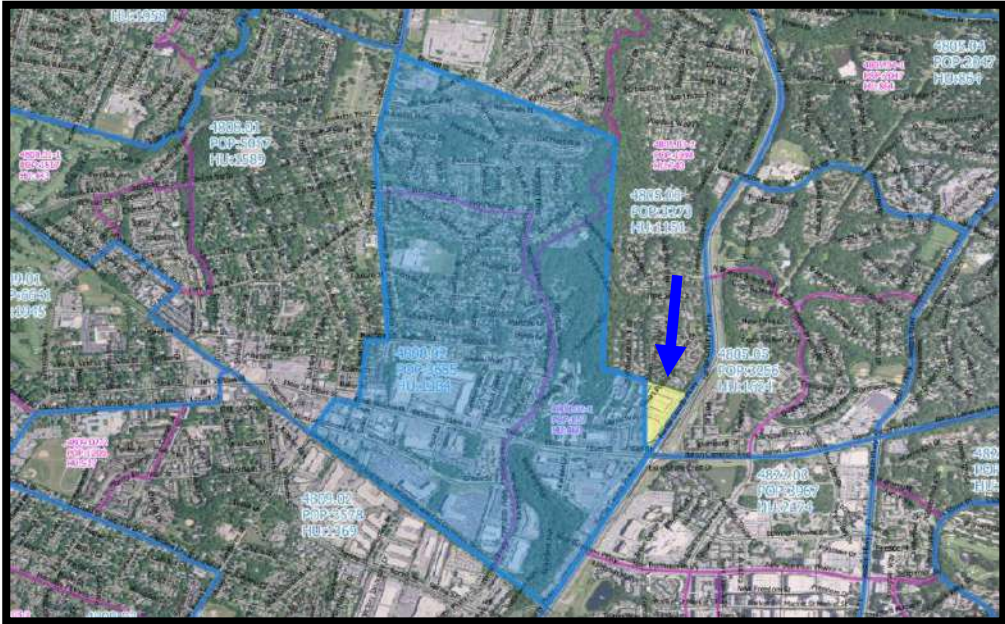

**IMPORTANT:** The guiding principle for census tract boundaries is to maintain historical comparability between decennial censuses. Sometimes small boundary changes occur to maintain the census tract boundary along a visible feature such as a road or river; however, drastic changes to census tract boundaries compromise comparability of the census tracts between decades. The Census Bureau reserves the right to deny participant boundary changes that introduce significant changes.

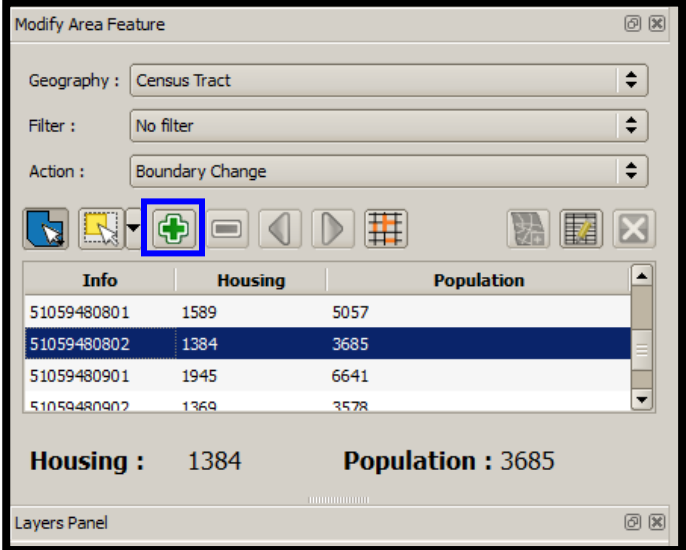
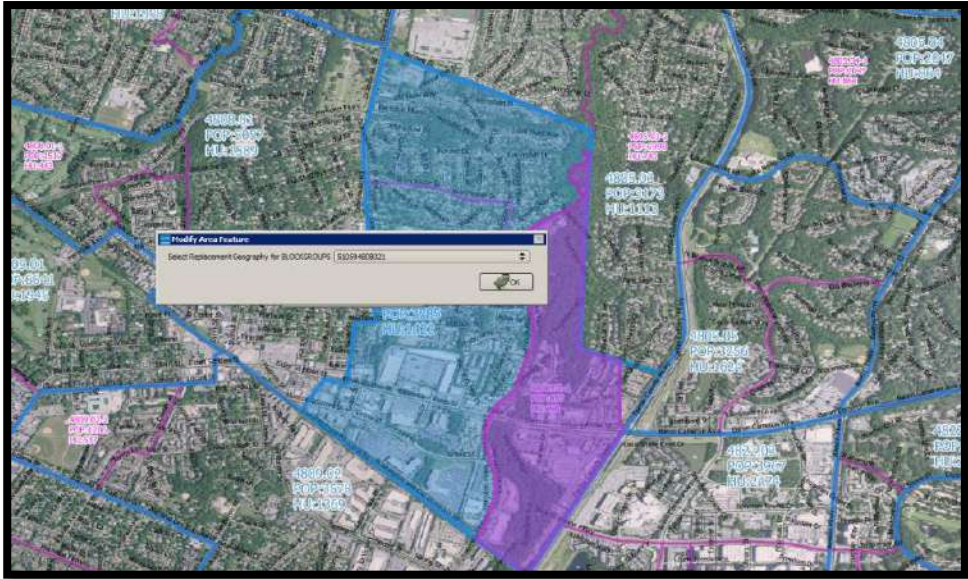
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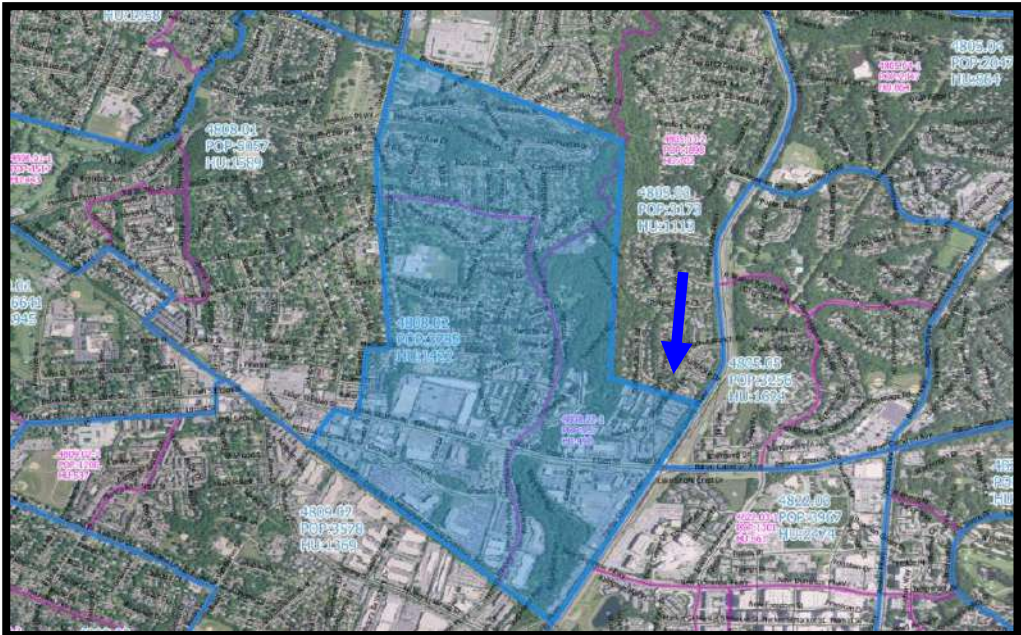
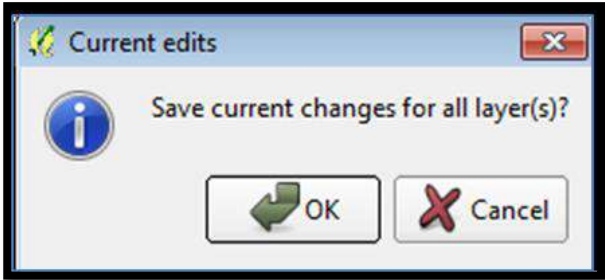
**Table 37: Change Census Tract Boundaries**

Step	Action and Result
Step 1	Follow steps from <a href="#">Table 32: Select Census Tracts</a> to open the project and select census tract for editing.

Step	Action and Result
<p><b>Step 2</b></p>	<p>Within the <b>Modify Area Feature</b> window, click the drop-down <b>Action</b> menu to select <b>Boundary Change</b>.</p> 
<p><b>Step 3</b></p>	<p>Double click to select a census tract from the <b>Info</b> column within the <b>Modify Area Feature</b> window. <i>The <b>Map View</b> zooms to the selected census tract to review for a potential boundary change.</i></p> 

Step	Action and Result
<b>Step 4</b>	<p>Click the <b>Select Features By Area</b> or <b>single click</b> button to select the faces to use for boundary change.</p>  <p>The selected faces highlight in yellow. This step depicts imagery.</p>  <p><b>IMPORTANT:</b> Remember to keep the census tract threshold numbers in mind:  Population: 1,200 – 8,000 <b>Optimum: 4,000</b>  Housing: 480 – 3,200 <b>Optimum: 1,600</b></p> <p>The housing and population totals change dynamically while selecting faces to alter the census tract boundary, allowing participants to see the results of the change, prior to actually modifying the boundary of the census tract.</p>
	<p>Selecting noncontiguous faces from the selected census tract result in geographic errors. Participants must correct contiguity errors prior to submitting their data to the Census Bureau.</p>

Step	Action and Result
<p><b>Step 5</b></p>	<p>Click the <b>Add Area</b> button to apply boundary change to the selected census tract.</p>  <p>A window displays requesting participants select the block group to add the selected faces. The <b>Map View</b> displays the potential block group in the drop-down menu.</p>  <p><b>Note:</b> GUPS highlights each block group as selected, allowing the participant to choose the adjacent one. Be mindful that this step can introduce contiguity errors.</p> <p>After selecting the appropriate block group, click <b>OK</b> to add the selected faces to the selected block group highlighted on the map.</p>

Step	Action and Result
<b>Step 6</b>	<p>Refer to the <b>Map View</b> to verify that GUPS captured the boundary change properly for the census tract.</p>  <p>To reverse the boundary change, simply add the area back to the original census tract or perform the <b>Undo</b> action prior to saving. Refer to <a href="#">Table 12</a> and <a href="#">Table 17</a> for instructions on the <b>Undo</b> functionality.</p>
<b>Step 7</b>	<p>Click the <b>Save</b> button to save the edits and update the project. <i>The <b>Current</b> edits confirmation dialog box asks to save the changes for all layer(s).</i> For more information on saving, please refer to <a href="#">Section 7.3, Save a Project in GUPS</a>.</p>  <p>Click <b>OK</b> to save or <b>Cancel</b> to return to the <b>Map View</b> without saving.</p>

### 9.3.6.1 Add Linear Feature



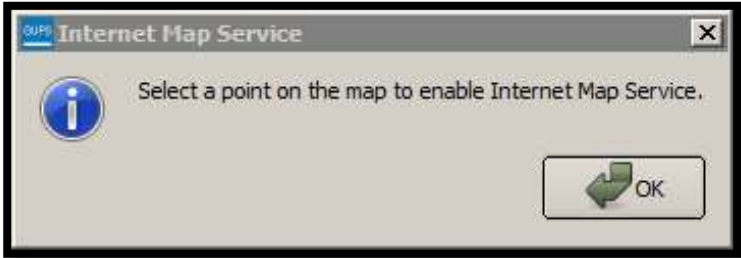
The addition of new or missing linear features may be necessary to form faces in order to modify all of the statistical geographies. While it may be tempting to add all missing linear features, with the time constraints of PSAP, focus first on adding only the linear features necessary to split statistical geographies or form new statistical geographies. Participants must utilize the Add Imagery button within GUPS for digitizing reference and may use the Internet Map Service button to provide a secondary source/visual of the area. [Table 17](#) describes the use of both buttons. Review [Table 38](#) for a detailed example.

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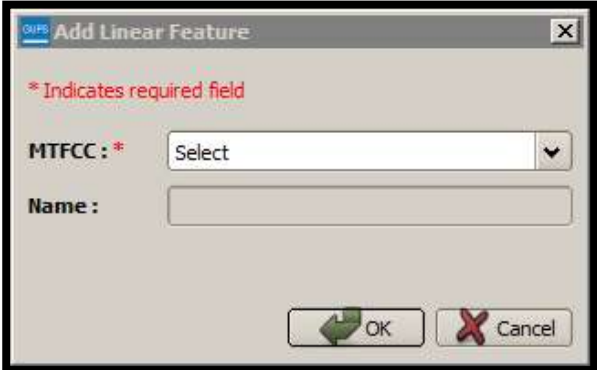
**IMPORTANT:** Do not add linear features without the assistance of imagery.


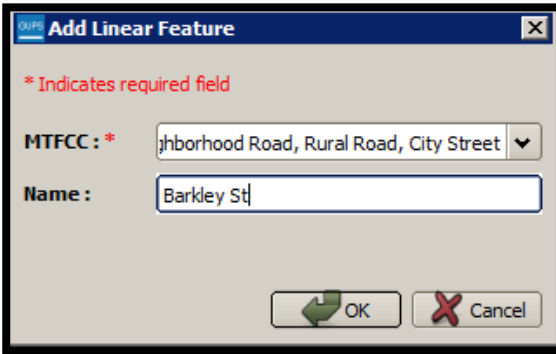

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**Table 38: Add Linear Feature**

Step	Action and Result
Step 1	Download and review the data as described in <a href="#">Section 7.2, Open GUPS and Start a New Project.</a>
Step 2	<p>Follow steps from <a href="#">Table 32: Select Census Tracts</a> to open the existing project. Zoom to the area to add linear features. Ensure imagery is enabled as described in <b>Step 7</b> of that table.</p> 
Step 3	<p>Click the Internet Map Service button.</p>  <p><i>An <b>Internet Map Service</b> window appears asking participants to select a point on the map to enable Internet Map Service.</i></p> 

Step	Action and Result
<p><b>Step 4</b></p>	<p>Click a point in the <b>Map View</b> near the missing feature(s) to select the targeted area from which to launch the internet service. <i>Another <b>Internet Map Service</b> window appears to select either <b>Google Maps</b> or <b>Bing Maps</b>.</i></p> <div> </div> <p>After selected, click <b>OK</b> and a new internet tab or session opens to the targeted section chosen in <b>Step 4</b>.</p> <div> </div>
<p><b>Step 5</b></p>	<p>Click the <b>Add Linear Feature</b> button from within the <b>PSAP toolbar</b>.</p> <div> </div>


Step	Action and Result
Step 6	<p>Zoom in to a proper scale for adding the linear feature.</p> 
Step 7	<p>In the <b>Map View</b>, left-click the mouse button to start adding the linear feature. Continue to left-click to add nodes as necessary to add shape to the road. To complete the linear feature, right-click. <i>An <b>Add Linear Feature</b> window appears to enter the required <b>MTFCC</b> and a <b>Name</b>.</i></p> 

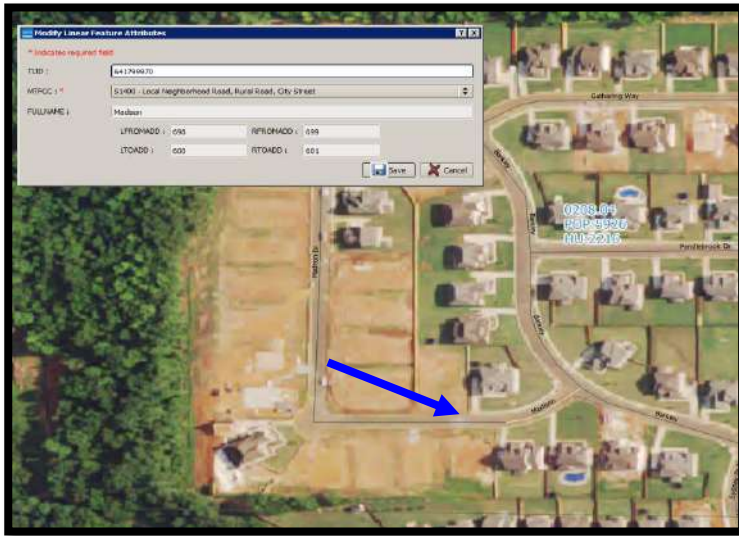
Step	Action and Result
Step 8	<p>From the <b>MTFCC</b> drop-down menu, select the proper code for the newly added feature. In this example, choose <b>S1400</b>.</p>  <p>The <b>Name</b> field activates after choosing the <b>MTFCC</b>. Enter the name and click <b>OK</b>.</p> 
Step 9	<p>Click the <b>Save</b> button to save the changes. Continue with the same steps to add any additional linear features.</p> 

### 9.3.6.2 Modify Linear Feature Attributes

Participants can modify the attributes of linear features by using the **Modify Linear Feature Attributes** button within the PSAP toolbar. This may be necessary to correct errors in existing feature names or correct errant MTFCC codes. See [Table 39](#) for an example.

**Table 39: Modify Linear Feature Attributes**


Step	Action and Result
Step 1	<p>Locate the linear feature to modify. Select the <b>Modify Linear Feature Attributes</b> button in the <b>PSAP</b> toolbar.</p> 


Step	Action and Result
Step 2	<p>In the <b>Map View</b>, left-click the linear feature to modify. A <b>Modify Linear Feature Attributes</b> window appears.</p> 
Step 3	<p>Change the <b>MTFCC</b> or the <b>FULLNAME</b> of the feature. Click the <b>Save</b> button to save the modification.</p>

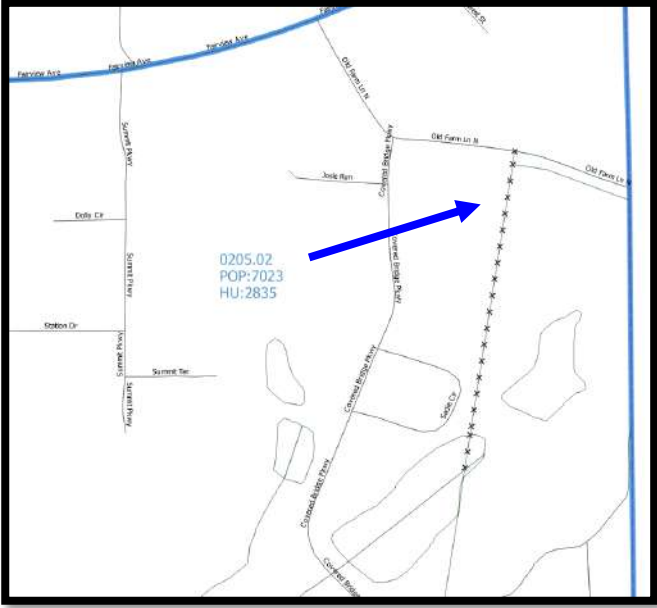

### 9.3.6.3 Delete/Restore Linear Feature

GUPS allows participants to delete linear features and/or restore recently deleted features since the last save process by using the **Delete/Restore Linear Feature** button within the PSAP toolbar. Review [Table 40](#) for examples of both deleting and restoring a linear feature.

**Table 40: Delete/Restore Linear Feature**

Step	Action and Result
Step 1	<p>Locate the linear feature to delete. Select the <b>Delete/Restore Linear Feature</b> button in the <b>PSAP toolbar</b>.</p> 

Step	Action and Result
<b>Step 2</b>	<p>In the <b>Map View</b>, left-click the linear feature to delete. A <i>Delete/Restore Linear Feature</i> window appears.</p> <div> </div> <div> </div>
<b>Step 3</b>	<p>Click <b>OK</b> to proceed with deletion of the selected feature.</p>
	<p>If the feature selected forms the boundary of an existing entity, <i>GUPS displays the following warning message.</i></p> <div> </div>

Step	Action and Result
<b>Step 4</b>	<p>The feature is marked for deletion and displays in GUPS with the “X” character along the entire feature. Imagery disabled in order to better view the “X” characters.</p> 
<b>Step 5</b>	<p>GUPS uses the same tool to restore the deleted feature if the deletion was in error. Enable the <b>Delete/Restore Linear Feature</b> button. Select the feature marked for deletion from the previous step. A <i>Delete/Restore Linear Feature</i> window appears asking for confirmation to restore the linear feature.</p>  <p>Click <b>OK</b> to restore the feature.</p>
<b>Step 6</b>	<p>Click the <b>Save</b> button to save the changes.</p>

## 9.4 Block Group Update Instructions

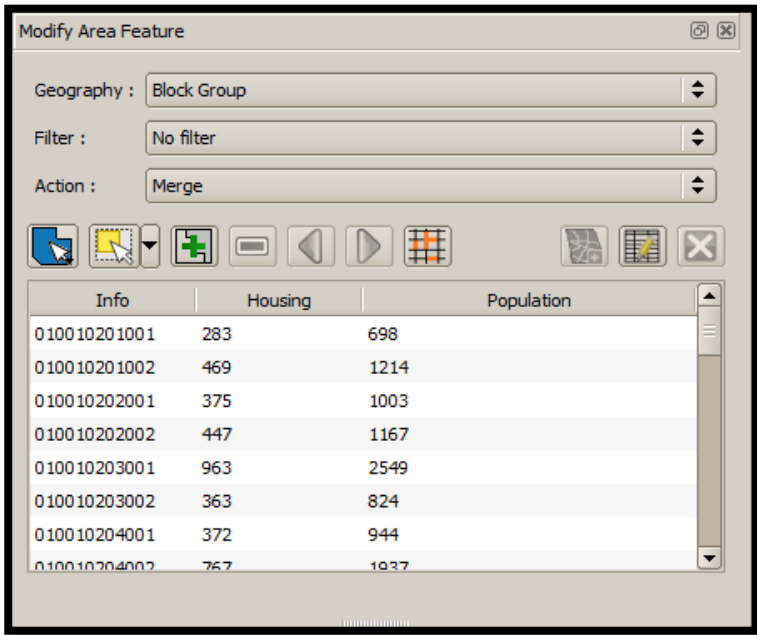
Participants can split block groups by face, merge block groups, and change block group boundaries. [Part 1](#) outlined the criteria and background for updating block groups, while [Part 2](#) introduced the tools for updating. This section provides detailed examples for performing the aforementioned updates of splitting, merging, and changing boundaries. Refer to [Section 9.3.4](#) for details on special use block groups.

**IMPORTANT:** Participants may renumber the block groups using the **Renumbering Tool** in the **PSAP toolbar**. If participants do want to renumber to avoid any gaps in the numbering of block groups, execute the tool after all work on the block group geography concludes. Do not execute the tool, if participants wish to retain the existing block group numbering.

### 9.4.1 Select Block Group

Participants can change and modify block groups. This is the second priority for participants' review after reviewing and updating census tracts. However, there may be instances in which the census tracts remain within specified thresholds, but block groups require updating due to population or housing changes. In those cases, participants begin with a review of the block groups. Steps to select block groups to begin a review are included in [Table 41](#).

**Table 41: Select Block Group**

Step	Action and Result																											
Step 1	Download and review the data as described in <a href="#">Section 7.2, Open GUPS and Start a New Project</a> .																											
Step 2	<p>Follow steps from <a href="#">Table 32: Select Census Tracts</a> to open the existing project. After completing <b>Steps 1 – 4</b> (step 5 only appears with the initial setup), modify <b>Step 6</b> by clicking the <b>Modify Area Feature, Geography</b> drop-down menu and selecting <b>Block Group</b>. Enable the imagery as described in <b>Step 7</b> in order to visualize and orient to the block group(s) under review.</p>  <table><thead><tr><th>Info</th><th>Housing</th><th>Population</th></tr></thead><tbody><tr><td>010010201001</td><td>283</td><td>698</td></tr><tr><td>010010201002</td><td>469</td><td>1214</td></tr><tr><td>010010202001</td><td>375</td><td>1003</td></tr><tr><td>010010202002</td><td>447</td><td>1167</td></tr><tr><td>010010203001</td><td>963</td><td>2549</td></tr><tr><td>010010203002</td><td>363</td><td>824</td></tr><tr><td>010010204001</td><td>372</td><td>944</td></tr><tr><td>010010204002</td><td>767</td><td>1937</td></tr></tbody></table>	Info	Housing	Population	010010201001	283	698	010010201002	469	1214	010010202001	375	1003	010010202002	447	1167	010010203001	963	2549	010010203002	363	824	010010204001	372	944	010010204002	767	1937
Info	Housing	Population																										
010010201001	283	698																										
010010201002	469	1214																										
010010202001	375	1003																										
010010202002	447	1167																										
010010203001	963	2549																										
010010203002	363	824																										
010010204001	372	944																										
010010204002	767	1937																										

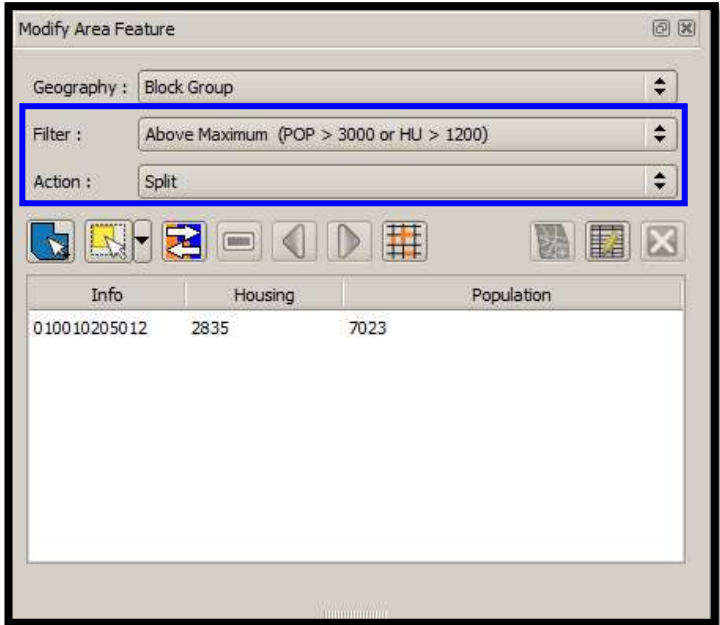
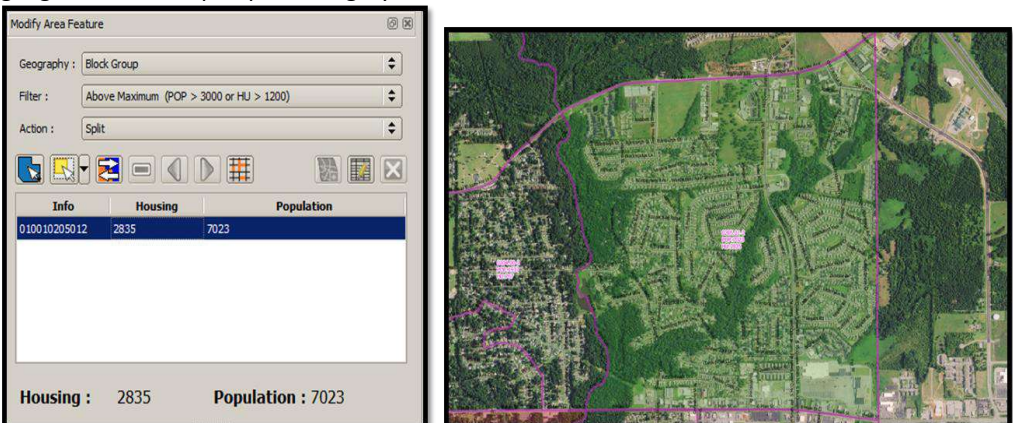
### 9.4.2 Split a Block Group

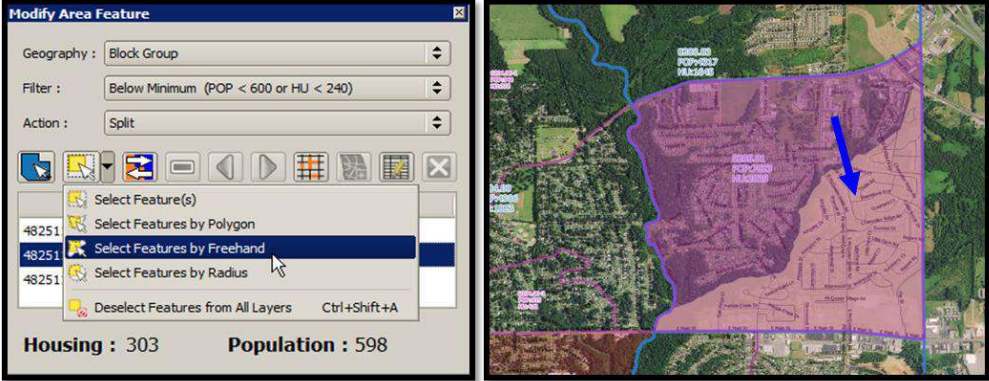

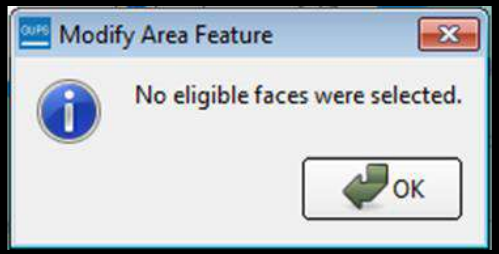
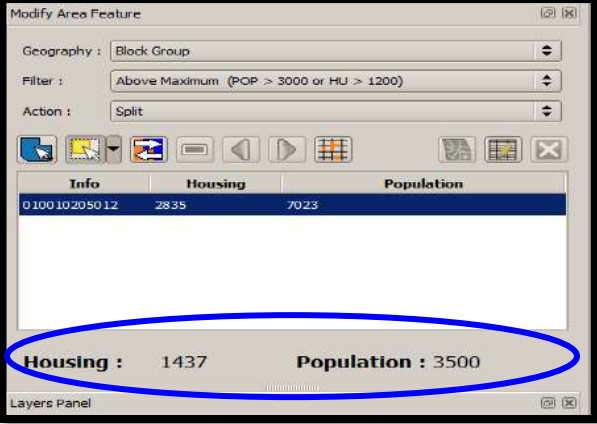
To resolve the block groups above the maximum threshold, participants split block groups by faces within the problematic block group, ideally into two equal parts. Unlike census tracts, historical comparability between decades is not a strong expectation. It is more important to ensure block groups meet the suggested criteria rather than maintaining historical comparability. Participants are encouraged to use one of two options when splitting block groups. Either they split the block group into geometrically equal parts or they split according to


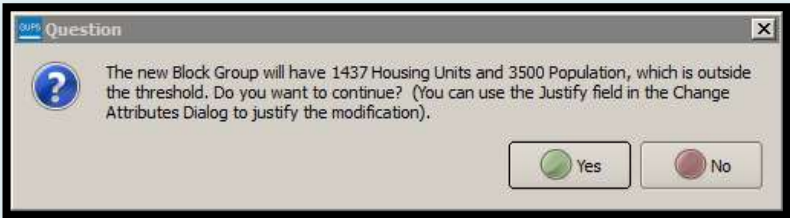

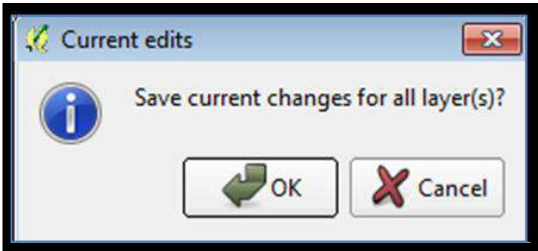
The screenshot shows the STC 3.0.5.111 software interface. The main window displays a 3D model of a mechanical part, which appears to be a bracket or a support structure. The model is rendered in a light blue color. The software interface includes a menu bar at the top with options like File, Edit, View, and Help. Below the menu bar is a toolbar with various icons for file operations, editing, and viewing. The main workspace shows the 3D model with several dimension lines and numerical values indicating the size of the part. The status bar at the bottom of the window displays the text "STC 3.0.5.111" and "2006.11.11 10:00:00".



**Table 42: Split Block Group**

Step	Action and Result						
Step 2	<p>Within the <b>Modify Area Feature</b> window, click the drop-down <b>Filter</b> menu to select <b>Above Maximum (POP &gt; 3000 or HU &gt; 1200)</b>. This will select all block groups that have more than the maximum number of houses/people. Change the <b>Action</b> drop-down to <b>Split</b>. This allows participants to split the block group by faces (areas).</p>  <table><thead><tr><th>Info</th><th>Housing</th><th>Population</th></tr></thead><tbody><tr><td>010010205012</td><td>2835</td><td>7023</td></tr></tbody></table>	Info	Housing	Population	010010205012	2835	7023
Info	Housing	Population					
010010205012	2835	7023					
Step 3	<p>Double click to select a block group from the <b>Info</b> column within the <b>Modify Area Feature</b> window. The <b>Map View</b> zooms to the selected block group to review for potential splitting and highlights it. This step depicts imagery.</p>  <table><thead><tr><th>Info</th><th>Housing</th><th>Population</th></tr></thead><tbody><tr><td>010010205012</td><td>2835</td><td>7023</td></tr></tbody></table> <p>Housing : 2835      Population : 7023</p>	Info	Housing	Population	010010205012	2835	7023
Info	Housing	Population					
010010205012	2835	7023					

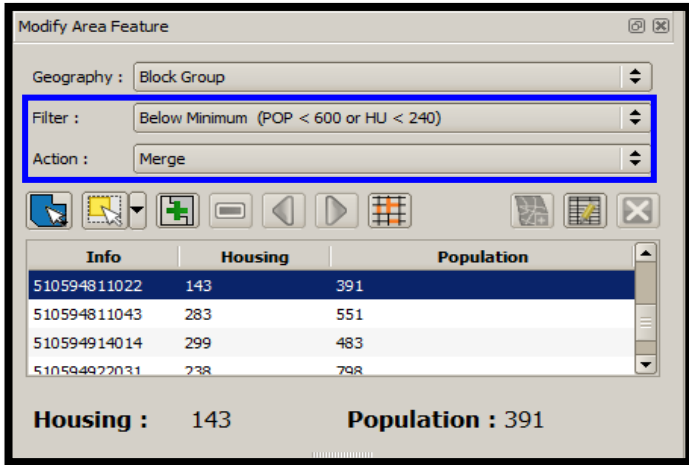
Step	Action and Result
<b>Step 4</b>	<p>Click the <b>Select Features by Freehand</b> button to select the faces to use to split the block group. Left click the mouse on the starting point and drag the chasing line around the targeted area then right-click the mouse to end the review the selected area. <i>The selected faces highlight with a yellow/green shade, likely distorted by the shading of a block group or census tract.</i> Change the selection method from <b>Select Features by Freehand</b> to <b>Select Feature(s)</b>. Hold the Ctrl key on the keyboard and single click to select and add any missing faces. Also, hold the Ctrl key and single click to unselect unnecessary selected faces. The use of the Shift key may also prove beneficial when adding to an existing set of faces, as it works similarly to the Ctrl key.</p> 
	<p>Participants are only able to select faces (areas) within the highlighted block group. <i>Selecting faces outside the highlighted area will result in an error message.</i></p> 
<b>Step 5</b>	<p><i>The selected area's <b>Housing and Population</b> totals display at the bottom of the <b>Modify Area Feature</b> window prior to completing the split.</i></p>  <p><b>IMPORTANT:</b> Remember to keep the block group threshold numbers in mind:  Population: 600 – 3,000  Housing: 240 – 1,200</p>

Step	Action and Result
<b>Step 6</b>	If the selected faces generate a valid new block group, click the <b>Split by Face</b> button to create two new block groups.
	<p>If a <b>Question</b> window displays showing that the selection is outside the threshold of acceptable ranges, participants need to either justify this threshold violation or select additional geographies to meet the required threshold. Click <b>YES</b> if satisfied with new block group. Click <b>NO</b> if not satisfied and would like to revise.</p> 
<b>Step 7</b>	<p>Refer to the <b>Map View</b> to verify that GUPS created the new block groups with new block group numbers. If completed successfully, the two block groups have no shading (no red or green) unless they fall outside the acceptable ranges of population or housing unit counts.</p>  <p>To reverse the split, prior to saving use the <b>Undo</b> button. Refer to <a href="#">Table 12</a> and <a href="#">Table 17</a> for instructions on the Undo functionality.</p>
<b>Step 8</b>	<p>Click the <b>Save</b> button to save the edits and update the project. <i>The <b>Current edits</b> confirmation dialog box asks to save the changes for all layer(s).</i> For more information on saving, please refer to <a href="#">Section 7.3, Save a Project in GUPS</a>.</p>  <p>Click <b>OK</b> to save or <b>Cancel</b> to return to the <b>Map View</b> without saving.</p>


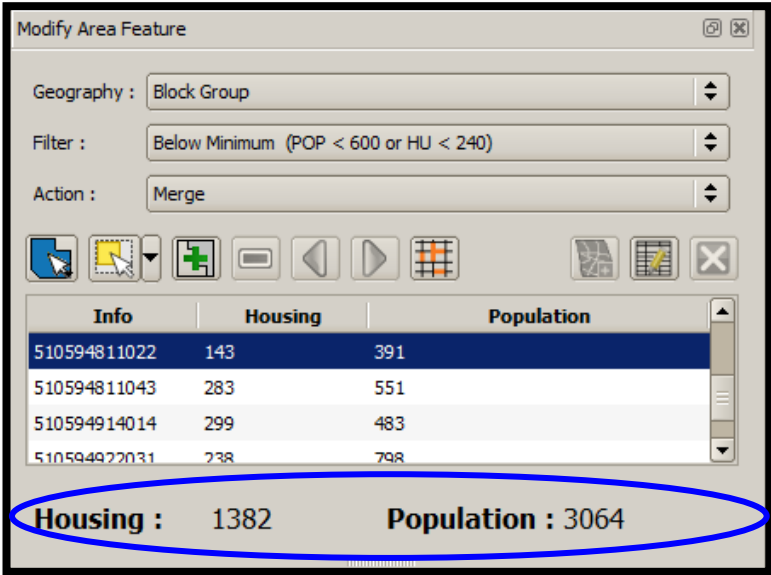

### 9.4.3 Merge Block Groups

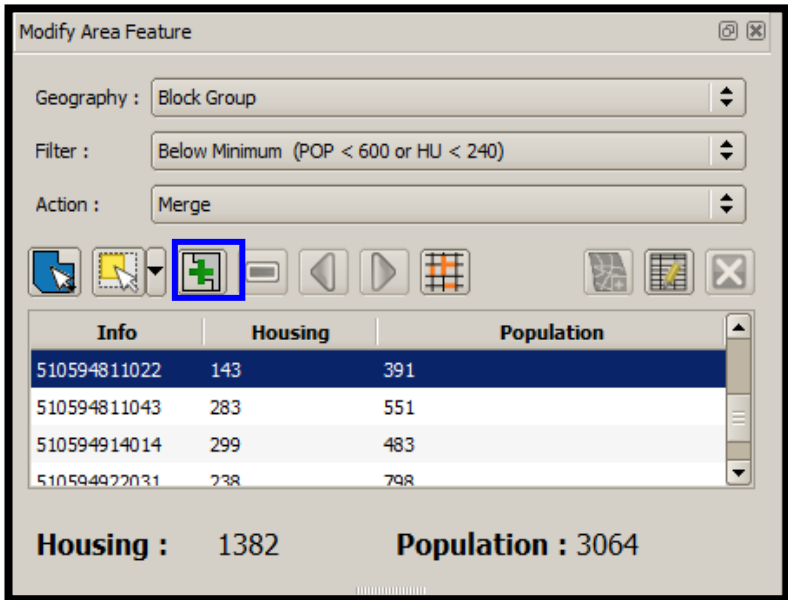

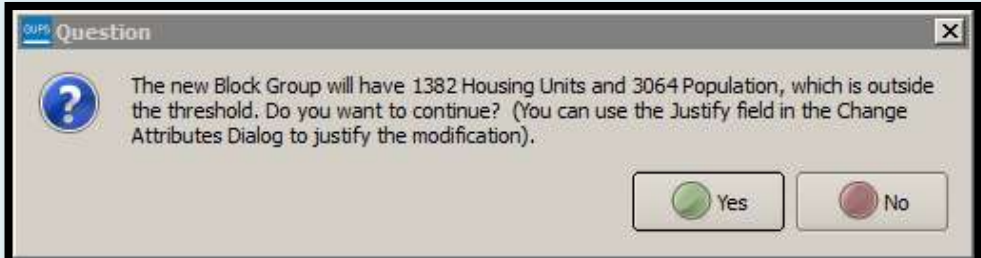
To resolve the block groups below the minimum threshold, participants perform a merge action by merging neighboring block groups. If both the block group and its census tract are outside of thresholds, resolve the census tract first. Because block groups nest within census tracts, the higher-level census tract changes affect how participants resolve block group errors. Recall that historical comparability is not a concern for block groups as it is for census tracts, so participants have more freedom to make boundary corrections and reorganize existing block groups to meet criteria thresholds. [Table 43](#) explains the steps to merge a block group.


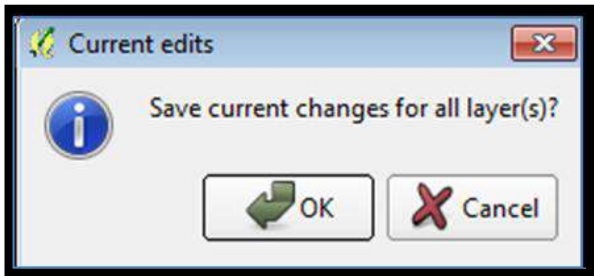
**Table 43: Merge Block Groups**

Step	Action and Result															
Step 1	Follow steps from <a href="#">Table 41: Select Block Group</a> to open the project and select block group for editing.															
Step 2	<p>Within the <b>Modify Area Feature</b> window, click the <b>Filter</b> drop-down menu to select <b>Below Minimum (POP &lt; 600 or HU &lt; 240)</b>. <i>This selects all block groups that have less than the minimum number of housing units or total population.</i> Change the <b>Action</b> drop-down to <b>Merge</b>. <i>This allows participants to merge (or combine) the block groups falling below the minimum requirements.</i></p>  <table><tr><th>Info</th><th>Housing</th><th>Population</th></tr><tr><td>510594811022</td><td>143</td><td>391</td></tr><tr><td>510594811043</td><td>283</td><td>551</td></tr><tr><td>510594914014</td><td>299</td><td>483</td></tr><tr><td>510594922031</td><td>238</td><td>798</td></tr></table> <p><b>Housing : 143      Population : 391</b></p>	Info	Housing	Population	510594811022	143	391	510594811043	283	551	510594914014	299	483	510594922031	238	798
Info	Housing	Population														
510594811022	143	391														
510594811043	283	551														
510594914014	299	483														
510594922031	238	798														

Step	Action and Result
Step 3	<p>Double click to select a block group from the <b>Info</b> column within the <b>Modify Area Feature</b> window. <i>The <b>Map View</b> zooms to the selected block group to review for potential merging and highlights it.</i></p> <div><div><div><div>Modify Area Feature</div><div>Geography : Block Group</div><div>Filter : Below Minimum (POP &lt; 500 or HU &lt; 240)</div><div>Action : Merge</div><div><div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div></div></div></div></div></div></div>

Step	Action and Result
<p><b>Step 4</b></p>	<p>Click the <b>Select Features by Area</b> or <b>single click button</b> to select the block group(s) to use to merge with the below minimum block group. <i>The newly selected block group(s) highlight in yellow. This step depicts imagery.</i></p>  <p><b>IMPORTANT:</b> Remember to keep the block group threshold numbers in mind:  Population: 600 – 3,000  Housing: 240 – 1,200</p>  <p><i>The housing and population totals change dynamically while selecting block groups to merge, allowing participants to see the results of the merge, prior to actually merging the block groups.</i></p>
	<p>Selecting block groups not contiguous with each other result in geographic errors. Participants must correct contiguity errors (or provide a justification for keeping the block groups noncontiguous) prior to submission to the Census Bureau. The <b>Modify Area Feature</b> tool does not allow a participant to select block groups in different counties.</p>

Step	Action and Result															
Step 5	<p>If the selected block group(s) generate a valid new block group, click the <b>Merge</b> button to create a new block group.</p> <div><table><thead><tr><th>Info</th><th>Housing</th><th>Population</th></tr></thead><tbody><tr><td>510594811022</td><td>143</td><td>391</td></tr><tr><td>510594811043</td><td>283</td><td>551</td></tr><tr><td>510594914014</td><td>299</td><td>483</td></tr><tr><td>510594922031</td><td>238</td><td>798</td></tr></tbody></table><p><b>Housing : 1382      Population : 3064</b></p></div>	Info	Housing	Population	510594811022	143	391	510594811043	283	551	510594914014	299	483	510594922031	238	798
Info	Housing	Population														
510594811022	143	391														
510594811043	283	551														
510594914014	299	483														
510594922031	238	798														
	<p>If a <b>Question</b> window displays showing that the selection is outside the threshold of acceptable ranges, participants need to either justify this threshold violation or select additional geographies to meet the required threshold. Click <b>YES</b> if satisfied with new block group. Click <b>NO</b> if not satisfied and would like to revise.</p> <div></div>															

Step	Action and Result
<b>Step 6</b>	<p>Refer to the <b>Map View</b> to verify that GUPS created the new block group with new block group number. If completed successfully, the new block group has no shading (no red or green) unless it still falls outside the acceptable ranges of population or housing unit counts.</p>  <p>To reverse the merge, prior to saving use the <b>Undo</b> button. Refer to <a href="#">Table 12</a> and <a href="#">Table 17</a> for instructions on the Undo functionality.</p> <p><b>Note:</b> Execute the <b>Renumbering Tool</b> after all work on the working county is complete. Do not execute it after editing each block group. If a working county submission includes gaps in the block group numbering, the Census Bureau will confirm with the participant whether they want the block groups renumbered or whether they forgot to execute the tool. Pending the answer, the Census Bureau will renumber the block groups prior to creation of the verification products or they will retain the existing block group numbering.</p>
<b>Step 7</b>	<p>Consider using the <b>Change Attributes</b> button within the <b>Modify Area Feature</b> tool to edit the block group number assigned by GUPS, or use the <b>Renumbering Tool</b> in the <b>PSAP toolbar</b> to renumber all of the block groups at the conclusion of all block group updates.</p>
<b>Step 8</b>	<p>Click the <b>Save</b> button to save the edits and update the project. <i>The <b>Current edits</b> confirmation dialog box asks to save the changes for all layer(s).</i> For more information on saving, please refer to <a href="#">Section 7.3, Save a Project in GUPS</a>.</p>  <p>Click <b>OK</b> to save or <b>Cancel</b> to return to the <b>Map View</b> without saving.</p>

#### 9.4.4 Change Block Group Boundaries

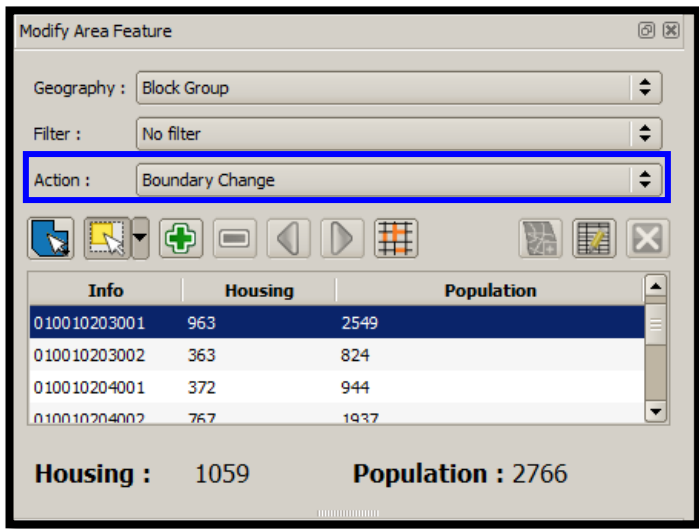
As stated previously, block group comparability is not as important as census tract comparability through the decades. Participants can apply boundary changes to block group

boundaries when the housing units and or the populations are below the required thresholds, when the boundary does not follow any visible features, or when the boundaries shown in GUPS are errant and no longer accurately reflect the real boundary. The Census Bureau will likely accept small revisions to block group boundaries, but will likely deny boundary changes that affect a large amount of population in the affected block groups.

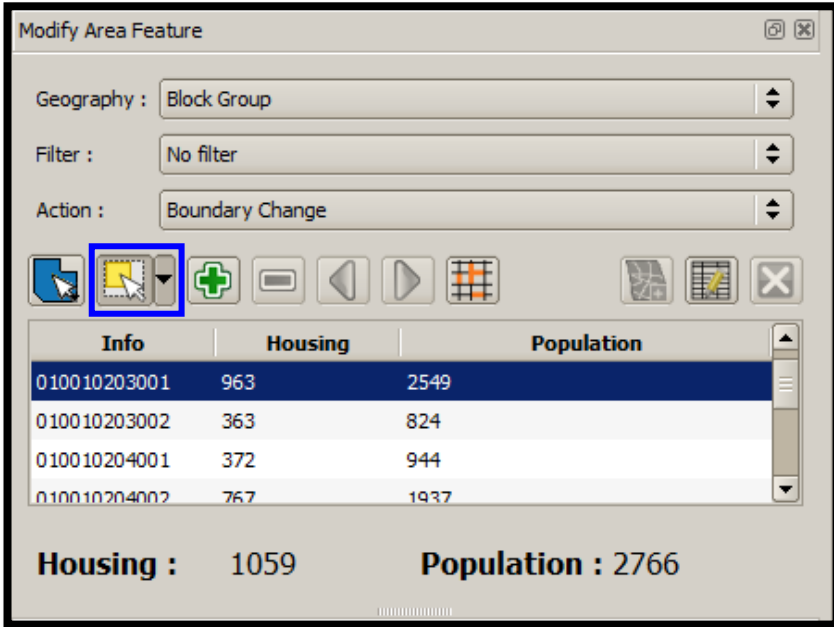
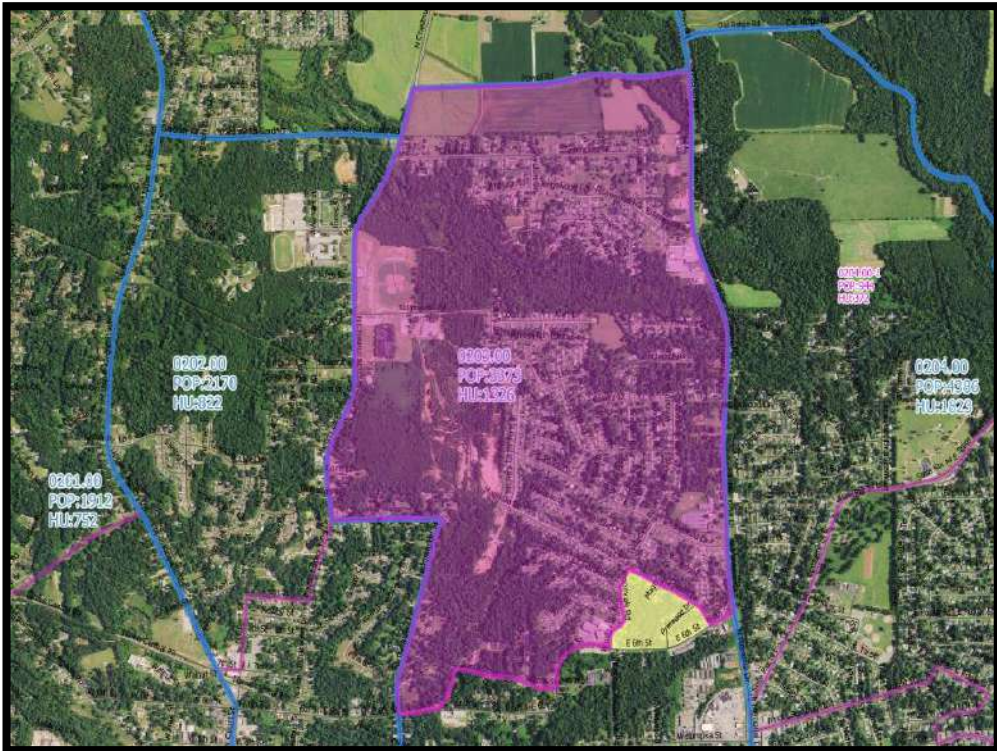
As with census tracts, the boundary change action uses the faces layer to modify block groups.


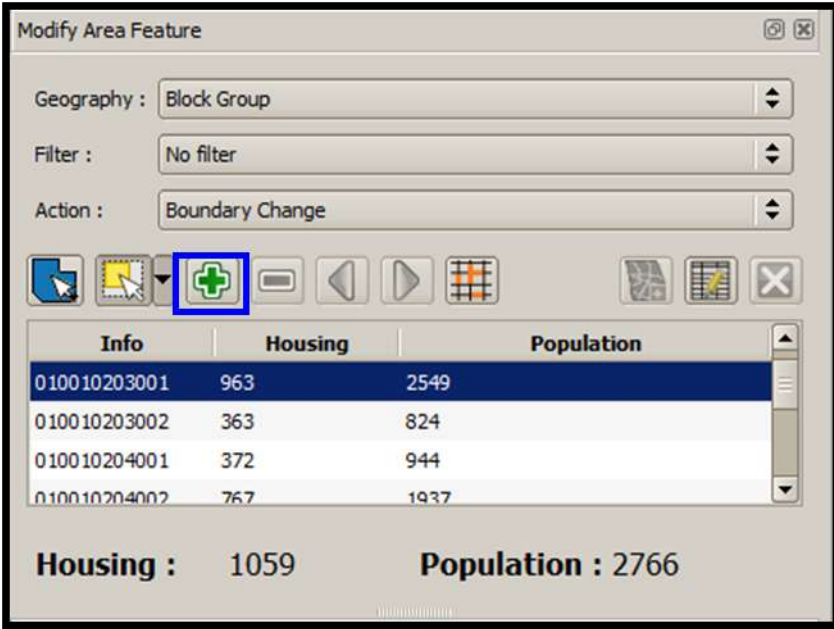
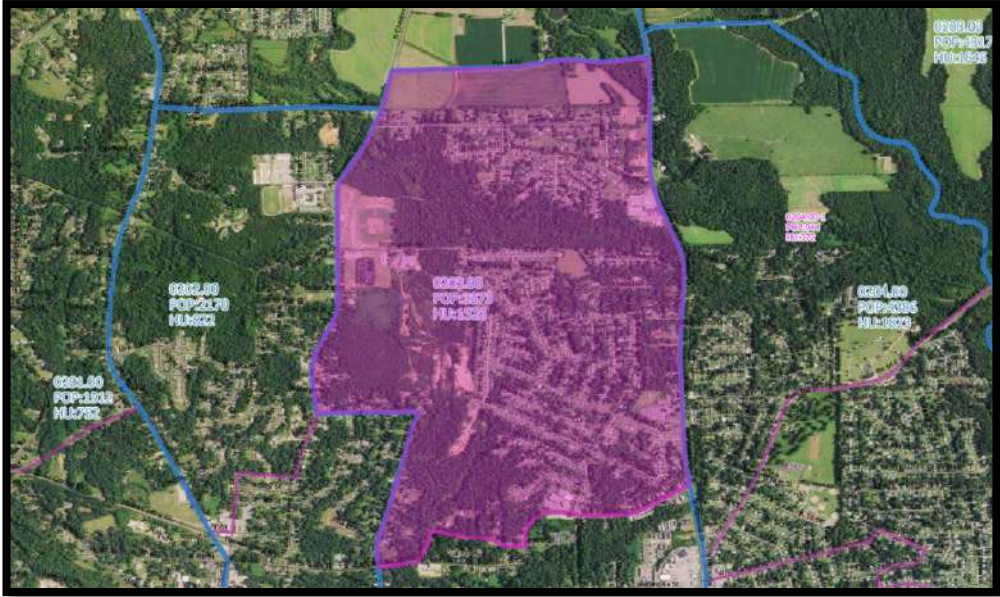
**Table 44** explains the steps to change block group boundaries.

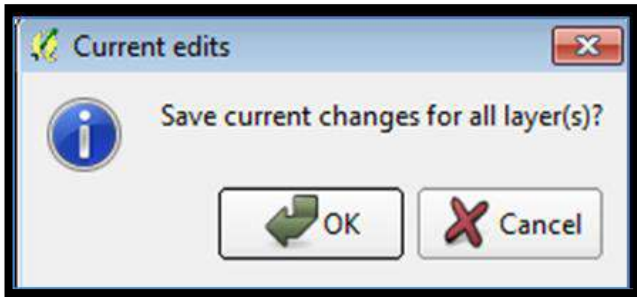
**Table 44: Change Block Group Boundaries**

Step	Action and Result															
Step 1	Follow steps from <a href="#">Table 41: Select Block Group</a> to open the project and select block group for editing.															
Step 2	Within the <b>Modify Area Feature</b> window, click the drop-down <b>Action</b> menu to select <b>Boundary Change</b> .															
	 <table><thead><tr><th>Info</th><th>Housing</th><th>Population</th></tr></thead><tbody><tr><td>010010203001</td><td>963</td><td>2549</td></tr><tr><td>010010203002</td><td>363</td><td>824</td></tr><tr><td>010010204001</td><td>372</td><td>944</td></tr><tr><td>010010204002</td><td>767</td><td>1937</td></tr></tbody></table> <p><b>Housing :</b> 1059      <b>Population :</b> 2766</p>	Info	Housing	Population	010010203001	963	2549	010010203002	363	824	010010204001	372	944	010010204002	767	1937
Info	Housing	Population														
010010203001	963	2549														
010010203002	363	824														
010010204001	372	944														
010010204002	767	1937														
Step 3	Double click to select a block group from the <b>Info</b> column within the <b>Modify Area Feature</b> window. <i>The <b>Map View</b> zooms to the selected block group to review for a potential boundary change.</i>															

Step	Action and Result
	<div><div>Modify Area Feature</div><div><div>Geography : Block Group</div><div>Filter : No filter</div><div>Action : Boundary Change</div></div><div><div></div></div></div>

Step	Action and Result
<b>Step 4</b>	<p>Click the <b>Select Features By Area</b> or <b>single click</b> button to select the faces to use for boundary change.</p>  <p>The selected faces highlight in yellow. This step depicts imagery.</p>  <p><b>IMPORTANT:</b> Remember to keep the block group threshold numbers in mind:  Population: 600 – 3,000  Housing: 240 – 1,200</p>

Step	Action and Result
	Selecting noncontiguous faces and the selected block group result in geographic errors. Participants must correct contiguity errors prior to submitting their data to the Census Bureau.
<b>Step 5</b>	<p>Click the <b>Add Area</b> button to apply boundary change to the selected block group.</p>  <p>The housing and population numbers dynamically adjust prior to finalizing the boundary change (change from 963 and 2,549 to 1,059 and 2,766 respectively).</p>
<b>Step 6</b>	<p>Refer to the <b>Map View</b> to verify that GUPS captured the boundary change properly for the block group.</p>  <p>To reverse the boundary change, simply add the area back to the original block group or perform the <b>Undo</b> action prior to saving. Refer to <a href="#">Table 12</a> and <a href="#">Table 17</a> for instructions on the <b>Undo</b> functionality.</p>

Step	Action and Result
Step 7	<p>Click the <b>Save</b> button to save the edits and update the project. <i>The <b>Current edits confirmation dialog box</b> asks to save the changes for all layer(s).</i> For more information on saving, please refer to <a href="#">Section 7.3, Save a Project in GUPS</a>.</p>  <p>Click <b>OK</b> to save or <b>Cancel</b> to return to the <b>Map View</b> without saving.</p>

## 9.5 Census Designated Places (CDPs) Update Instructions

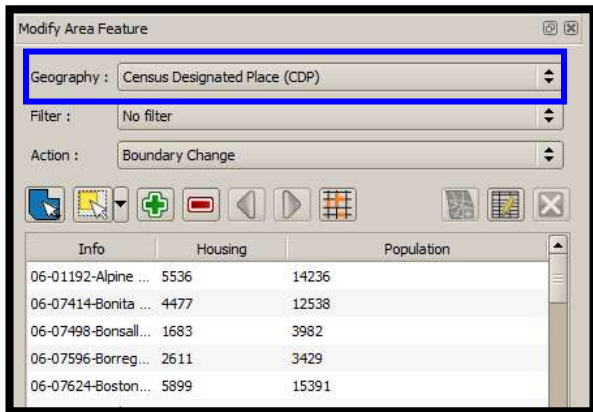
Participants can perform boundary changes to existing CDPs. Performing a boundary change adds faces to or removes faces from existing CDPs. Participants can add new CDPs, delete existing CDPs, and they can perform attribute updates on existing CDPs.

As a reminder from [Chapter 4](#) of this document, the Census Bureau recommends CDP boundaries follow visible features, except in circumstances where the boundary is coincident with the nonvisible boundary of a state, county, minor civil division, or incorporated place.

### 9.5.1 Select Census Designated Place (CDP)

Steps to select a CDP to begin a review are included in [Table 45](#).

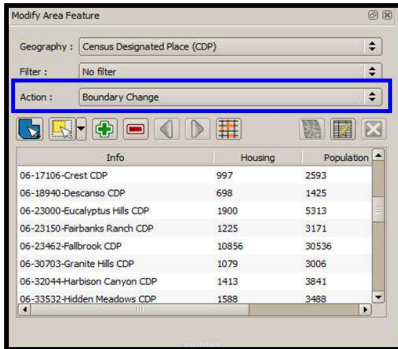
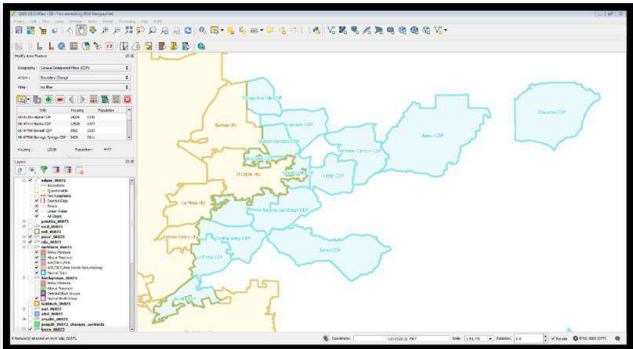
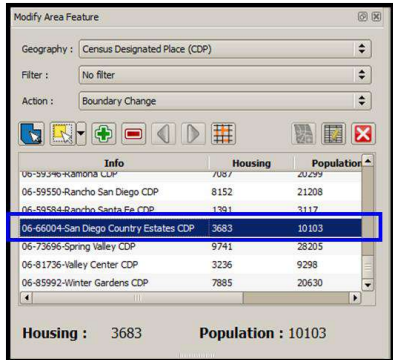
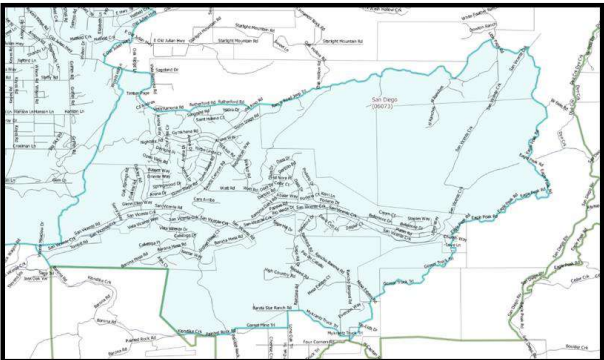
**Table 45: Select Census Designated Place**

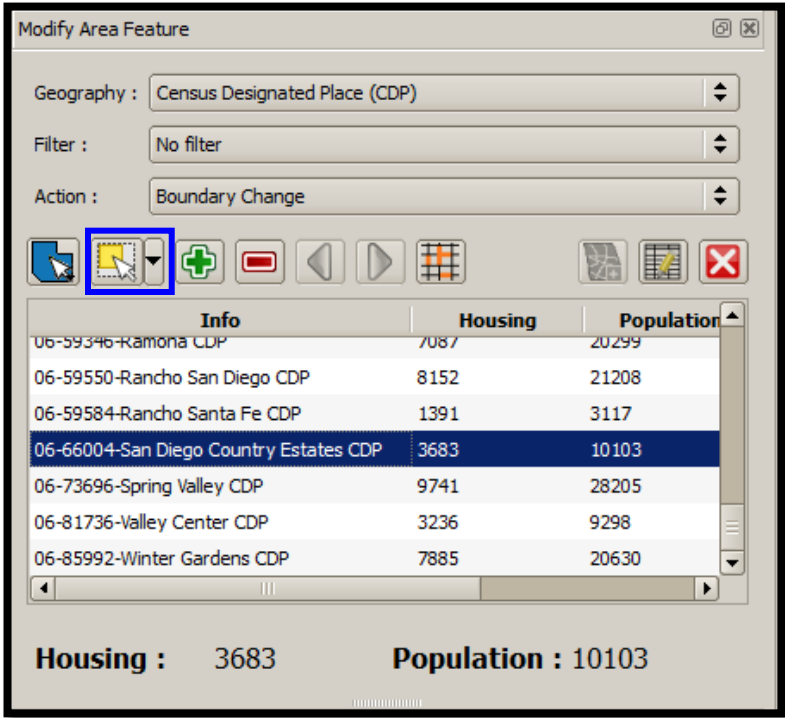
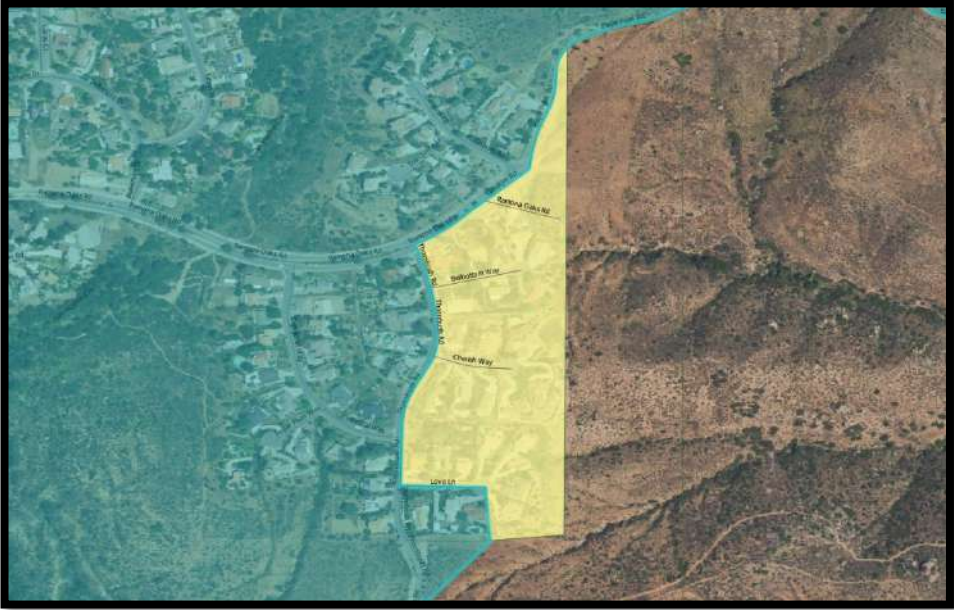
Step	Action and Result
Step 1	Download and review the data as described in <a href="#">Section 7.2, Open GUPS and Start a New Project</a> .
Step 2	<p>Follow steps from <a href="#">Table 32: Select Census Tracts</a> to open the project. After completing <b>Steps 1 – 4</b> (step 5 only appears with the initial setup), modify <b>Step 6</b> by clicking the <b>Modify Area Feature, Geography</b> drop-down menu and selecting <b>Census Designated Place (CDP)</b>. Enable the imagery as described in <b>Step 7</b> in order to visualize and orient to the CDP(s) under review.</p> 

## 9.5.2 Boundary Change – Add Area (CDP)

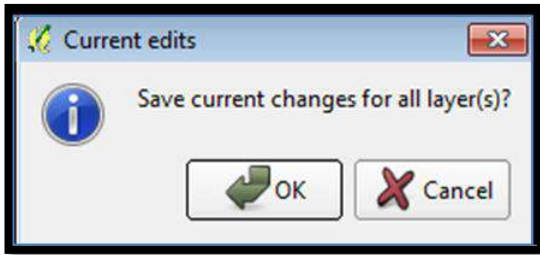
Participants can perform boundary changes to CDPs by adding new area or removing an existing area. The **Boundary Change** action uses the faces layer to modify CDPs. CDP boundaries must follow physical boundaries (with some exceptions as mentioned in [Chapter 4](#)), so the use of imagery when performing this action is vital. If the addition of area dictates an attribute change, refer to the **Change Attributes** section for details on modifying the name of existing CDPs. [Table 46](#) explains the steps to add area to an existing CDP.

**Table 46: Boundary Change – Add Area (CDP)**

Step	Action and Result																											
Step 1	Follow steps from <a href="#">Table 45: Select Census Designated Place</a> to open the project and select Census Designated Places for editing.																											
Step 2	<p>Within the <b>Modify Area Feature</b> window, click the <b>Action</b> drop-down menu to select <b>Boundary Change</b>.</p> <div><table><thead><tr><th>Info</th><th>Housing</th><th>Population</th></tr></thead><tbody><tr><td>06-17106-Crest CDP</td><td>997</td><td>2593</td></tr><tr><td>06-18940-Descanso CDP</td><td>698</td><td>1425</td></tr><tr><td>06-23000-Eucalyptus Hills CDP</td><td>1900</td><td>5313</td></tr><tr><td>06-23150-Fairbanks Ranch CDP</td><td>1225</td><td>3171</td></tr><tr><td>06-23462-Fallbrook CDP</td><td>10856</td><td>30536</td></tr><tr><td>06-30703-Granite Hills CDP</td><td>1079</td><td>3006</td></tr><tr><td>06-32044-Harison Canyon CDP</td><td>1413</td><td>3841</td></tr><tr><td>06-33532-Hidden Meadows CDP</td><td>1588</td><td>3488</td></tr></tbody></table></div>  <p>View the CDPs in the <b>Map View</b> window.</p>	Info	Housing	Population	06-17106-Crest CDP	997	2593	06-18940-Descanso CDP	698	1425	06-23000-Eucalyptus Hills CDP	1900	5313	06-23150-Fairbanks Ranch CDP	1225	3171	06-23462-Fallbrook CDP	10856	30536	06-30703-Granite Hills CDP	1079	3006	06-32044-Harison Canyon CDP	1413	3841	06-33532-Hidden Meadows CDP	1588	3488
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Step 3	<p>Double click to select a CDP from the <b>Info</b> column within the <b>Modify Area Feature</b> window. <i>The Map View zooms to the selected CDP to review and highlights it.</i></p> <div><table><thead><tr><th>Info</th><th>Housing</th><th>Population</th></tr></thead><tbody><tr><td>06-39346-Ranoma CDP</td><td>7067</td><td>21299</td></tr><tr><td>06-59550-Rancho San Diego CDP</td><td>8152</td><td>21208</td></tr><tr><td>06-66004-San Diego Country Estates CDP</td><td>3683</td><td>10103</td></tr><tr><td>06-73696-Spring Valley CDP</td><td>9741</td><td>28205</td></tr><tr><td>06-81736-Valley Center CDP</td><td>3236</td><td>9298</td></tr><tr><td>06-85992-Winter Gardens CDP</td><td>7885</td><td>20630</td></tr></tbody></table><p>Housing : 3683      Population : 10103</p></div> 	Info	Housing	Population	06-39346-Ranoma CDP	7067	21299	06-59550-Rancho San Diego CDP	8152	21208	06-66004-San Diego Country Estates CDP	3683	10103	06-73696-Spring Valley CDP	9741	28205	06-81736-Valley Center CDP	3236	9298	06-85992-Winter Gardens CDP	7885	20630						
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Step	Action and Result
Step 4	<p>Click the <b>Select Features By Area or single click</b> button to select the faces to add to the CDP. Participants can choose any of the four choices beneath the <b>Select Features</b> button to accomplish the modification to the CDP.</p>  <p>The selected faces highlight in yellow. This step depicts imagery.</p>  <p><b>Note:</b> The selected faces are outside of the CDP boundary because this is an add action.</p>

Step	Action and Result																										
Step 5	<p>Click the <b>Add Area</b> button to apply boundary change (addition of faces/areas) to the selected CDP.</p> <div><div>Modify Area Feature</div><div><div>Geography : Census Designated Place (CDP)</div><div>Filter : No filter</div><div>Action : Boundary Change</div><div><div></div></div><table><thead><tr><th>Info</th><th>Housing</th><th>Population</th></tr></thead><tbody><tr><td>06-59346-Ramona CDP</td><td>7087</td><td>20299</td></tr><tr><td>06-59550-Rancho San Diego CDP</td><td>8152</td><td>21208</td></tr><tr><td>06-59584-Rancho Santa Fe CDP</td><td>1391</td><td>3117</td></tr><tr><td>06-66004-San Diego Country Estates CDP</td><td>3683</td><td>10103</td></tr><tr><td>06-73696-Spring Valley CDP</td><td>9741</td><td>28205</td></tr><tr><td>06-81736-Valley Center CDP</td><td>3236</td><td>9298</td></tr><tr><td>06-85992-Winter Gardens CDP</td><td>7885</td><td>20630</td></tr></tbody></table><div><div>Housing : 3683</div><div>Population : 10103</div></div></div></div> <tr><td>Step 6</td><td><p>Refer to the <b>Map View</b> to verify that GUPS captured the boundary change properly for the CDP. Zoom to the proper scale for viewing if the area added is small. If the boundary change is incorrect, the next section explains the process for removing area from a CDP.</p><div></div><p>To reverse the boundary change, simply remove the area or perform the <b>Undo</b> action prior to saving. Refer to <a href="#">Table 12</a> and <a href="#">Table 17</a> for instructions on the <b>Undo</b> functionality.</p></td></tr>	Info	Housing	Population	06-59346-Ramona CDP	7087	20299	06-59550-Rancho San Diego CDP	8152	21208	06-59584-Rancho Santa Fe CDP	1391	3117	06-66004-San Diego Country Estates CDP	3683	10103	06-73696-Spring Valley CDP	9741	28205	06-81736-Valley Center CDP	3236	9298	06-85992-Winter Gardens CDP	7885	20630	Step 6	<p>Refer to the <b>Map View</b> to verify that GUPS captured the boundary change properly for the CDP. Zoom to the proper scale for viewing if the area added is small. If the boundary change is incorrect, the next section explains the process for removing area from a CDP.</p> <div></div> <p>To reverse the boundary change, simply remove the area or perform the <b>Undo</b> action prior to saving. Refer to <a href="#">Table 12</a> and <a href="#">Table 17</a> for instructions on the <b>Undo</b> functionality.</p>
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Step	Action and Result
Step 7	<p>Click the <b>Save</b> button to save the edits and update the project. The <b>Current edits confirmation dialog box</b> asks to save the changes for all layer(s). For more information on saving, please refer to <a href="#">Section 7.3, Save a Project in GUPS</a>.</p>  <p>Click <b>OK</b> to save or <b>Cancel</b> to return to the <b>Map View</b> without saving.</p>

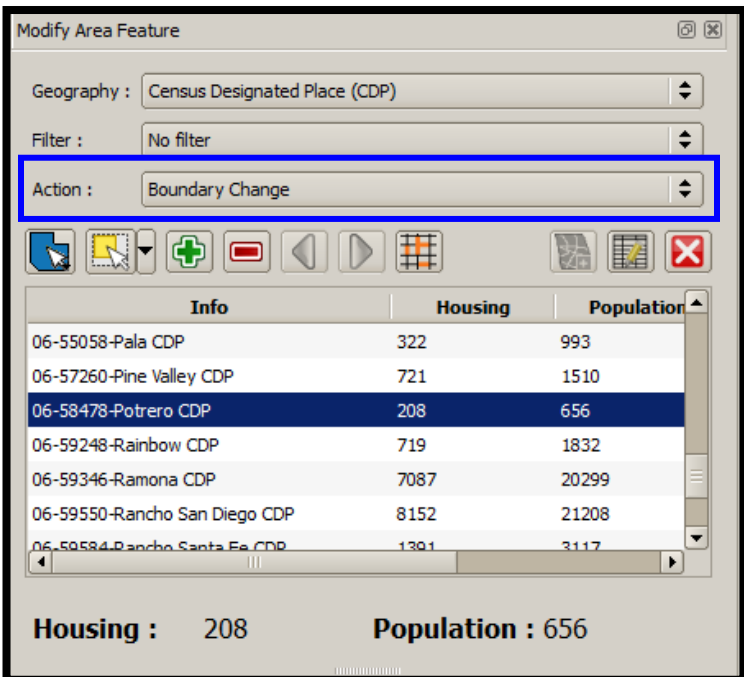
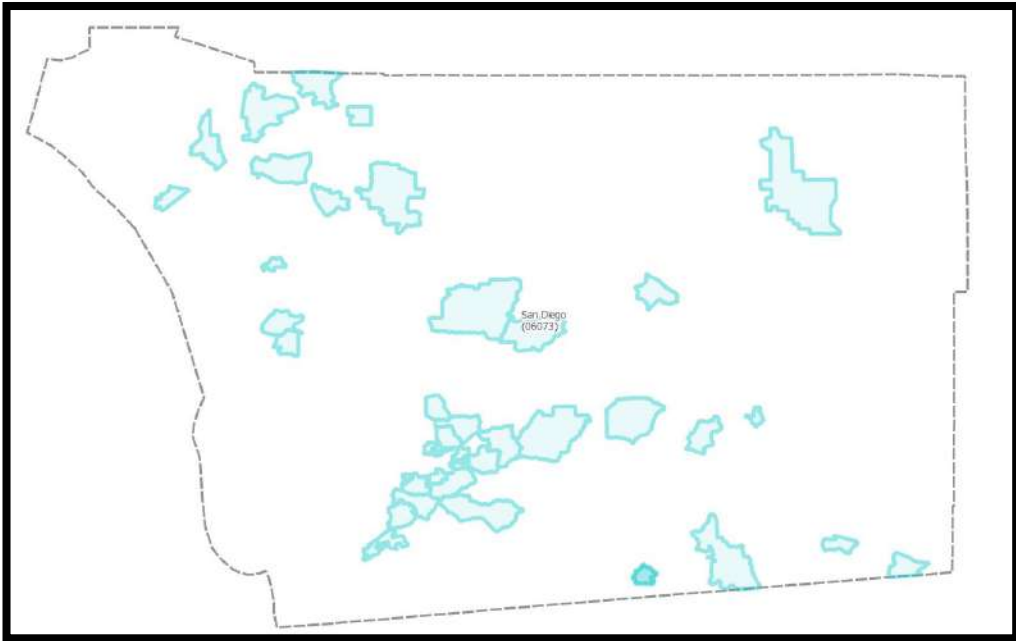
### 9.5.3 Boundary Change – Remove Area (CDP)

Participants can perform boundary changes to CDPs by adding new area or removing an existing area. The **Boundary Change** action uses the faces layer to modify CDPs. CDP boundaries must follow physical boundaries (with some exceptions as mentioned in [Chapter 4](#), so the use of imagery when performing this action is vital. If the removal of area dictates an attribute change, refer to the **Change Attributes** section for details on modifying the name of existing CDPs.


This section covers removing area from an existing CDP. [Table 47](#) explains the steps to remove area from an existing CDP.

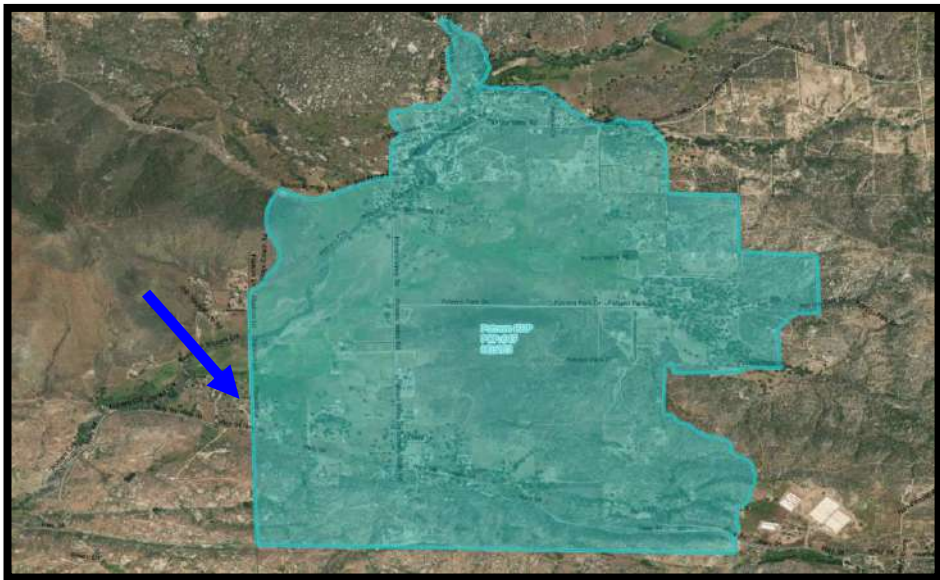
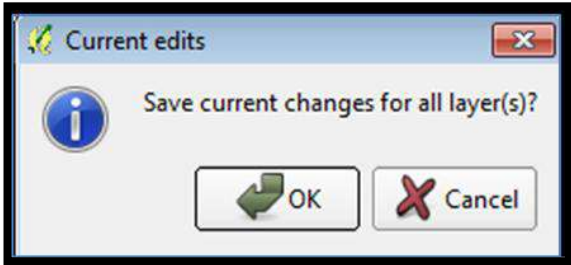
**Table 47: Boundary Change – Remove Area (CDP)**

Step	Action and Result
Step 1	Follow steps from <a href="#">Table 45: Select Census Designated Place</a> to open the project and select Census Designated Places for editing.

Step	Action and Result																								
Step 2	<p>Within the <b>Modify Area Feature</b> window, click the <b>Action</b> drop-down menu to select <b>Boundary Change</b>.</p> <div><table><thead><tr><th>Info</th><th>Housing</th><th>Population</th></tr></thead><tbody><tr><td>06-55058-Pala CDP</td><td>322</td><td>993</td></tr><tr><td>06-57260-Pine Valley CDP</td><td>721</td><td>1510</td></tr><tr><td>06-58478-Potrero CDP</td><td>208</td><td>656</td></tr><tr><td>06-59248-Rainbow CDP</td><td>719</td><td>1832</td></tr><tr><td>06-59346-Ramona CDP</td><td>7087</td><td>20299</td></tr><tr><td>06-59550-Rancho San Diego CDP</td><td>8152</td><td>21208</td></tr><tr><td>06-59584-Rancho Santa Fe CDP</td><td>1391</td><td>3117</td></tr></tbody></table><p><b>Housing : 208      Population : 656</b></p></div> <div></div> <p>View the CDPs in the <b>Map View</b> window.</p>	Info	Housing	Population	06-55058-Pala CDP	322	993	06-57260-Pine Valley CDP	721	1510	06-58478-Potrero CDP	208	656	06-59248-Rainbow CDP	719	1832	06-59346-Ramona CDP	7087	20299	06-59550-Rancho San Diego CDP	8152	21208	06-59584-Rancho Santa Fe CDP	1391	3117
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Step	Action and Result
Step 3	<p>Double click to select a CDP from the <b>Info</b> column within the <b>Modify Area Feature</b> window. <i>The Map View zooms to the selected CDP to review and highlights it.</i></p> <div><div><div><div>Modify Area Feature</div><div><div>Geography : Census Designated Place (CDP)</div><div>Filter : No filter</div><div>Action : Boundary Change</div></div><div><div><div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><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Step	Action and Result
	<div></div> <p><b>Note:</b> The selected faces are inside of the CDP boundary because this is a remove action.</p>
Step 5	<p>Click the <b>Remove Area</b> button to apply boundary change (removal of faces/areas) from the selected CDP.</p> <div><div><div>Modify Area Feature</div><div><div>Geography : Census Designated Place (CDP)</div><div>Filter : No filter</div><div>Action : Boundary Change</div></div><div><div></div></div></div></div>

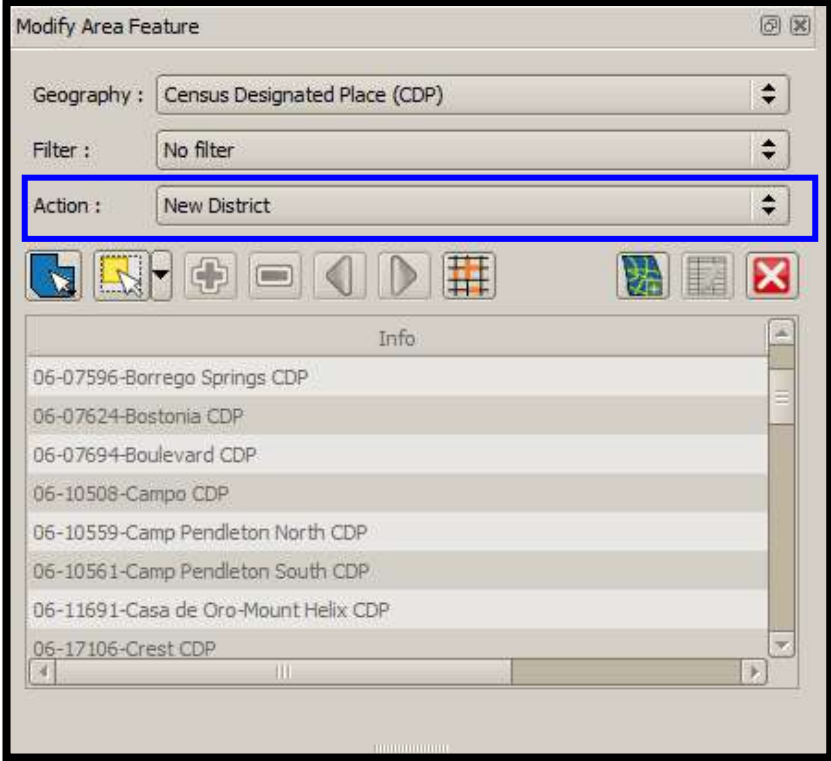
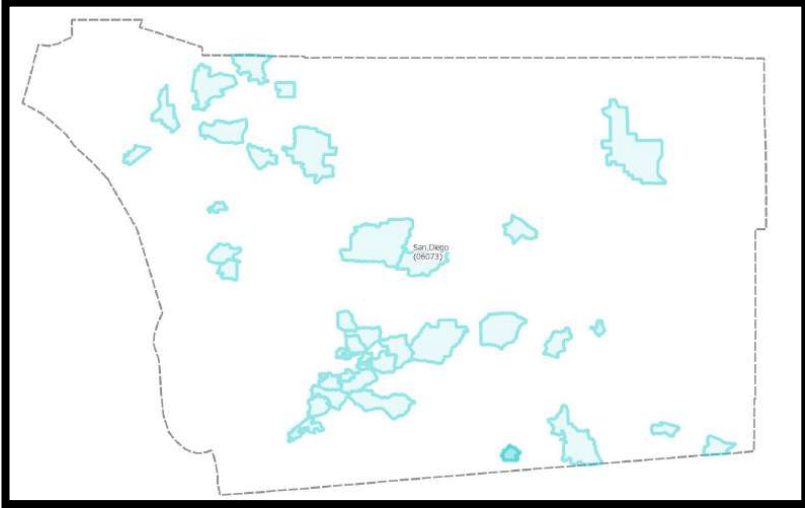
Step	Action and Result
<b>Step 6</b>	<p>Refer to the <b>Map View</b> to verify that GUPS captured the boundary change properly for the CDP. Zoom to the proper scale if the area is small. If the boundary change is incorrect, the previous section on <b>Boundary Change</b> explains the process for adding area to a CDP.</p>  <p>To reverse the boundary change, simply add the area back to the CDP or perform the <b>Undo</b> action prior to saving. Refer to <a href="#">Table 12</a> and <a href="#">Table 17</a> for instructions on the <b>Undo</b> functionality.</p>
<b>Step 7</b>	<p>Click the <b>Save</b> button to save the edits and update the project. The <b>Current edits confirmation dialog box</b> asks to save the changes for all layer(s). For more information on saving, please refer to <a href="#">Section 7.3, Save a Project in GUPS</a>.</p>  <p>Click <b>OK</b> to save or <b>Cancel</b> to return to the <b>Map View</b> without saving.</p>

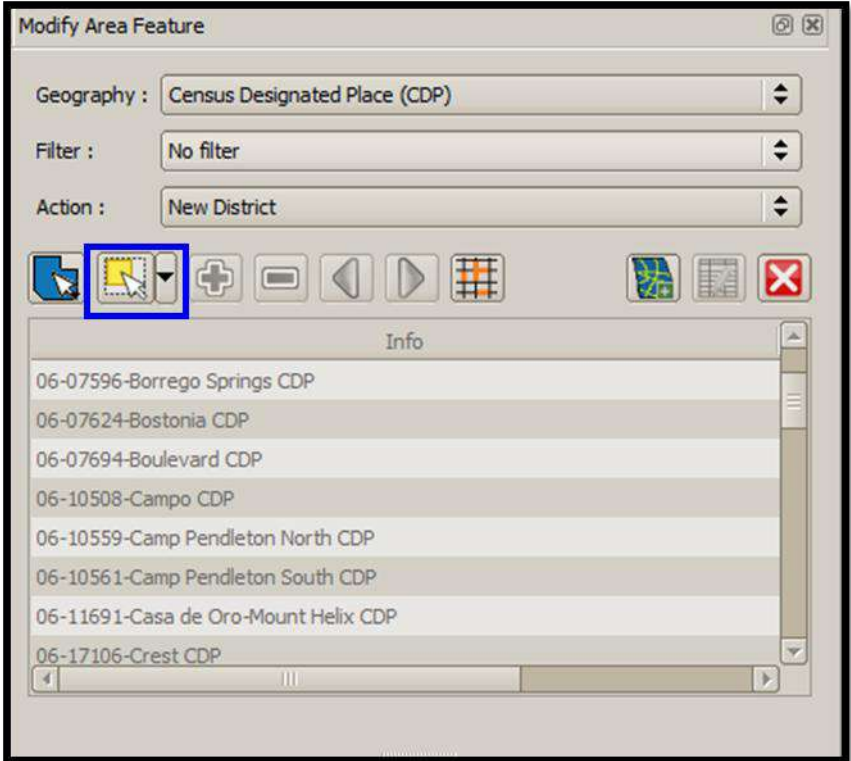

#### 9.5.4 New District – Add Entity (Add a New CDP)

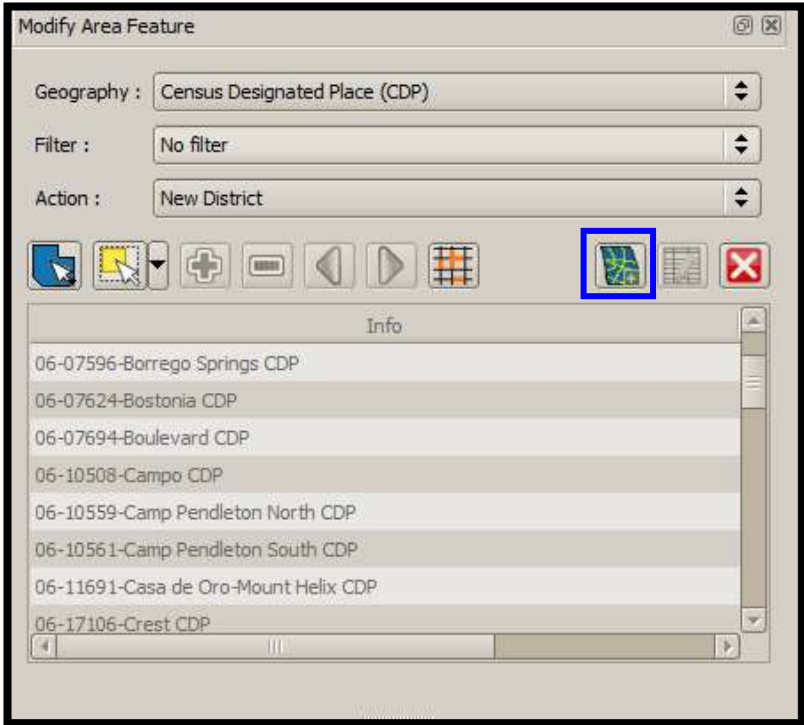
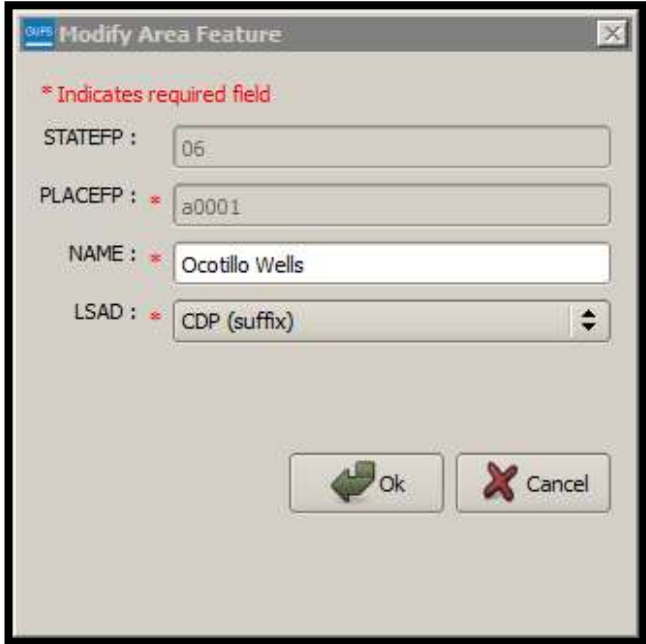
Participants can add new CDPs as part of their PSAP work. As with adding area or removing area from an existing CDP, the **New District** action uses the faces layer to add new CDPs. CDP boundaries must follow physical boundaries (with some exceptions as mentioned in [Chapter 4](#)), so the use of imagery when performing this action is vital.

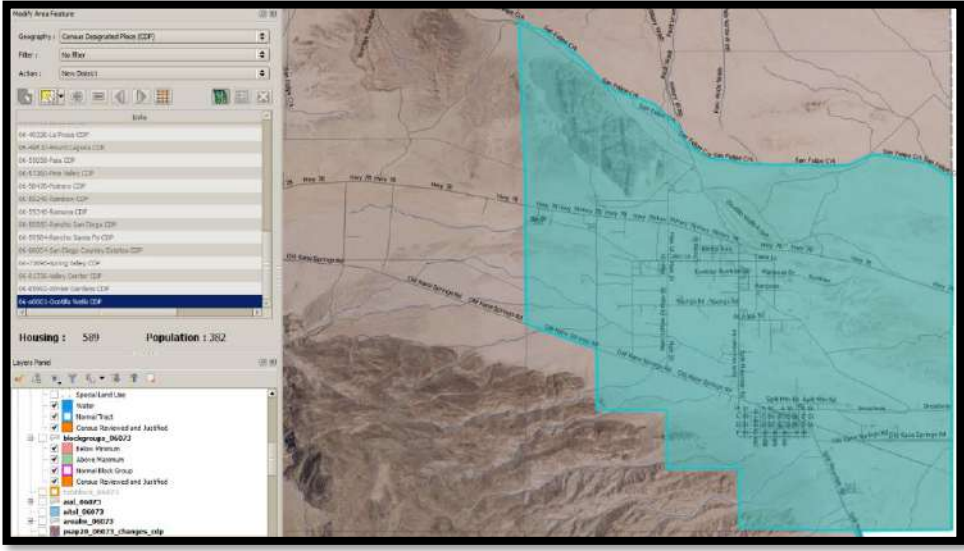
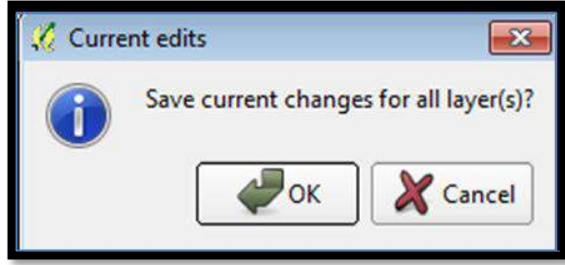
This section covers adding a new CDP to a working county. [Table 48](#) explains the steps to add new CDP using the faces layer.

**Table 48: New District - Add Entity (Add a New CDP)**

Step	Action and Result
Step 1	Follow steps from <a href="#">Table 45: Select Census Designated Place</a> to open the project and select Census Designated Places for editing.
Step 2	<p>Within the <b>Modify Area Feature</b> window, click the <b>Action</b> drop-down menu to select <b>New District</b>.</p>   <p>View the existing CDPs in the <b>Map View</b> window and determine if any are missing.</p> <p>To determine if a CDP is missing, use the <b>Zoom In</b> button and the <b>Pan</b> button on the <b>Standard toolbar</b> to zoom and pan around the working county.</p>

Step	Action and Result
Step 3	<p>Click the <b>Select Features By Area</b> or <b>single click</b> button to select the faces to add to the new CDP. Participants can choose any of the four choices beneath the <b>Select Features</b> button to accomplish the creation of the new CDP.</p>  <p>The selected faces highlight in yellow. This step depicts imagery.</p>  <p><b>Note:</b> Select faces that do not belong to an existing CDP area.</p>

Step	Action and Result
<p><b>Step 4</b></p>	<p>Click the <b>Add Entity</b> button to create a new CDP.</p> 
<p><b>Step 5</b></p>	<p>The <b>Modify Area Feature</b> window opens.</p> <p>Enter the <b>Name</b> of the newly created CDP and then click the <b>OK</b> button.</p> 

Step	Action and Result
Step 6	<p>Refer to the <b>Map View</b> to verify that GUPS captured the new CDP properly. Zoom to the proper scale to confirm the boundaries and area of the CDP. If CDP is incorrect, the previous two sections on <b>Boundary Change</b> explain the process to use for modifying the newly created CDP.</p> 
Step 7	<p>Click the <b>Save</b> button to save the edits and update the project. <i>The <b>Current edits</b> confirmation dialog box asks to save the changes for all layer(s).</i> For more information on saving, please refer to <a href="#">Section 7.3, Save a Project in GUPS</a>.</p>  <p>Click <b>OK</b> to save or <b>Cancel</b> to return to the <b>Map View</b> without saving.</p>

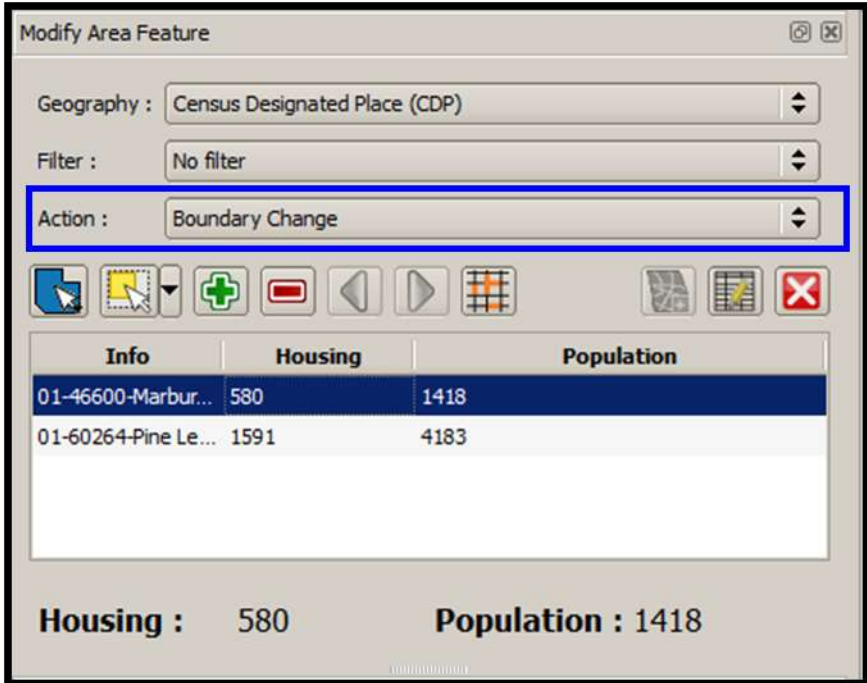
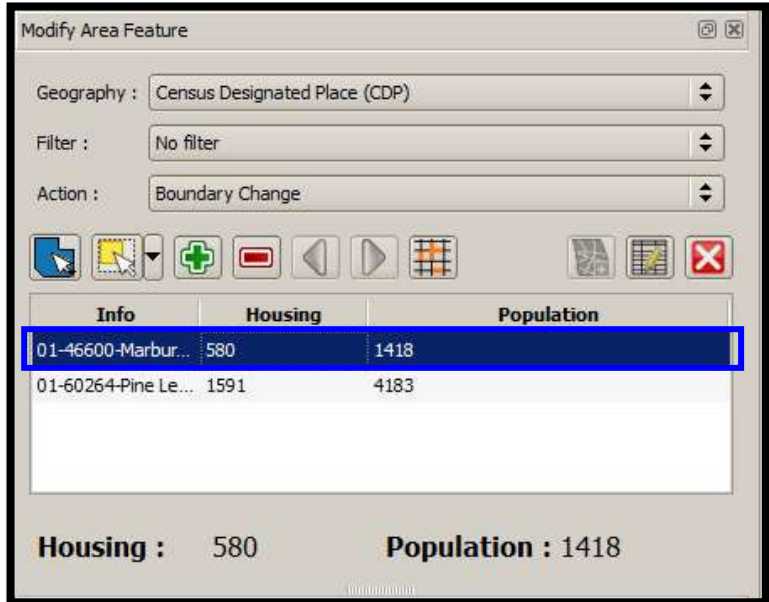
### 9.5.5 Boundary Change – Delete Area Feature (Delete an Existing CDP)

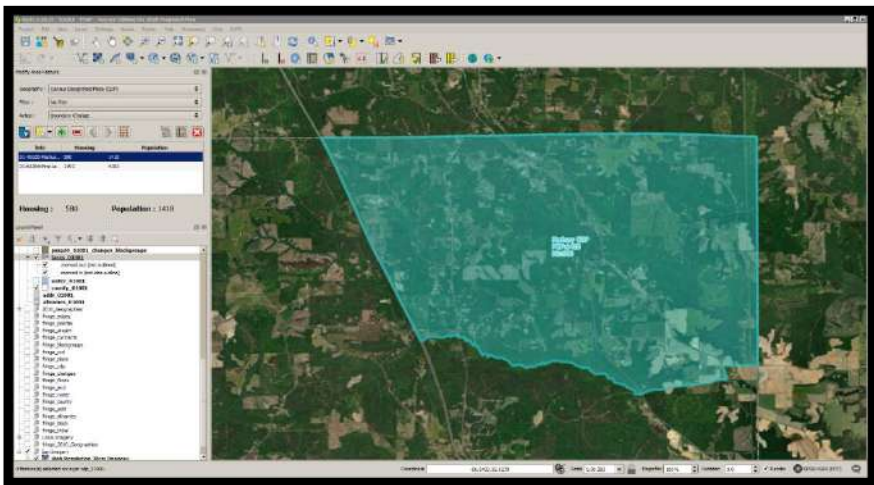
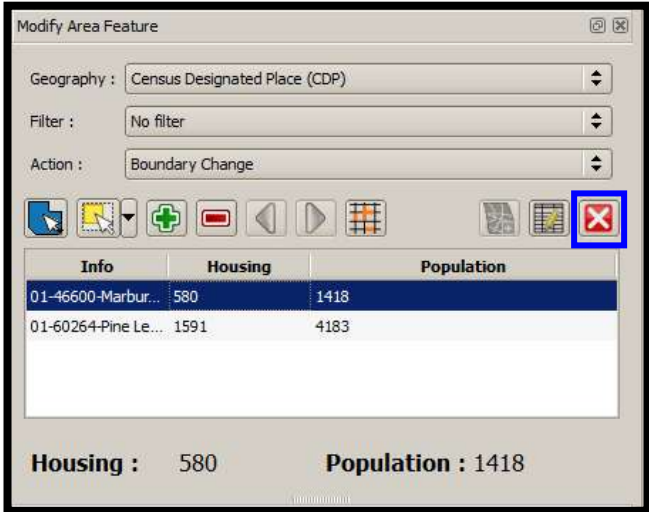
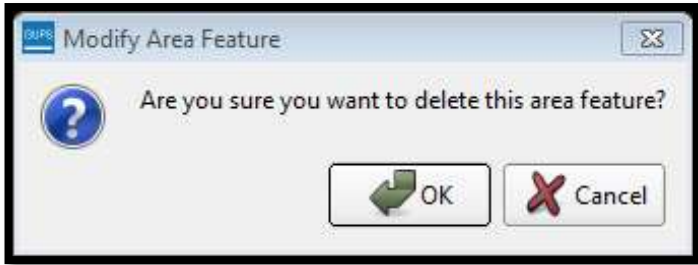
Participants can delete existing CDPs as part of their PSAP work. Before deleting an existing CDP, participants should ensure that none of the characteristics described in [Chapter 4](#) exist for the CDP under consideration for deletion. Presence of those characteristics leads to retention of the existing CDP. Pending review of the submission, the Census Bureau may disapprove of the deletion and retain CDPs proposed for deletion by participants.

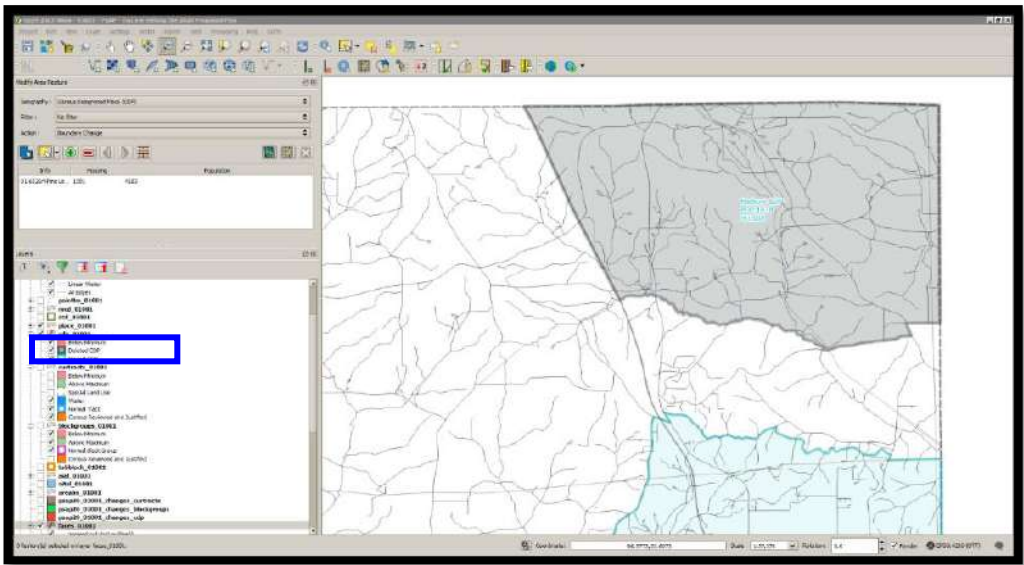
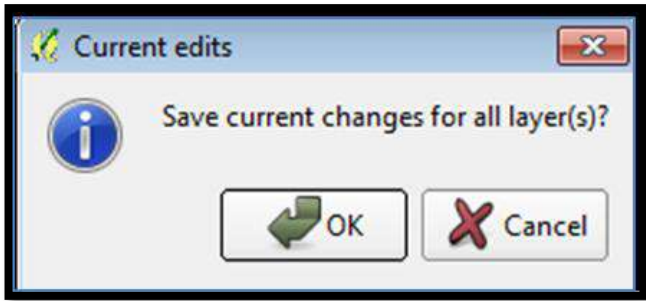
This section covers deleting an existing CDP. [Table 49](#) explains the steps to remove an existing CDP from the working county.

**Table 49: Boundary Change – Delete Area Feature (Delete an Existing CDP)**

Step	Action and Result
Step 1	Follow steps from <a href="#">Table 45: Select Census Designated Place</a> to open the project and select Census Designated Places for editing.

Step	Action and Result
<b>Step 2</b>	<p>Within the <b>Modify Area Feature</b> window, click the <b>Action</b> drop-down menu to select <b>Boundary Change</b>.</p> 
<b>Step 3</b>	<p>Double click to select the CDP to delete from the <b>Info</b> column within the <b>Modify Area Feature</b> window.</p> 

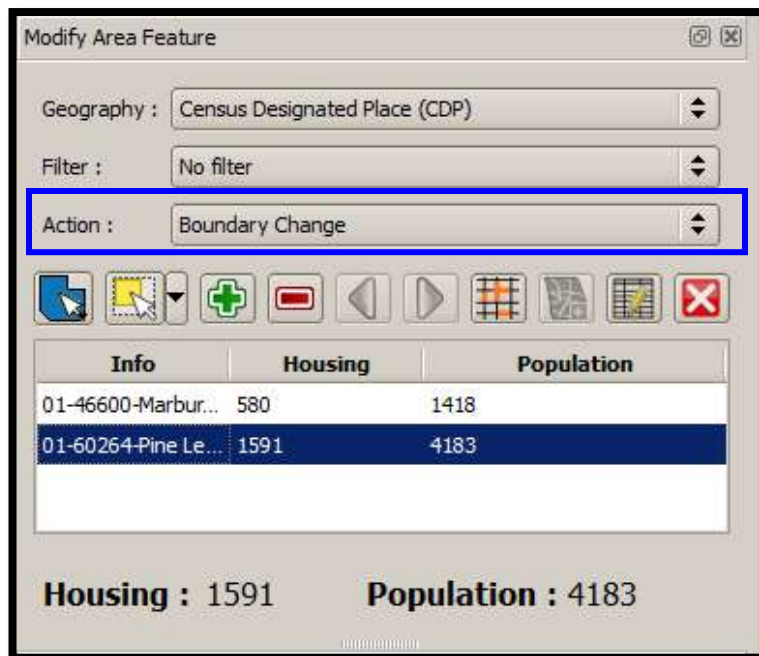
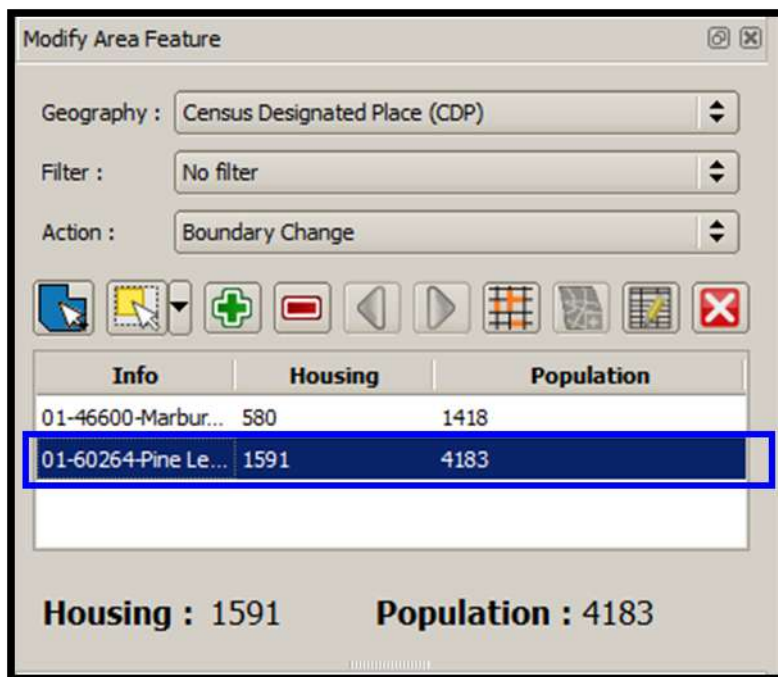
Step	Action and Result									
	<p>The <b>Map View</b> zooms to the selected CDP to review and highlights it. This step depicts imagery.</p> 									
Step 4	<p>Click the <b>Delete Area Feature</b> button to delete the CDP from the list.</p>  <table><thead><tr><th>Info</th><th>Housing</th><th>Population</th></tr></thead><tbody><tr><td>01-46600-Marbur...</td><td>580</td><td>1418</td></tr><tr><td>01-60264-Pine Le...</td><td>1591</td><td>4183</td></tr></tbody></table>	Info	Housing	Population	01-46600-Marbur...	580	1418	01-60264-Pine Le...	1591	4183
Info	Housing	Population								
01-46600-Marbur...	580	1418								
01-60264-Pine Le...	1591	4183								
Step 5	<p>The <b>Modify Area Feature</b> confirmation dialog box displays to verify the deletion of this area feature.</p> <p>Click <b>OK</b> if satisfied with the deletion. Click <b>Cancel</b> to discard the deletion.</p> 									
	<p>For this example, click the <b>OK</b> button to continue.</p>									

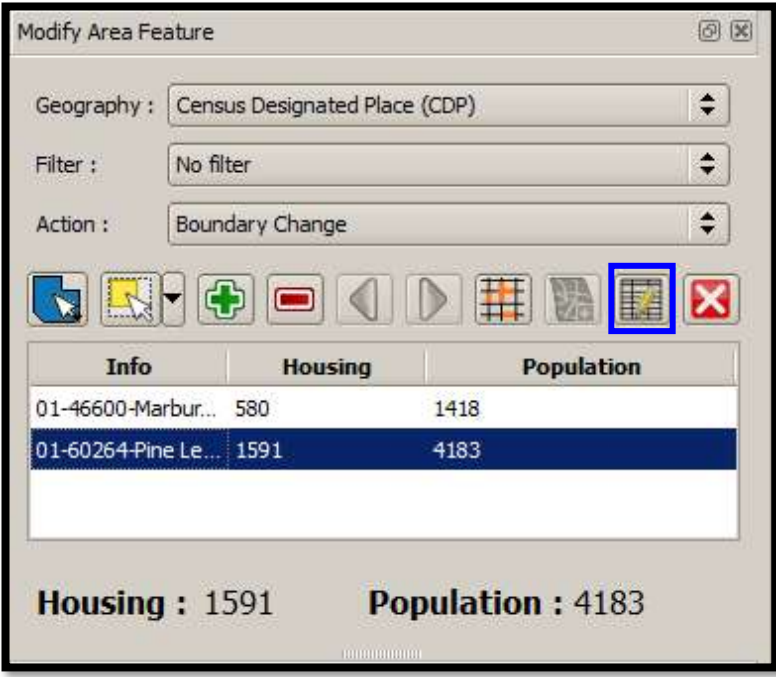
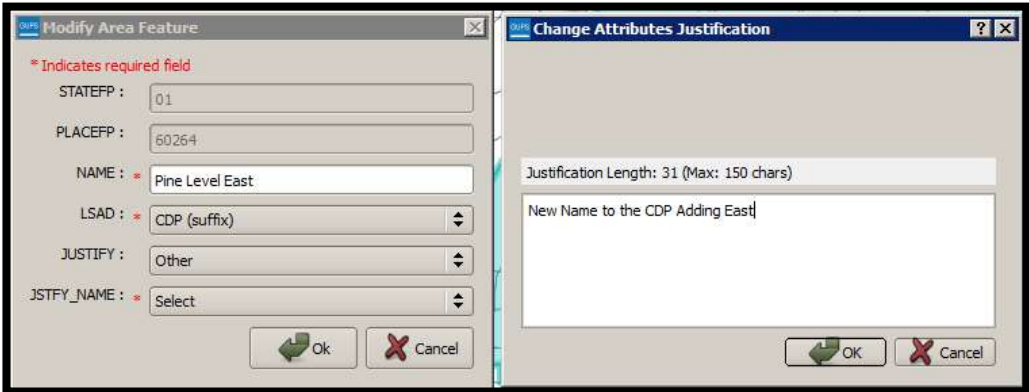
Step	Action and Result
<p><b>Step 6</b></p>	<p>Refer to the <b>Map View</b> to verify that GUPS deleted the CDP. Zoom to the proper scale to confirm the deletion. If participants decide the CDP deletion was incorrect, the previous section on <b>New District – Add Entity (Add a new CDP)</b> explains the process to use for adding the deleted CDP back into the working county.</p> 
<p><b>Step 7</b></p>	<p>Click the <b>Save</b> button to save the edits and update the project. <i>The <b>Current edits</b> confirmation dialog box asks to save the changes for all layer(s).</i> For more information on saving, please refer to <a href="#">Section 7.3, Save a Project in GUPS</a>.</p>  <p>Click <b>OK</b> to save or <b>Cancel</b> to return to the <b>Map View</b> without saving.</p>

## 9.5.6 Boundary Change – Change Attributes (CDP)

Using the **Boundary Change** action, participants can perform attribute updates on existing CDPs. Attributes that can be modified include the **NAME**, **JUSTIFY**, and **JSTFY\_NAME** fields. Refer to [Chapter 4](#) for naming rules and recommendations. When a participant changes an existing CDP name or creates a new CDP, then the **JSTFY\_NAME** field becomes required. The participant uses the field to provide reasoning for the chosen name. Participants may also use the **JUSTIFY** field to provide additional reasoning for the name change to an existing CDP or creating a new CDP. If participants make substantial changes to the boundaries of an existing CDP, then the Census Bureau recommends the modification of the name or a strong justification for retaining the name. [Table 50](#) explains the steps to change the attributes an existing CDP.

**Table 50: Boundary Change – Change Attributes (CDP)**

Step	Action and Result									
Step 1	Follow steps from <a href="#">Table 45: Select Census Designated Place</a> to open the project and select Census Designated Places for editing.									
Step 2	<p>Within the <b>Modify Area Feature</b> window, click the <b>Action</b> drop-down menu to select <b>Boundary Change</b>.</p>  <p>The screenshot shows the 'Modify Area Feature' window. At the top, there are three dropdown menus: 'Geography' set to 'Census Designated Place (CDP)', 'Filter' set to 'No filter', and 'Action' set to 'Boundary Change'. The 'Action' dropdown is highlighted with a blue box. Below these menus is a toolbar with various icons. Underneath the toolbar is a table with three columns: 'Info', 'Housing', and 'Population'. The table contains two rows of data. The second row is highlighted with a blue background.</p> <table><thead><tr><th>Info</th><th>Housing</th><th>Population</th></tr></thead><tbody><tr><td>01-46600-Marbur...</td><td>580</td><td>1418</td></tr><tr><td>01-60264-Pine Le...</td><td>1591</td><td>4183</td></tr></tbody></table> <p>At the bottom of the window, the summary statistics are displayed: <b>Housing : 1591</b> and <b>Population : 4183</b>.</p>	Info	Housing	Population	01-46600-Marbur...	580	1418	01-60264-Pine Le...	1591	4183
Info	Housing	Population								
01-46600-Marbur...	580	1418								
01-60264-Pine Le...	1591	4183								
Step 3	<p>Double click to select the CDP to modify from the <b>Info</b> column within the <b>Modify Area Feature</b> window. <i>The <b>Map View</b> zooms to the selected CDP and highlights it (not shown in this example).</i></p>  <p>The screenshot shows the 'Modify Area Feature' window, similar to the previous one. The 'Info' column of the table is highlighted with a blue box, indicating the selected CDP. The table structure and data are the same as in the previous screenshot.</p> <table><thead><tr><th>Info</th><th>Housing</th><th>Population</th></tr></thead><tbody><tr><td>01-46600-Marbur...</td><td>580</td><td>1418</td></tr><tr><td>01-60264-Pine Le...</td><td>1591</td><td>4183</td></tr></tbody></table> <p>At the bottom of the window, the summary statistics are displayed: <b>Housing : 1591</b> and <b>Population : 4183</b>.</p>	Info	Housing	Population	01-46600-Marbur...	580	1418	01-60264-Pine Le...	1591	4183
Info	Housing	Population								
01-46600-Marbur...	580	1418								
01-60264-Pine Le...	1591	4183								

Step	Action and Result
<b>Step 4</b>	<p>Click the <b>Change Attributes</b> button to modify the CDPs attributes.</p> 
<b>Step 5</b>	<p>The <b>Modify Area Feature</b> window displays. Enter the required data (fields with the red asterisks). GUPS pre-populates the <b>Name</b> field with the selected CDP name and the <b>LSAD</b> field defaults to the geography selected. In this case, CDP. The <b>NAME</b>, <b>JUSTIFY</b>, and <b>JSTFY_NAME</b> fields can be updated. When finished, press <b>OK</b>.</p>  <p><b>Note:</b> To change the name of an existing CDP, follow the CDP naming criteria outlined in <a href="#">Chapter 4</a>. Participants must provide justification such as the community has officially renamed (e.g., Tyson's Corner VA rebranded itself as Tysons VA). Signage and other proof should exist to confirm the renaming.</p>

## 9.6 Census County Division Update Instructions

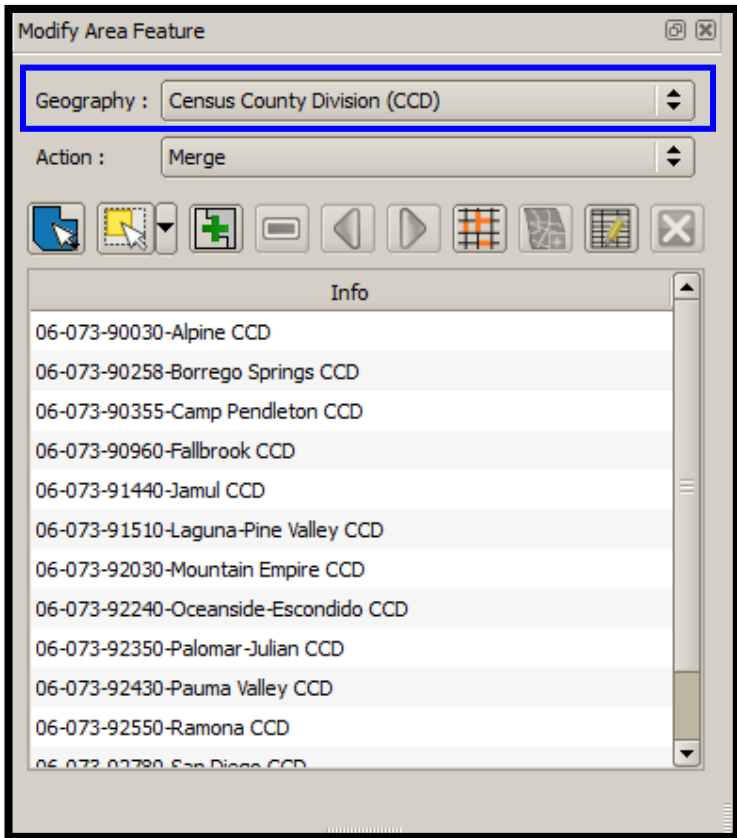
Participants can merge CCDs or perform boundary changes, specifically by adding faces to existing CCDs. Participants can add new CCDs, and they can perform attribute updates for existing CCDs.

As a reminder from [Chapter 5](#), CCD boundaries normally follow visible features and county lines, but may also follow corporate boundaries and other nonvisible features.

### 9.6.1 Select Census County Division (CCD)

Steps to select a CCD to begin a review are included in [Table 51](#).

**Table 51: Select Census County Division (CCD)**

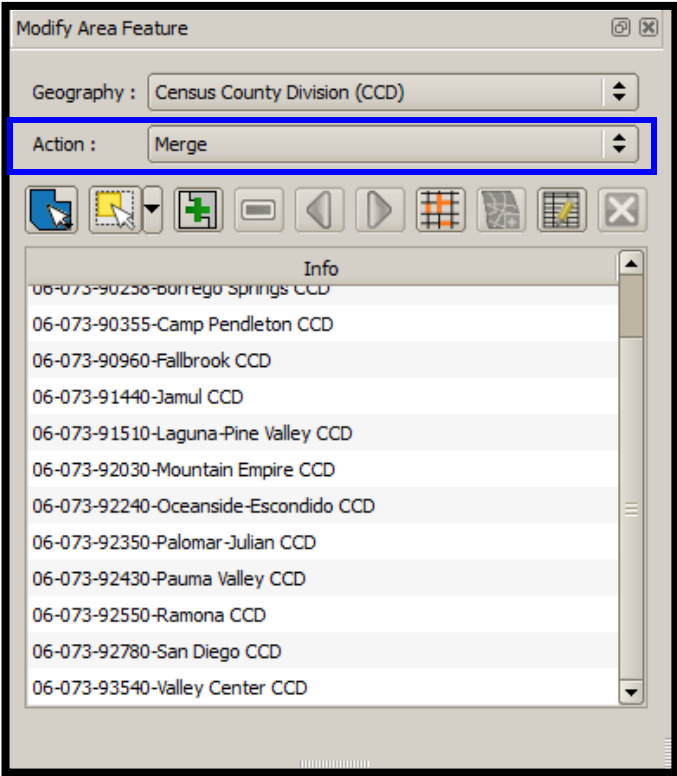
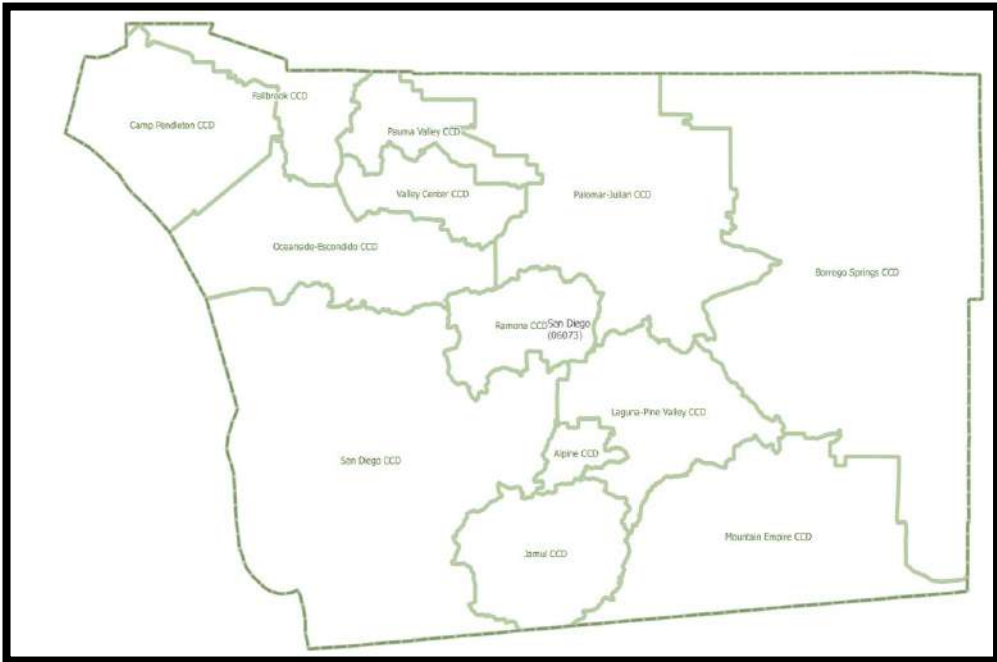
Step	Action and Result
<b>Step 1</b>	Download and review the data as described in <a href="#">Section 7.2, Open GUPS and Start a New Project</a> .
<b>Step 2</b>	<p>Follow steps from <a href="#">Table 32: Select Census Tracts</a> to open the existing project. After completing <b>Steps 1 – 4</b> (step 5 only appears with the initial setup), modify <b>Step 6</b> by clicking the <b>Modify Area Feature, Geography</b> drop-down menu and selecting <b>Census County Division (CCD)</b>. Enable the imagery as described in <b>Step 7</b> in order to visualize and orient to the CCD(s) under review. <i>The following screenshot is for San Diego County, California.</i></p> 

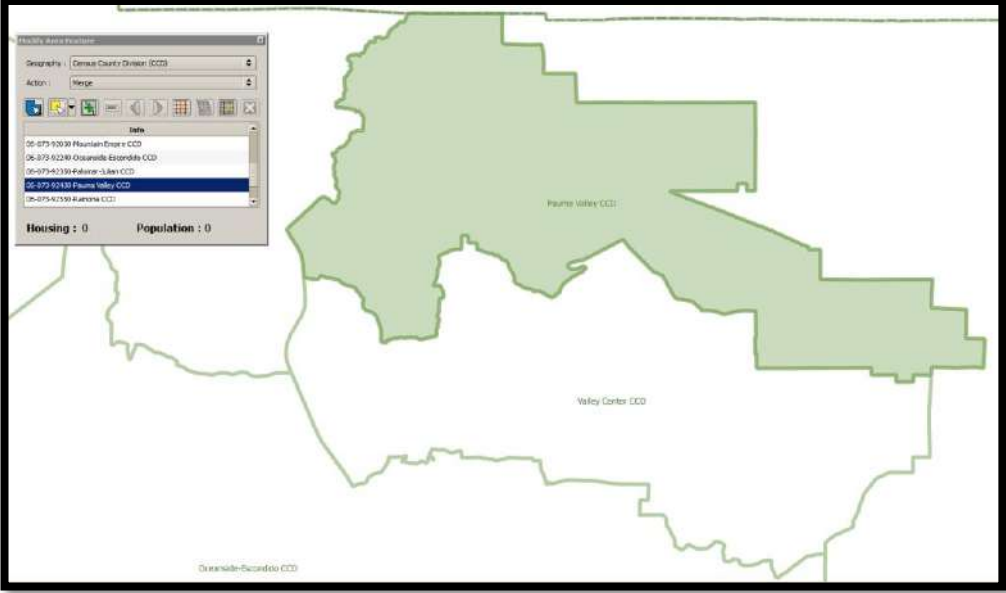
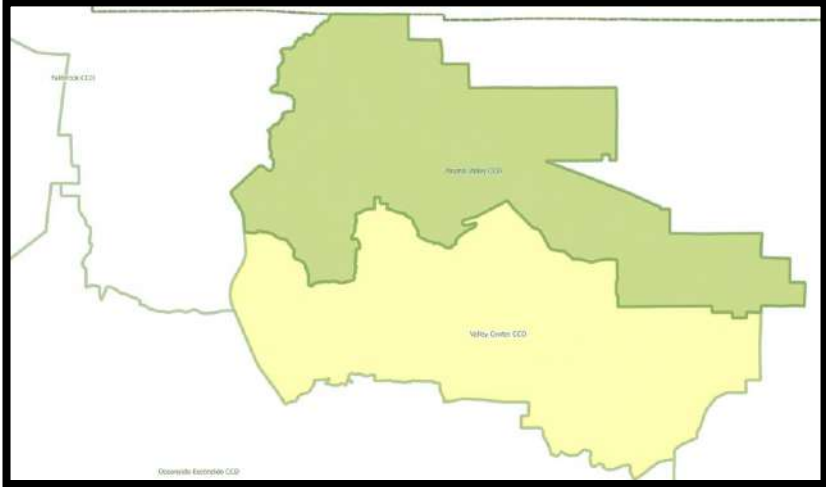
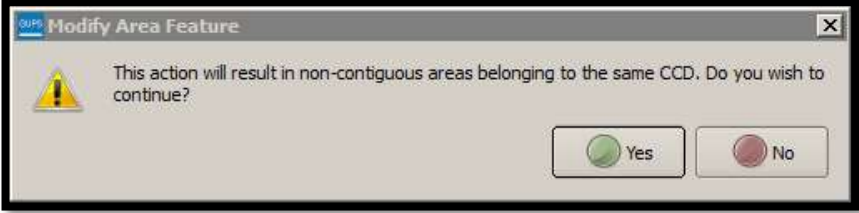
### 9.6.2 Merge Census County Divisions (CCDs)

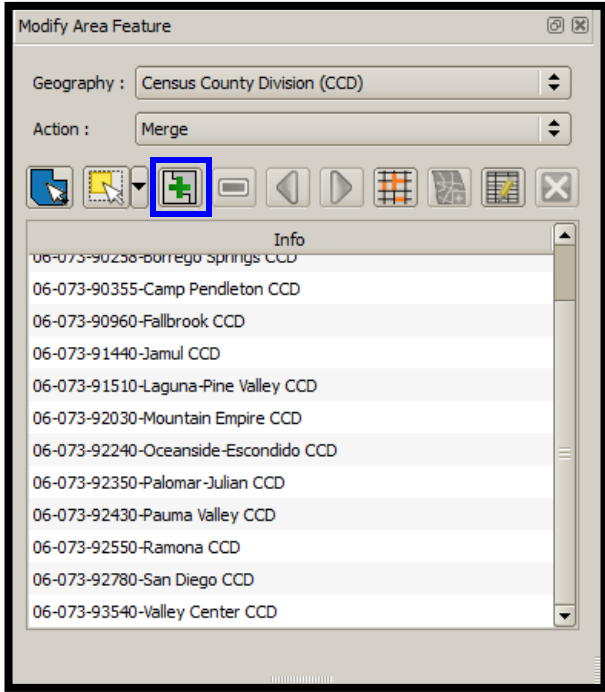
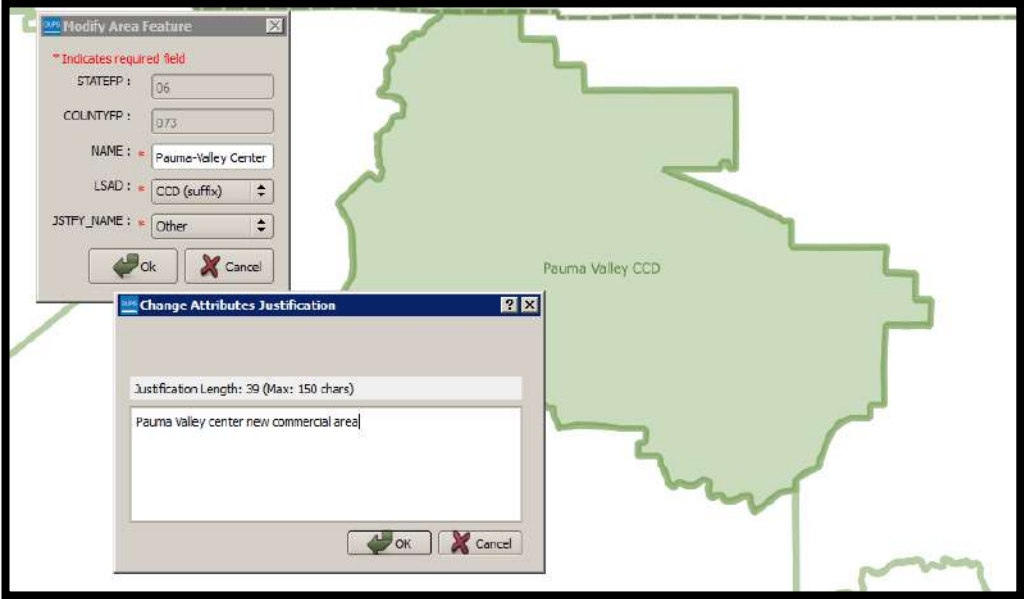
Participants can merge CCDs to form a new CCD. [Table 52](#) explains the steps to merge CCDs.

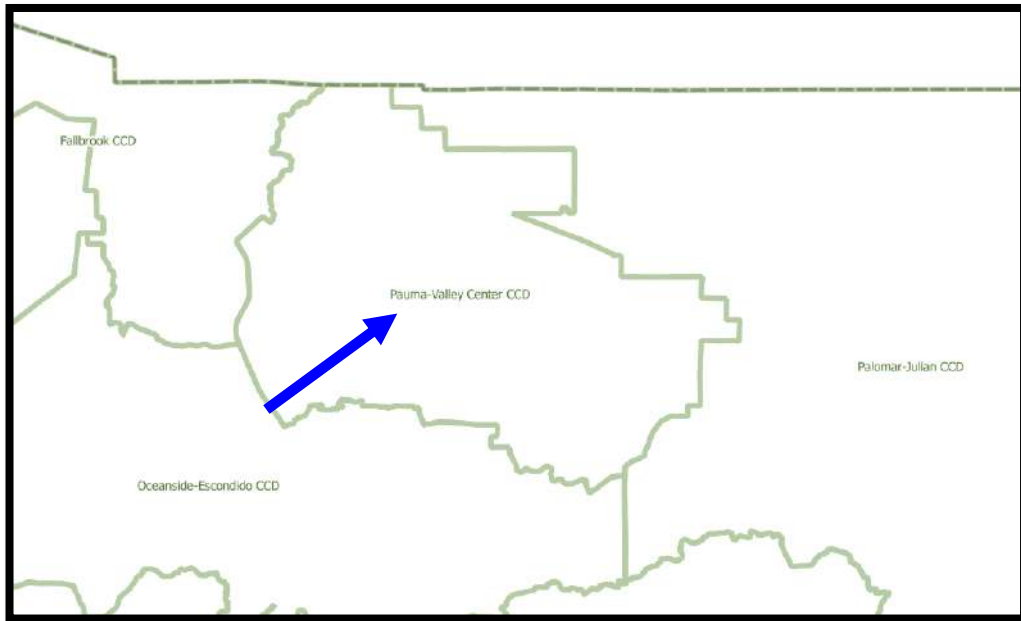
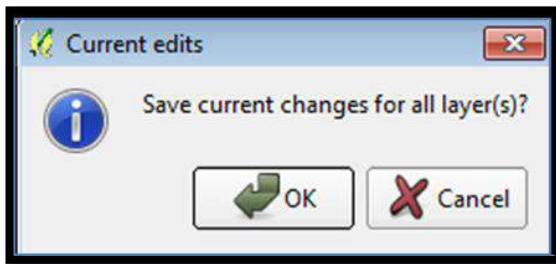
**Table 52: Merge CCDs**

Step	Action and Result
<b>Step 1</b>	Follow steps from <a href="#">Table 51: Select Census County Division (CCD)</a> to open the project and select Census County Division for editing.

Step	Action and Result
Step 2	<p>Within the <b>Modify Area Feature</b> window, click the <b>Action</b> drop-down menu to select <b>Merge</b>.</p>  <p>Use the <b>Zoom Full</b> button on the <b>Standard toolbar</b> to zoom to the extent of the county and view the existing CCDs. <i>The <b>Map View</b> displays all of the CCDs for the working county.</i></p> <p><b>Note:</b> Not enabling imagery at this scale allows for better visualization of the CCD names.</p> 

Step	Action and Result
<p><b>Step 3</b></p>	<p>Double click to select a CCD from the <b>Info</b> column within the <b>Modify Area Feature</b> window. The <b>Map View</b> zooms to the selected CCD (Pauma Valley) and displays it in light green color with a dark green border.</p> 
<p><b>Step 4</b></p>	<p>Click the <b>Select Features by Area</b> or <b>single click</b> button to select the CCD to use to merge with the previously selected CCD. <i>The newly selected CCD (Valley Center) highlights in yellow.</i></p> 
<p><b>Step 5</b></p>	<p>Selecting CCDs not contiguous with each other result in geographic errors.</p>  <p>Participants must correct contiguity errors (or provide a justification for keeping the CCD noncontiguous) prior to submission to the Census Bureau. The <b>Modify Area Feature</b> tool does not allow a participant to select CCDs in different counties.</p>

Step	Action and Result
<p><b>Step 6</b></p>	<p>With the CCDs selected, click the <b>Merge</b> button to create a new CCD.</p> 
<p><b>Step 7</b></p>	<p>The <b>Modify Area Feature</b> window displays. Enter the required data (fields with the red asterisks). GUPS pre-populates the <b>NAME</b> field with the selected CCD name and the <b>LSAD</b> field defaults to the geography selected. The <b>NAME</b> and <b>JSTFY_NAME</b> fields are editable. The participant must update one of those two fields to continue.</p>  <p>When finished, click <b>OK</b>.</p> <p><b>Note:</b> Participants must to change the name of the CCD to continue or must justify retention of the existing name in the JSTFY_NAME field (e.g., name of one of the merged CCD names is still the most prominent after merging). Otherwise, they receive an error message <i>indicating the name must be unique and the specified name is not unique</i>.</p>

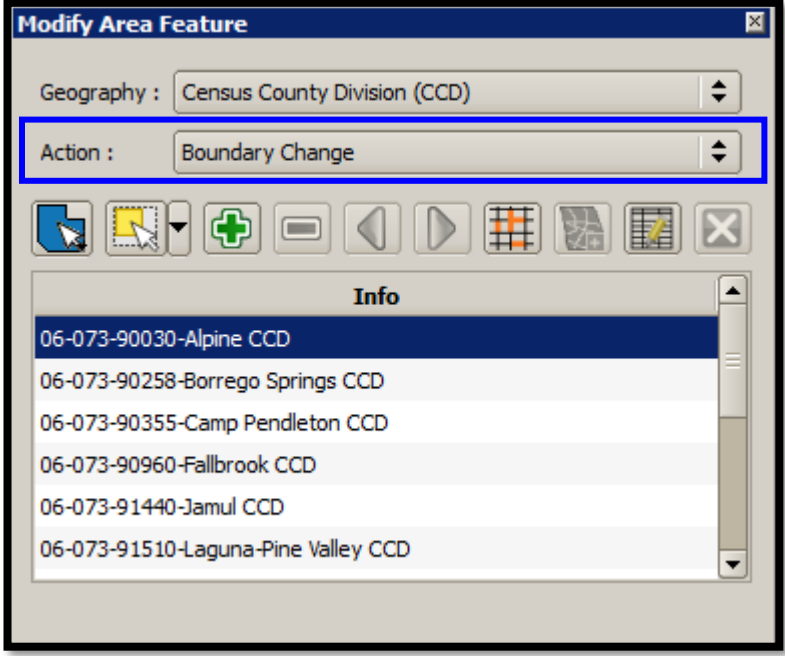
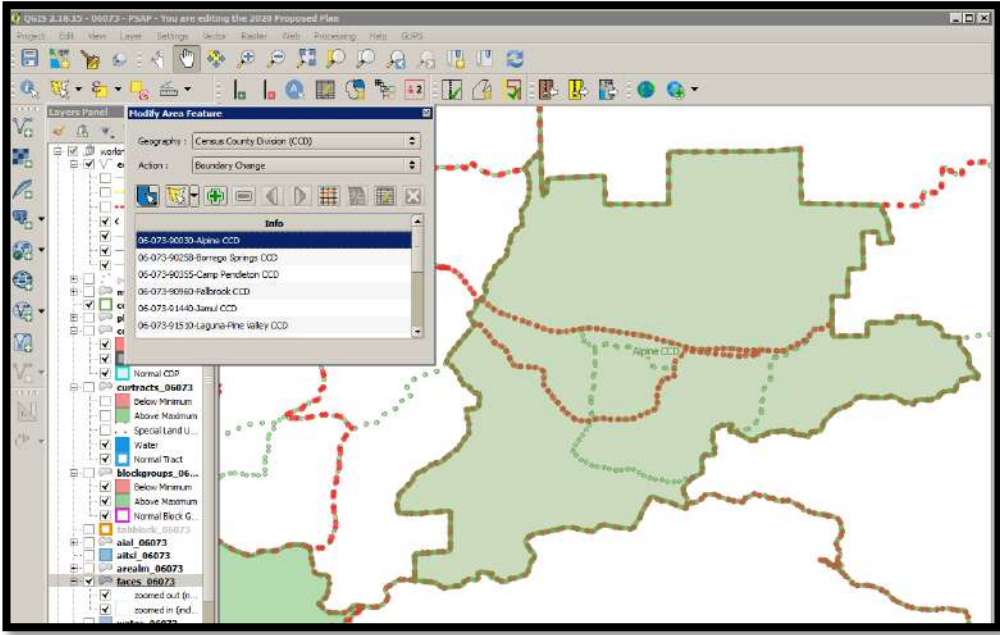
Step	Action and Result
<b>Step 8</b>	<p>Refer to the <b>Map View</b> to verify that the CCD merge completed properly. The <b>Map View</b> shows the two CCDs merged into one CCD and depicts the new name, Pauma Valley Center CCD.</p>  <p>To reverse the merge, prior to saving use the <b>Undo</b> button. Refer to <a href="#">Table 12</a> and <a href="#">Table 17</a> for instructions on the Undo functionality.</p>
<b>Step 9</b>	<p>Click the <b>Save</b> button to save the edits and update the project. The <b>Current edits confirmation dialog box</b> asks to save the changes for all layer(s). For more information on saving, please refer to <a href="#">Section 7.3, Save a Project in GUPS</a>.</p>  <p>Click <b>OK</b> to save or <b>Cancel</b> to return to the <b>Map View</b> without saving.</p>

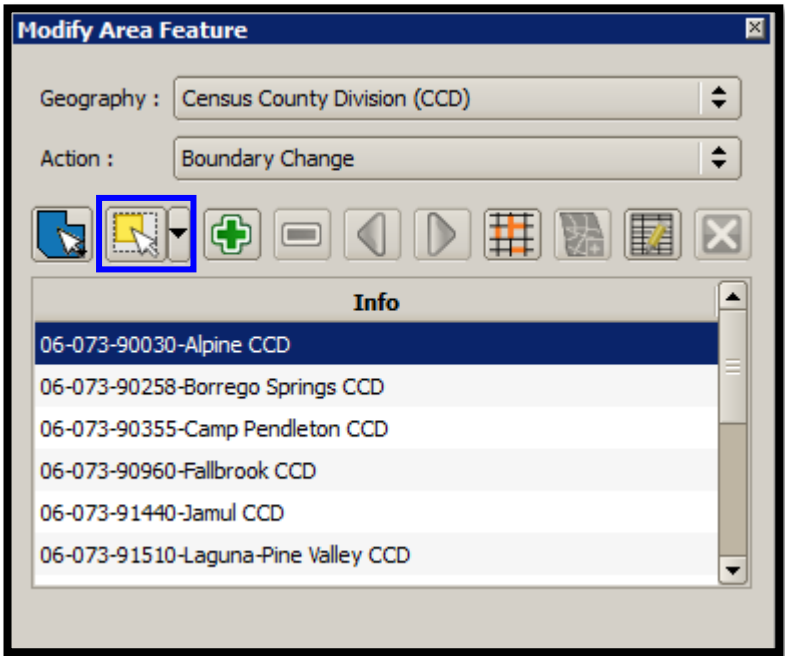
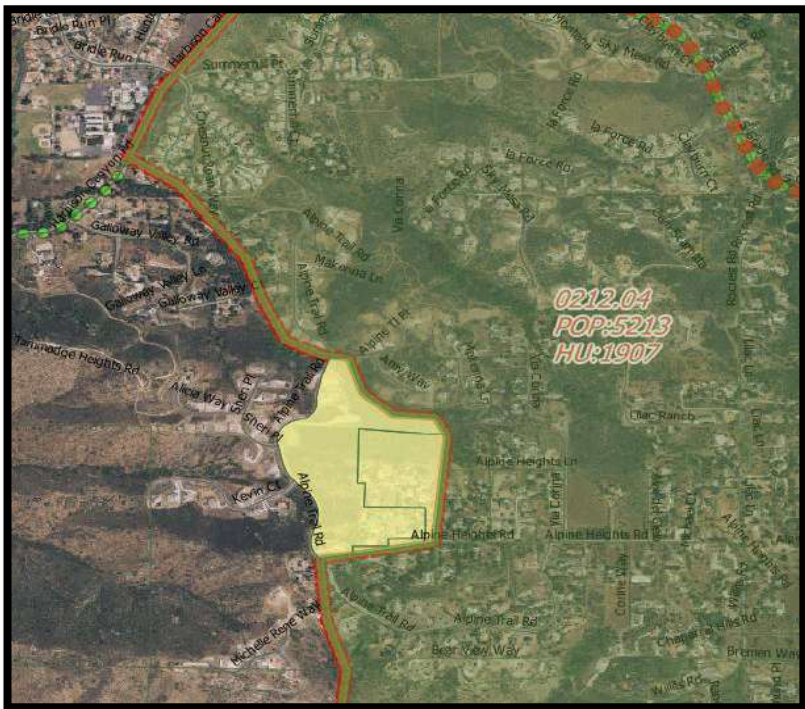

### 9.6.3 Boundary Change – Add Area (CCD)

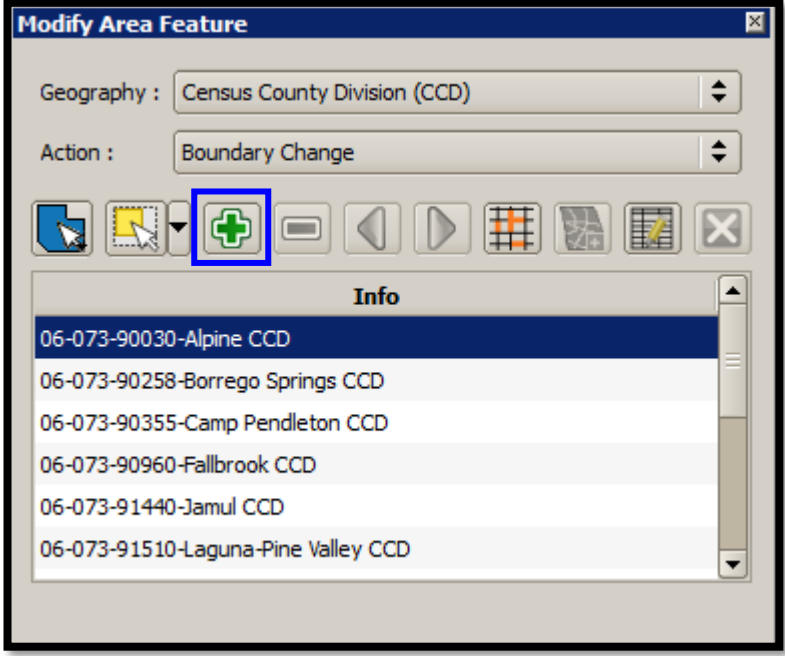
Participants can perform boundary changes to CCDs by adding new area or removing existing area. The **Boundary Change** action uses the faces layer to modify the area of a CCD. [Table 53](#) provides steps for adding area to a CCD through the **Boundary Change** menu.

**Table 53: Boundary Change – Add Area (CCD)**

Step	Action and Result
<b>Step 1</b>	Follow steps from <a href="#">Table 51: Select Census County Division (CCD)</a> to open the project and select Census County Division for editing.

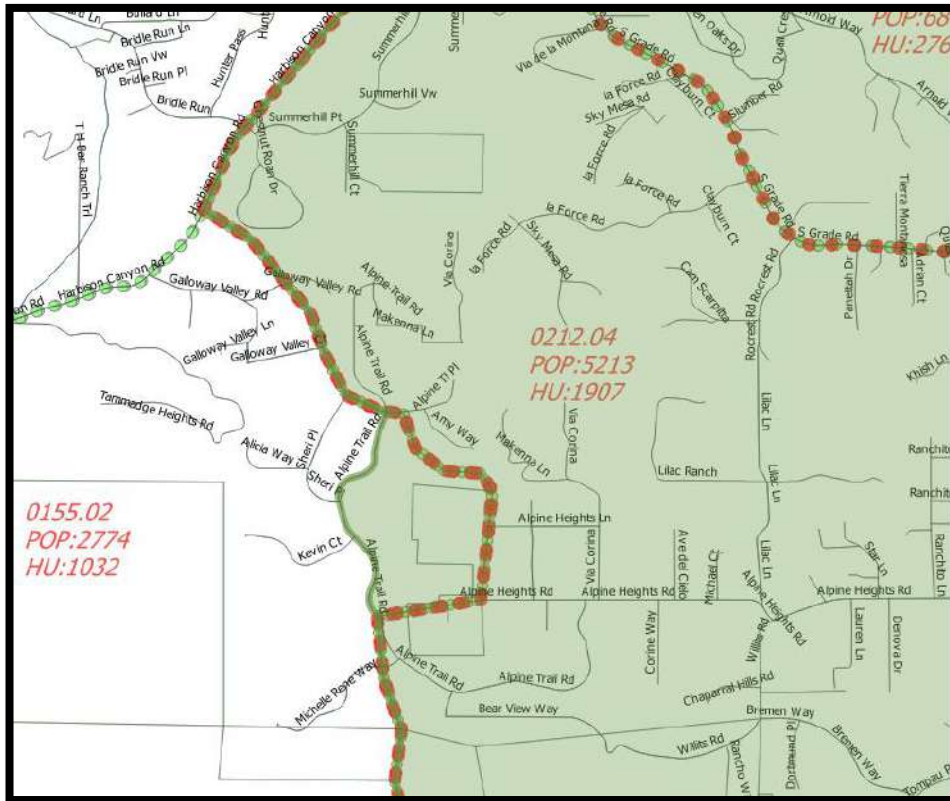
Step	Action and Result
Step 2	<p>Within the <b>Modify Area Feature</b> window, click the <b>Action</b> drop-down menu to select <b>Boundary Change</b>.</p> 
Step 3	<p>Double click to select a CCD from the <b>Info</b> column within the <b>Modify Area Feature</b> window. The <b>Map View</b> zooms to the selected CCD (e.g., Alpine CCD) to review and highlights it using green.</p> 
Step 4	<p>Use the <b>Zoom In</b> button and <b>Add Imagery</b> button to help with accuracy of selected area(s) to add.</p>

Step	Action and Result
<p><b>Step 5</b></p>	<p>Click the <b>Select Features By Area</b> or <b>single click</b> button to select the faces to add to the CCD. Participants can choose any of the four choices beneath the <b>Select Features</b> button to accomplish the modification to the CCD.</p>  <p>The selected faces highlight in yellow. This image depicts zoomed view with imagery enabled.</p> 
	<p>Participants are unable to select faces within the CCD selected in <b>Step 3</b>, the targeted CCD. Selecting noncontiguous faces results in geographic errors that participants must correct prior to submitting to the Census Bureau. The GUPS software prevents adding faces from different counties.</p>

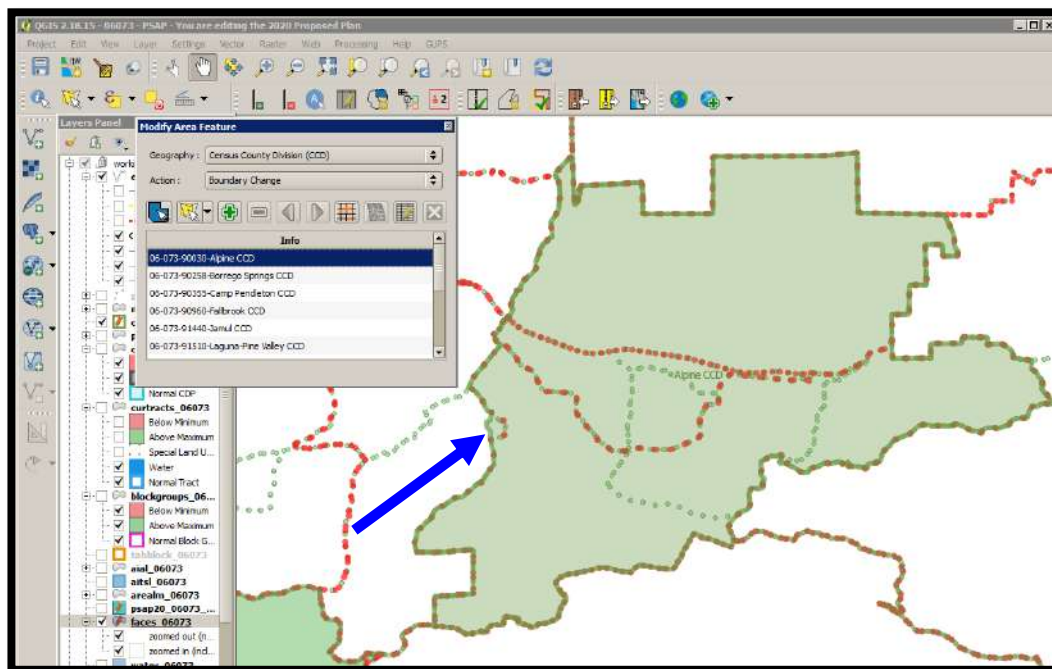
Step	Action and Result
<b>Step 6</b>	<p>Click the <b>Add Area</b> button to apply boundary change (addition of faces/areas) to the selected CCD.</p> 

## Step 7

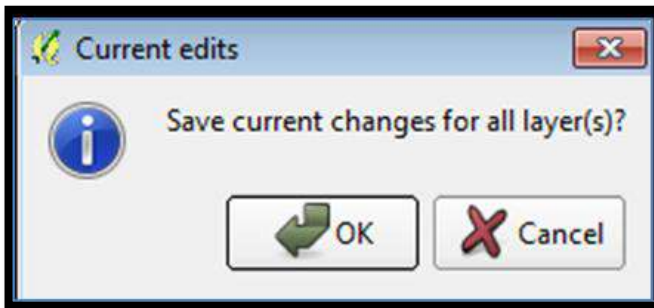
Refer to the **Map View** to verify that the CCD boundary change completed properly.



The newly added area appears in the same fill color as the selected CCD and the external boundary bumps out to the edge of the added area.



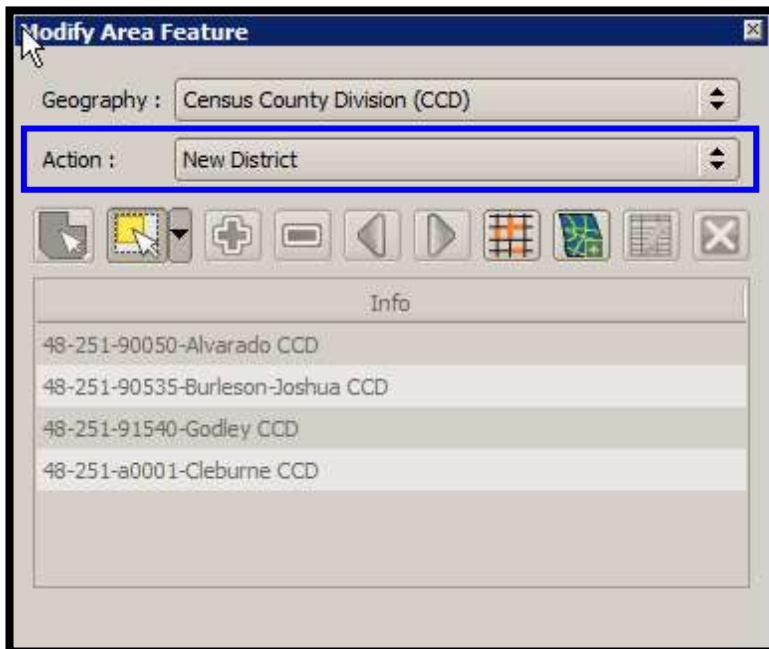
The full image includes blue arrow denoting the newly added area. To reverse the boundary change, simply add the area back to the original CCD or perform the **Undo** action prior to saving. Refer to [Table 12](#) and [Table 17](#) for instructions on the **Undo** functionality.

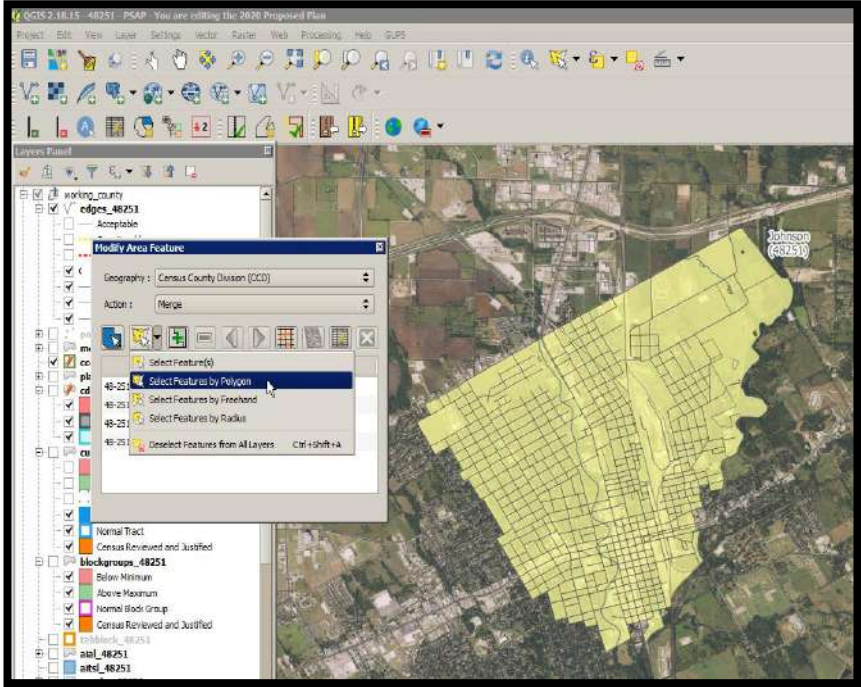
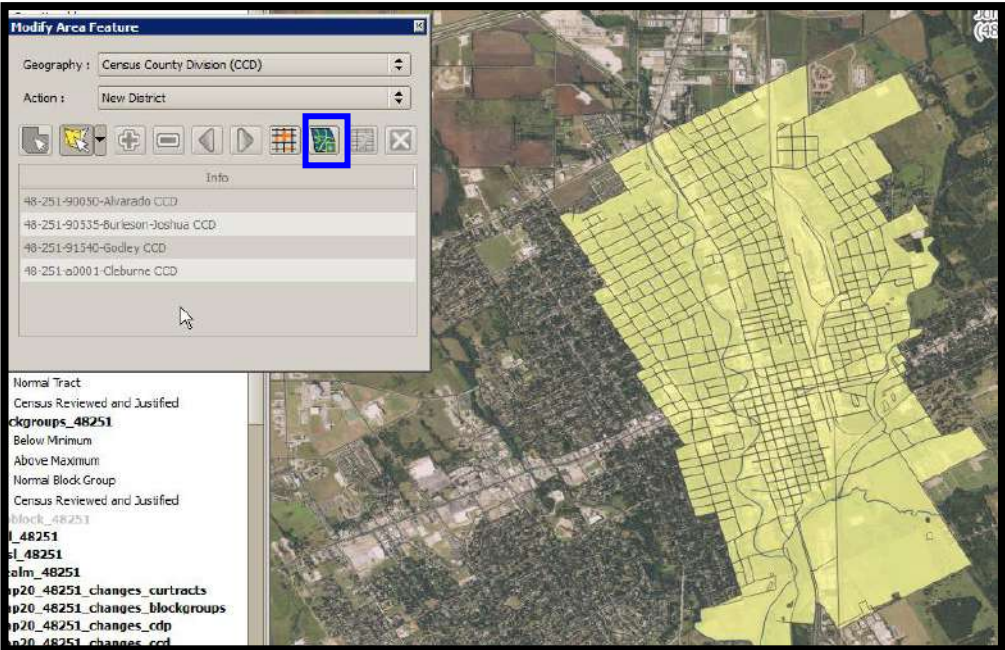
Step	Action and Result
Step 8	<p>Click the <b>Save</b> button to save the edits and update the project. The <b>Current edits confirmation dialog box</b> asks to save the changes for all layer(s). For more information on saving, please refer to <a href="#">Section 7.3, Save a Project in GUPS</a>.</p>  <p>Click <b>OK</b> to save or <b>Cancel</b> to return to the <b>Map View</b> without saving.</p>

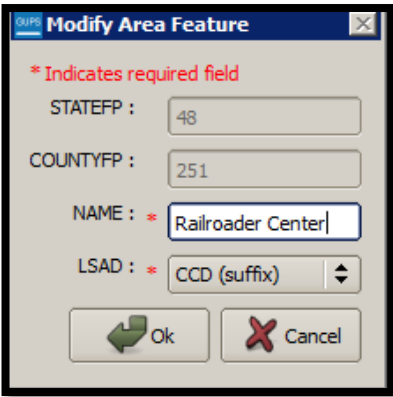
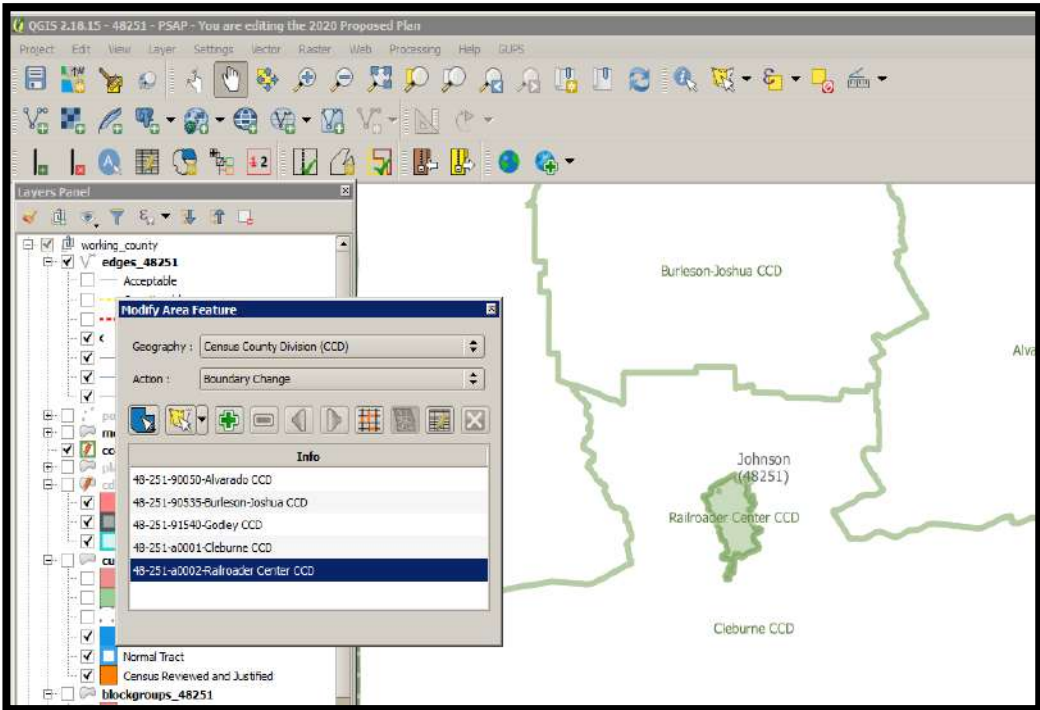
### 9.6.4 New District – Add Entity (Add a New CCD)

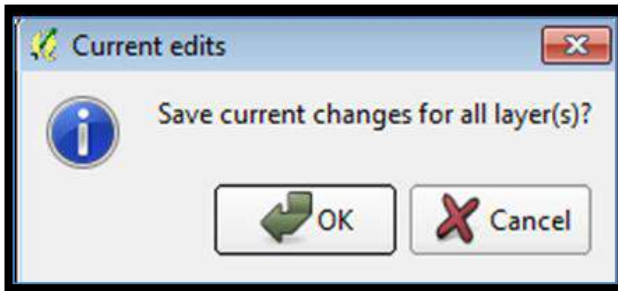
As with CDPs, participants can add new CCDs as part of their PSAP work. As with adding area or removing area from an existing CCD, the **New District** action uses the faces layer to modify CCDs. [Table 54](#) describes the steps for adding a new CCD.

**Table 54: New District - Add Entity (Add a New CCD)**

Step	Action and Result
Step 1	Follow steps from <a href="#">Table 51: Select Census County Division (CCD)</a> to open the project and select Census County Division for editing.
Step 2	<p>Within the <b>Modify Area Feature</b> window, click the <b>Action</b> drop-down menu to select <b>New District</b>.</p> 

Step	Action and Result
<p><b>Step 3</b></p>	<p>Use <b>Zoom In</b> button to zoom into an appropriate scale for selecting areas to add to a new CCD and the <b>Add Imagery</b> button to help with accuracy of selected area(s) to add. Click the <b>Select Features By Area or single click</b> button to select the faces to add to the CCD. Participants can choose any of the four choices beneath the <b>Select Features</b> button to accomplish the modification to the CCD. <i>This example uses <b>Select Features by Polygon</b>. The selected faces highlight in yellow.</i></p> 
<p><b>Step 4</b></p>	<p>Click the <b>Add Entity</b> button to add the selected faces to create a new CCD.</p> 

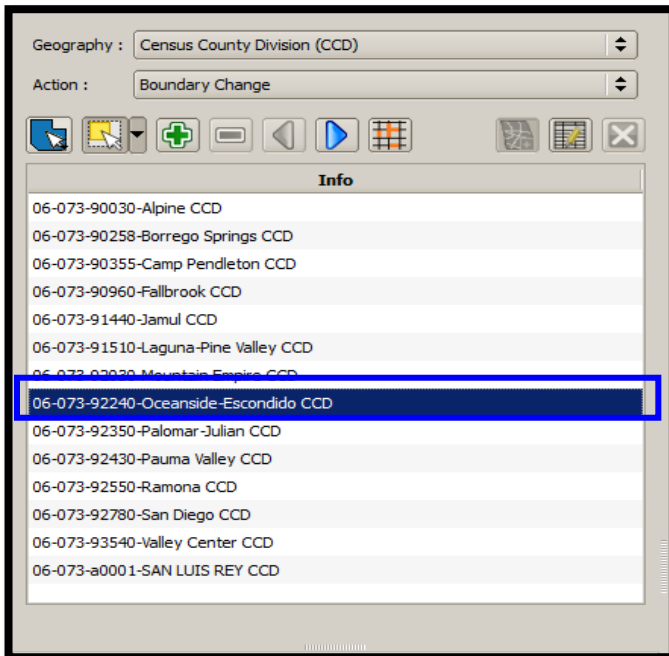
Step	Action and Result
<p><b>Step 5</b></p>	<p>The <b>Modify Area Feature</b> window opens. Enter the <b>NAME</b> of the newly created CCD and then click the <b>OK</b> button.</p> 
<p><b>Step 6</b></p>	<p>Refer to the <b>Map View</b> to verify that GUPS captured the new CCD properly. Zoom to the proper scale to confirm the boundaries and area of the CCD. To reverse the creation of the CCD, prior to saving, use the <b>Undo</b> button. If CCD is incorrect, participants can cancel the creation and begin again or they can accept the almost correct CCD and perform a <b>Boundary Change</b> action with the adjacent CCD. The <b>Boundary Change</b> window is activated in the screenshot below.</p> 

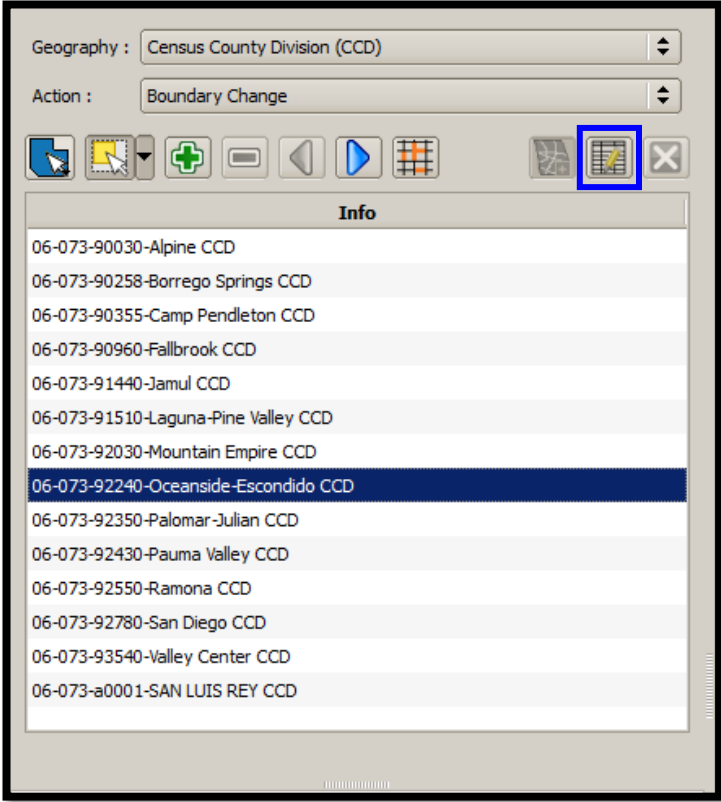
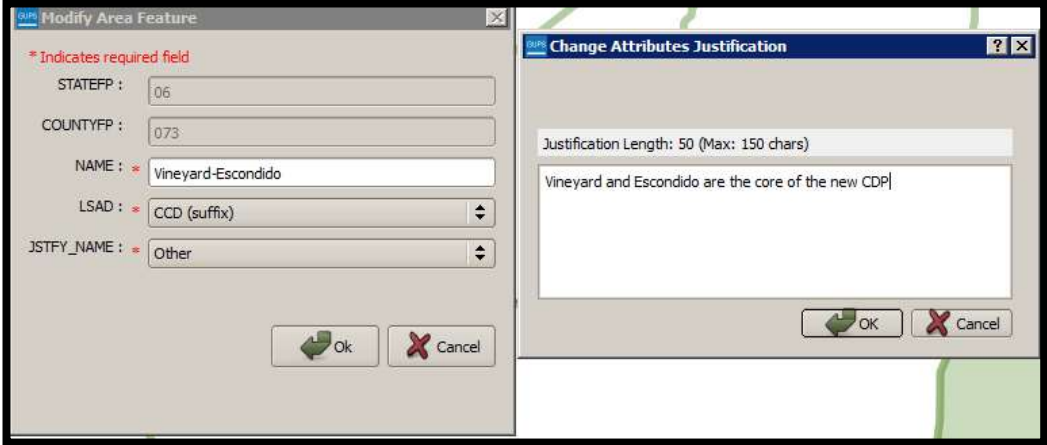
Step	Action and Result
Step 7	<p>Click the <b>Save</b> button to save the edits and update the project. The <b>Current edits confirmation dialog box</b> asks to save the changes for all layer(s). For more information on saving, please refer to <a href="#">Section 7.3, Save a Project in GUPS</a>.</p>  <p>The dialog box is titled 'Current edits' and contains the text 'Save current changes for all layer(s)?'. It has two buttons: 'OK' with a green arrow icon and 'Cancel' with a red X icon.</p> <p>Click <b>OK</b> to save or <b>Cancel</b> to return to the <b>Map View</b> without saving.</p>

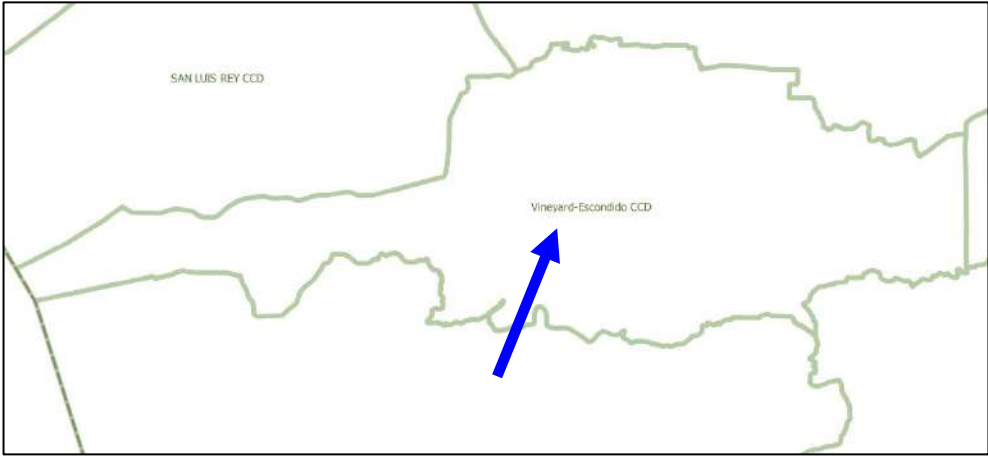
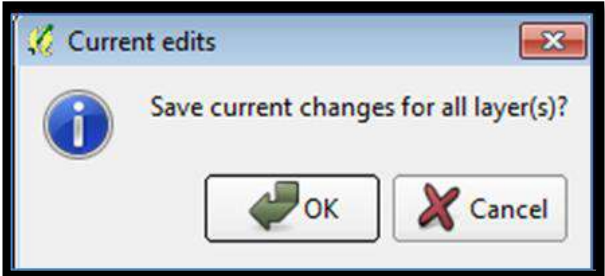
## 9.6.5 Boundary Change – Change Attributes (CCD)

Using the **Boundary Change** action, participants can perform attribute updates for existing CCDs. Attributes that can be modified include the **NAME** and **JSTFY\_NAME** fields. When a participant changes an existing CCD name or creates a new CCD, then the **JSTFY\_NAME** field becomes required. The participant uses the field to provide reasoning for the chosen name. [Table 55](#) describes steps necessary to change the attributes of an existing CCD.

**Table 55: Boundary Change – Change Attributes (CCD)**

Step	Action and Result
Step 1	Follow steps from <a href="#">Table 51: Select Census County Division (CCD)</a> to open the project and select Census County Division for editing.
Step 2	<p>Double click the CCD to update from the <b>Info</b> list. The <b>Map View</b> zooms to the selected CCD.</p>  <p>The screenshot shows a software interface with a dropdown menu set to 'Geography : Census County Division (CCD)' and an 'Action : Boundary Change' dropdown. Below these are several icons. A list titled 'Info' contains the following entries: 06-073-90030-Alpine CCD, 06-073-90258-Borrego Springs CCD, 06-073-90355-Camp Pendleton CCD, 06-073-90960-Fallbrook CCD, 06-073-91440-Jamul CCD, 06-073-91510-Laguna-Pine Valley CCD, 06-073-92030-Mountain Empire CCD, 06-073-92240-Oceanside-Escondido CCD (highlighted with a blue box), 06-073-92350-Palomar-Julian CCD, 06-073-92430-Pauma Valley CCD, 06-073-92550-Ramona CCD, 06-073-92780-San Diego CCD, 06-073-93540-Valley Center CCD, and 06-073-a0001-SAN LUIS REY CCD.</p>

Step	Action and Result
<b>Step 3</b>	<p>Click the <b>Change Attributes</b> button.</p> 
<b>Step 4</b>	<p>The <b>Modify Area Feature</b> window opens to allow participants to change the attribution of the selected CCD. In this example, the Oceanside-Escondido CCD name changed to Vineyard-Escondido CCD.</p>  <p>Click the <b>OK</b> to continue and process the change.</p>

Step	Action and Result
<b>Step 5</b>	<p>GUPS updates the <b>Map View</b> with the new CCD name. Imagery disabled to make viewing the CCD names easier.</p> 
<b>Step 6</b>	<p>Click the <b>Save</b> button to save the edits and update the project. The <b>Current edits</b> confirmation dialog box asks to save the changes for all layer(s). For more information on saving, please refer to <a href="#">Section 7.3, Save a Project in GUPS</a>.</p>  <p>Click <b>OK</b> to save or <b>Cancel</b> to not and return to the <b>Map View</b>.</p>

# CHAPTER 10. VALIDATE DATA AND PREPARE FILES FOR SUBMISSION

As introduced in [Part 2](#), GUPS provides validation tools to help review and validate the updates made to statistical geographies by participants (regardless whether updates made to the 2020 proposed plan or to the 2010 geographies). The next three sections describe the three tools necessary to validate the PSAP data prior to submission to the Census Bureau: [PSAP Criteria Review Tool](#), the [Review Change Polygons Tool](#), and the [Geography Review Tool](#). Each of the three tools function differently to give participants the opportunity to verify, fix, justify, and assure the quality of the final exported project. GUPS also provides the [Export to Zip Button](#), to prepare data for sharing with other reviewers and/or submitting to the Census Bureau.


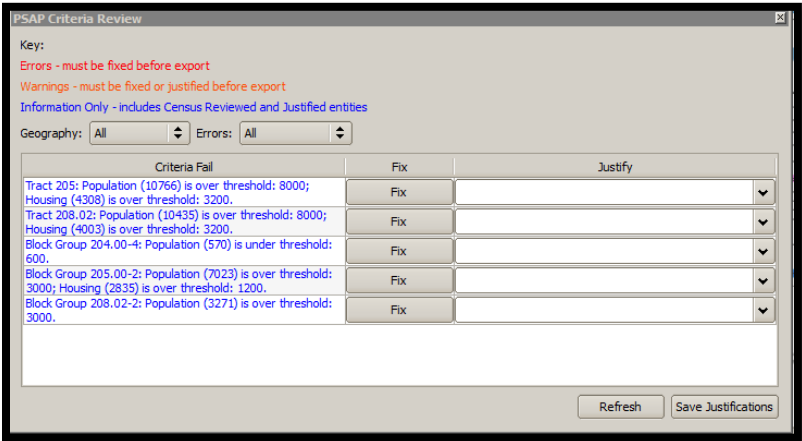
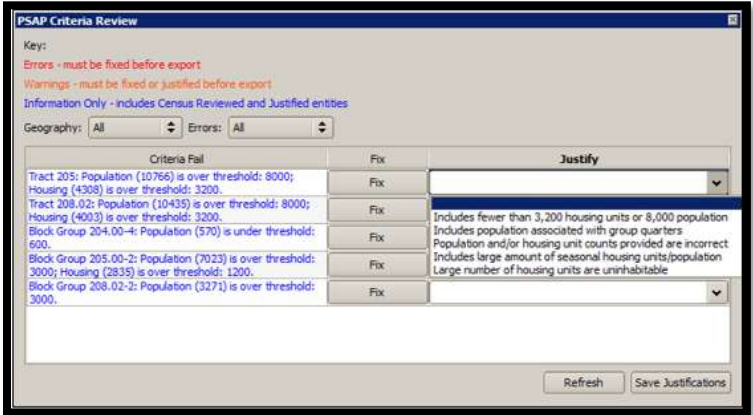
The Census Bureau recommends executing these tools in the order presented for the next three sections. Run the PSAP Criteria Review Tool first, then the Review Change Polygons Tool, and finish with the Geography Review Tool.

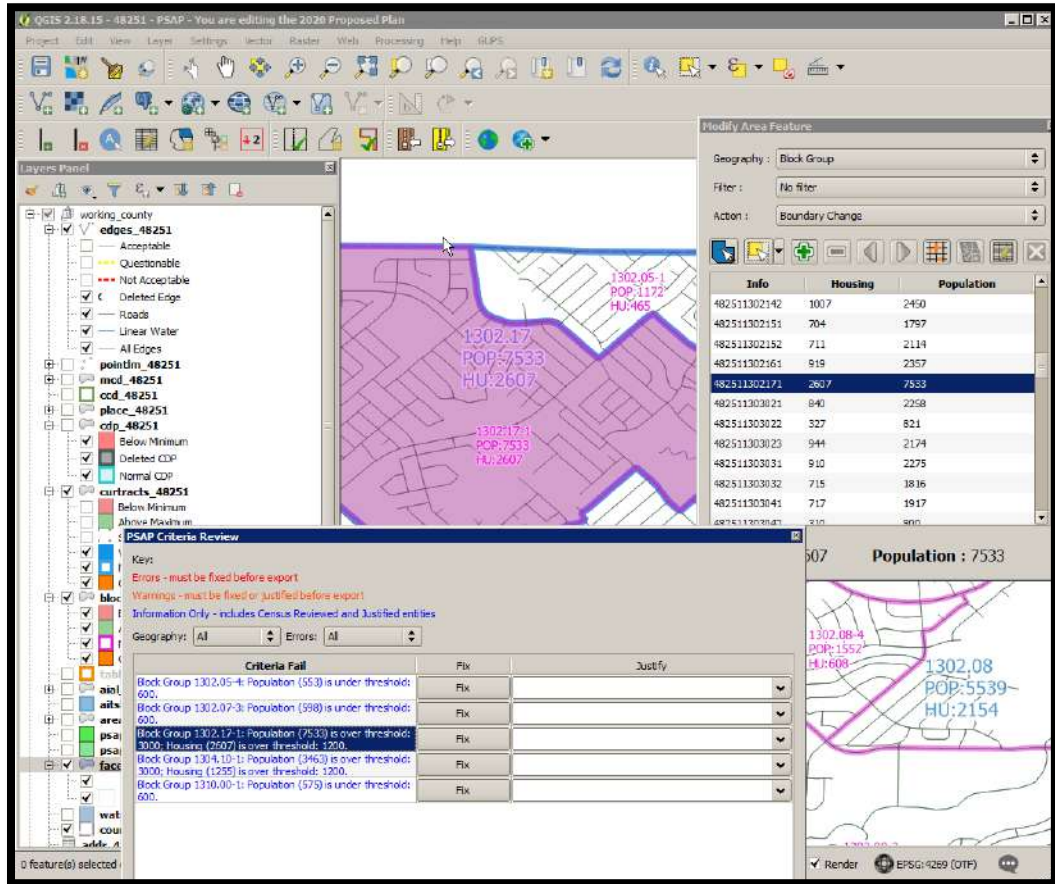
## 10.1 PSAP Criteria Review Tool

Participants use the PSAP Criteria Review tool to generate a list of threshold failures and correct (labeled as “fix” in the tool) the failures or provide a justification for the failure. GUPS color-codes the list of failures: Participants must correct red errors. They must correct orange errors or justify them to remain as such. Participants can correct the issues or provide a justification of their own to retain the geography based on local knowledge. Run this required check before creating a data output file for submission to the Census Bureau. [Section 8.4.2.4](#) introduced this tool.

Table 56: PSAP Criteria Review Button

Step	Action and Result
Step 1	Download and Review the data as described in <a href="#">Section 7.2, Open GUPS and Start a New Project</a> .

Step	Action and Result
<b>Step 2</b>	<p>Click the <b>PSAP Criteria Review</b> button.</p>  <p>A <b>PSAP Criteria Review</b> dialog box opens to inform participants that it is actively reviewing the population and housing unit criteria for all the Geographic entities in the working county. Once the tool has run, the <b>PSAP Criteria Review</b> window displays the remaining issues. Participants can choose to display the list by Geography type, error type, or display all the geographies. The list contains the geographic entities that do not meet thresholds or missing other requirements such as noncontiguous entities.</p> 
<b>Step 3</b>	<p>If the exceedance of the threshold as displayed in the <b>Criteria Fail</b> is justified, select the justification using the drop-down button in the <b>Justify</b> attribute field. Choose one of the pre-determined justifications or enter something unique. There is a 150-character limit to this field. Be sure to save frequently by clicking the <b>Save Justifications</b> button at the bottom of the window.</p> 


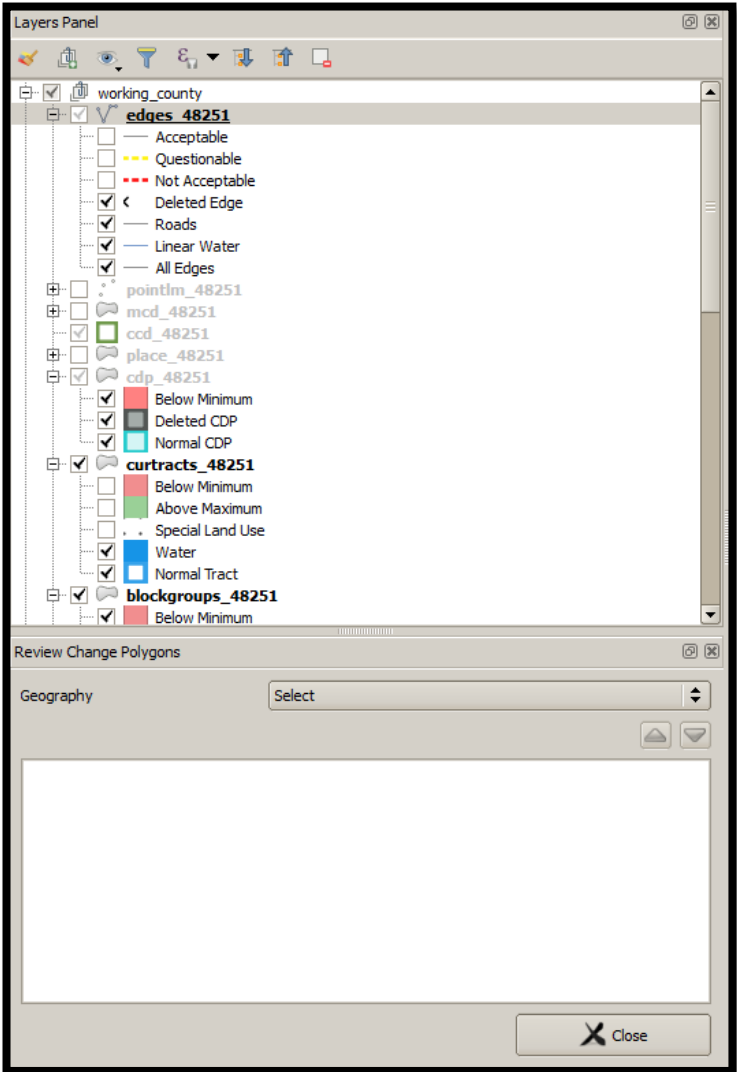
Step	Action and Result
Step 4	<p>If the failure needs correction, click the <b>Fix</b> button for any of the geographic entities within the <b>PSAP Criteria Review</b> window list, <i>GUPS</i> zooms to the <b>Map View</b> of the selected geographic entity, opens the <b>Modify Area Feature</b> tool, and then selects the entity within the <b>Modify Area Feature</b> window. From here, choose an <b>Action</b> within the <b>Modify Area Feature</b> tool and perform the edits necessary to meet the requirements and resolve the failure. Refer to <a href="#">Section 8.4.2.1</a>, the <b>Modify Area Feature</b> tool section, for detail on its functionality.</p>  <p>The screenshot shows the QGIS 2.18.15 interface. The top menu bar includes Project, Edit, View, Layers, Settings, Vector, Raster, Web, Processing, and Help. The Layers Panel on the left shows a list of layers including 'working_county', 'edges_48251', 'pointlm_48251', 'mod_48251', 'ccd_48251', 'place_48251', 'cdp_48251', and 'curtracts_48251'. The main map area displays a purple-shaded geographic entity with labels for '1302.05-1 POP:1172 HU:465', '1302.17 POP:7533 HU:2607', and '1302.08 POP:5539 HU:2154'. The 'Modify Area Feature' window on the right shows the 'Geography' dropdown set to 'Block Group', the 'Filter' set to 'No filter', and the 'Action' set to 'Boundary Change'. Below this is a table with columns 'Info', 'Housing', and 'Population'. The 'PSAP Criteria Review' window at the bottom shows a list of criteria failures with columns for 'Criteria Fail', 'Fix', and 'Justify'. The list includes failures for Block Group 1302.05-1, Block Group 1302.07-3, Block Group 1302.17-1, Block Group 1302.08-4, Block Group 1302.09-1, and Block Group 1302.00-1.</p>
Step 5	<p>Once participants correct or justify all failures, participants can close the tool by clicking the “x” in the top right hand corner of the window. Refreshing the window is beneficial as work is underway. Click the <b>Refresh</b> button at the bottom of the window next to the <b>Save Justifications</b> button to refresh the results of executing the tool</p>

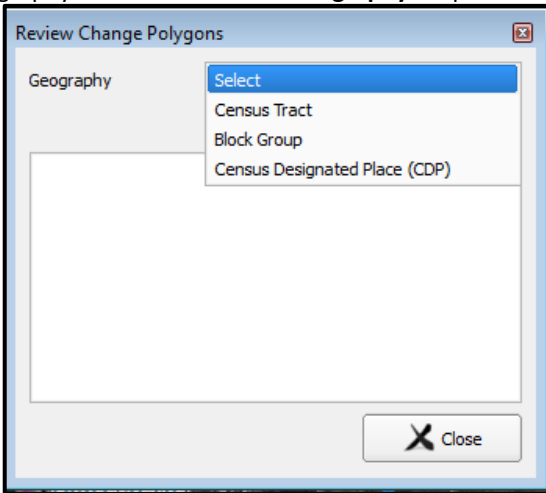
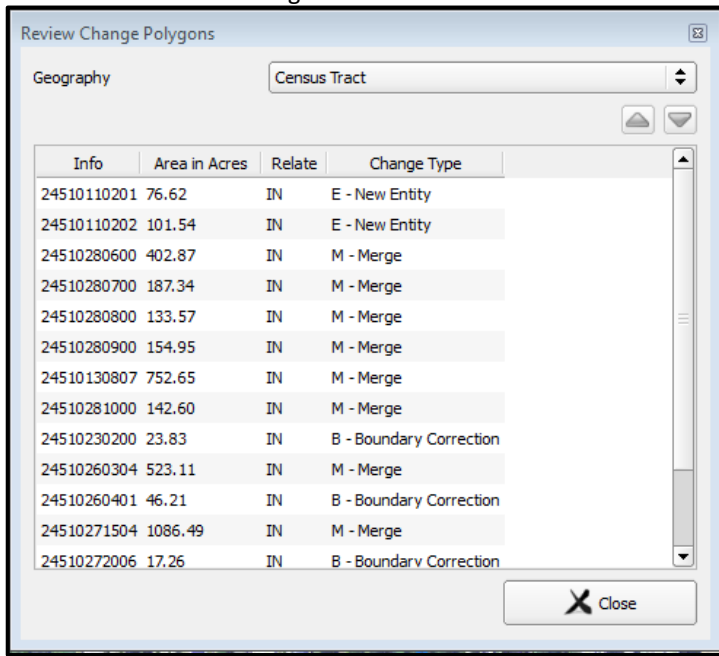

## 10.2 Review Change Polygons Tool


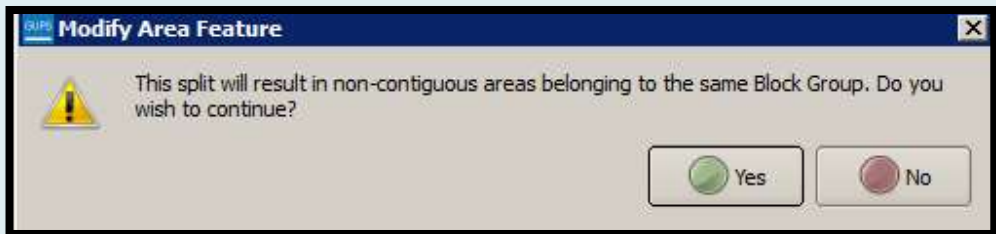
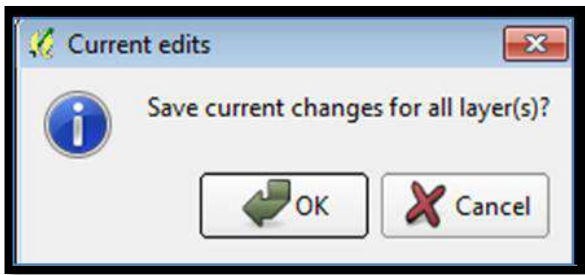
The **Review Change Polygons** tool reviews transaction polygons for tracts, block groups, CDPs, and CCDs. It provides a list of their applied changes (boundary changes, splits, merges). Participants use this tool to check the general accuracy of the change polygons in the **Map View** by clicking each change within the list. [Section 8.4.2.3](#) introduced this tool.

Table 57: Review Change Polygon Button

Step	Action and Result
Step 1	Download and review the data as described in <a href="#">Section 7.2, Open GUPS and Start a New Project</a> .

Step	Action and Result
Step 2	<p>Click the <b>Review Change Polygons</b> button.</p>  <p>The <b>Review Change Polygons</b> dialog box opens just beneath the <b>Table of Contents</b>. The dialog box can be moved anywhere, even out of the GUPS window onto a dual monitor. It does not have to remain beneath the <b>Table of Contents</b>.</p> 

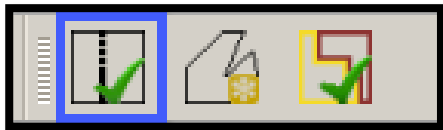
Step	Action and Result																																																								
Step 3	<p>Select the statistical geography to review from the <b>Geography</b> drop-down menu.</p> 																																																								
Step 4	<p>The full list of geographies with modifications appear after selecting the geography to review. For this example, Census Tract is the selected geography and the list includes numerous changes (e.g., New Entity, Merge, and Boundary Correction). The type of changes varies based on the geography selected. See <a href="#">Table 31</a> for information on change types. The <b>Change Type</b> field shown below depicts a single letter, where “E” denotes a split, “M” denotes a merge, “B” denotes a boundary change, and “G” denotes an attribute change.</p>  <table><thead><tr><th>Info</th><th>Area in Acres</th><th>Relate</th><th>Change Type</th></tr></thead><tbody><tr><td>24510110201</td><td>76.62</td><td>IN</td><td>E - New Entity</td></tr><tr><td>24510110202</td><td>101.54</td><td>IN</td><td>E - New Entity</td></tr><tr><td>24510280600</td><td>402.87</td><td>IN</td><td>M - Merge</td></tr><tr><td>24510280700</td><td>187.34</td><td>IN</td><td>M - Merge</td></tr><tr><td>24510280800</td><td>133.57</td><td>IN</td><td>M - Merge</td></tr><tr><td>24510280900</td><td>154.95</td><td>IN</td><td>M - Merge</td></tr><tr><td>24510130807</td><td>752.65</td><td>IN</td><td>M - Merge</td></tr><tr><td>24510281000</td><td>142.60</td><td>IN</td><td>M - Merge</td></tr><tr><td>24510230200</td><td>23.83</td><td>IN</td><td>B - Boundary Correction</td></tr><tr><td>24510260304</td><td>523.11</td><td>IN</td><td>M - Merge</td></tr><tr><td>24510260401</td><td>46.21</td><td>IN</td><td>B - Boundary Correction</td></tr><tr><td>24510271504</td><td>1086.49</td><td>IN</td><td>M - Merge</td></tr><tr><td>24510272006</td><td>17.26</td><td>IN</td><td>B - Boundary Correction</td></tr></tbody></table>	Info	Area in Acres	Relate	Change Type	24510110201	76.62	IN	E - New Entity	24510110202	101.54	IN	E - New Entity	24510280600	402.87	IN	M - Merge	24510280700	187.34	IN	M - Merge	24510280800	133.57	IN	M - Merge	24510280900	154.95	IN	M - Merge	24510130807	752.65	IN	M - Merge	24510281000	142.60	IN	M - Merge	24510230200	23.83	IN	B - Boundary Correction	24510260304	523.11	IN	M - Merge	24510260401	46.21	IN	B - Boundary Correction	24510271504	1086.49	IN	M - Merge	24510272006	17.26	IN	B - Boundary Correction
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24510272006	17.26	IN	B - Boundary Correction																																																						
	<p>Refresh the change polygon list by switching geography types. Doing so repopulates the list with the current list of polygon changes.</p>																																																								
Step 5	<p>To view a change polygon on the map, click the row for the polygon in the <b>Info</b> list. <i>The polygon highlights and the map zooms to the location.</i></p>																																																								
Step 6	<p>To correct a mistake (e.g., correct a noncontiguous polygon or sliver missed during the splitting/merging of a geography), or review changes made during the participant’s review (e.g., creation of a new CDP), click on the <b>Modify Area Feature</b> button on the <b>PSAP toolbar</b> and make the correction. Refer to <a href="#">Section 9.2.1, Modify Area Feature Tool</a>, for the instructions on using this tool.</p>																																																								

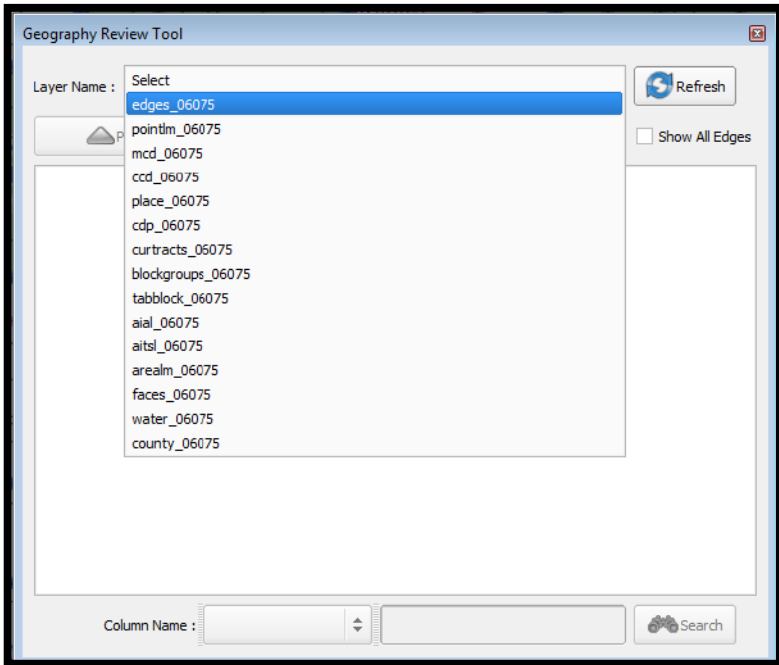
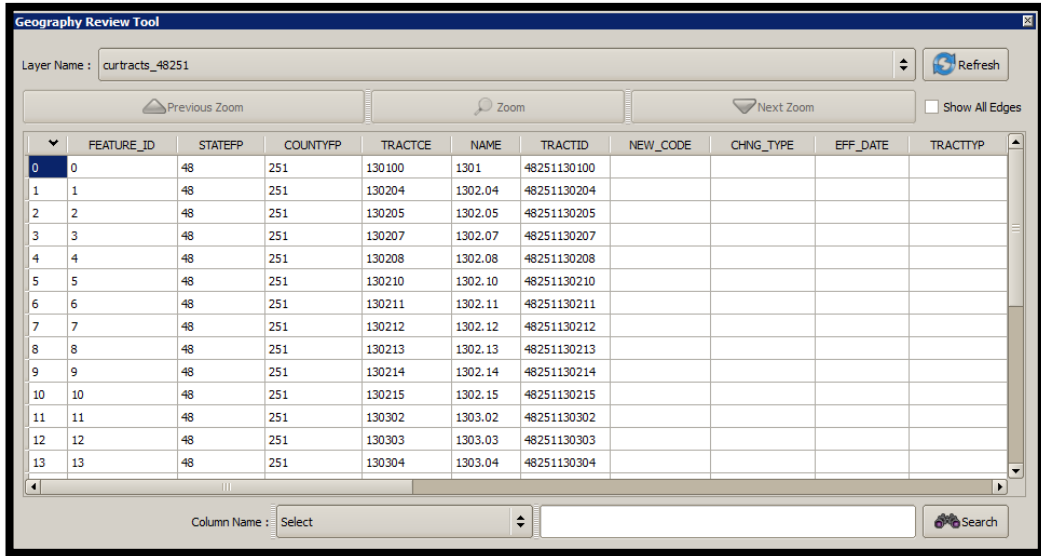

Step	Action and Result
	<p>The software contains built-in tools to check for contiguity of the statistical geographies. A confirmation dialog box, similar to the one shown below, appears if the participant introduces a contiguity issue during their work.</p> 
Step 7	<p>Click the <b>Save</b> button to save the edits and update the project. <i>The <b>Current edits</b> confirmation dialog box asks to save the current changes for all layers.</i> For more information on saving, please refer to <a href="#">Section 7.3, Save a Project in GUPS</a>.</p>  <p>Click <b>OK</b> to save or <b>Cancel</b> to return to the <b>Map View</b> without saving.</p>
Step 8	<p>Upon completion of the review and updates, click the <b>Close</b> button in the <b>Review Change Polygons</b> window to close the tool.</p>

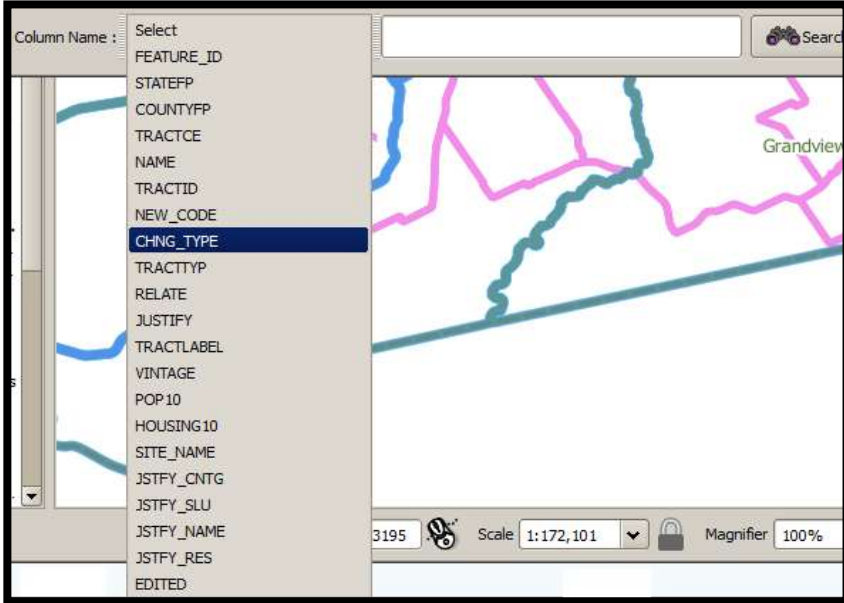
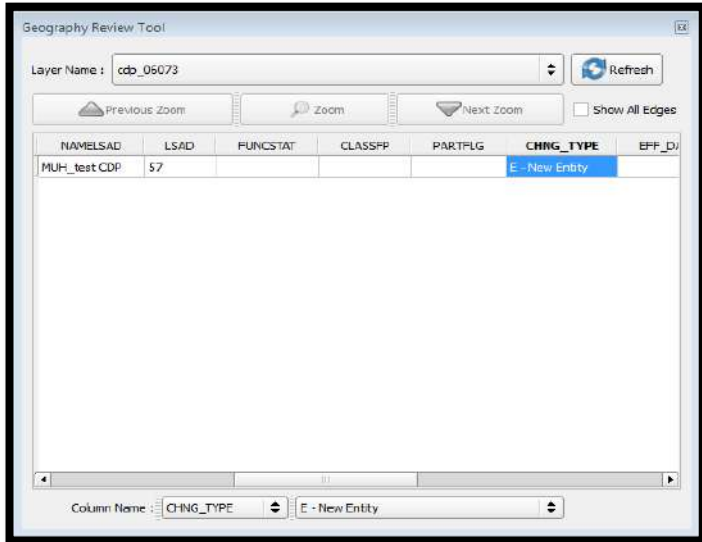
### 10.3 Geography Review Tool

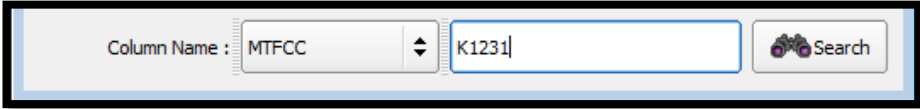
The **Geography Review Tool** provides access to the attribute tables of some of the layers displayed in the **Table of Contents**. It filters the map layers based on field values in the attribute table. This tool provides an overall review of the new or deleted entities, or the entities with boundary changes. The Census Bureau recommends the use of this tool, rather than directly editing the various statistical geographies attribute tables. [Section 8.4.2.2](#) introduced this tool.

**Table 58: Geography Review Tool Button**

Step	Action and Result
Step 1	<p>Download and review the data as described in <a href="#">Section 7.2, Open GUPS and Start a New Project</a>.</p>
Step 2	<p>Click the <b>Geography Review Tool</b> button on the PSAP toolbar.</p>  <p><i>The <b>Geography Review Tool</b> dialog box opens.</i></p>

Step	Action and Result																																																																																																																																																																					
Step 3	<div><p>In the <b>Layer Name:</b> field drop-down menu, select the data layer to view.</p></div> <p>The geography (e.g., layers) modified during PSAP that need to be reviewed are as follows (listed in alpha order, not priority order):</p> <ul style="list-style-type: none"><li>• Block groups (blockgroups_&lt;STCOU&gt;).</li><li>• Census county divisions (ccd_&lt;STCOU&gt;), if one of the 21 states with CCD geography.</li><li>• Census designated places (cdp_&lt;STCOU&gt;), if they exist in the working county.</li><li>• Census tracts (curtracts_&lt;STCOU&gt;).</li></ul> <p>Once selected, the attribute table for the layer opens, with the individual geographies (each census tract for this example) in separate rows and specific attributes displayed in separate columns. The image below shows the attributes for curtracts.</p>  <table><thead><tr><th></th><th>FEATURE_ID</th><th>STATEFP</th><th>COUNTYFP</th><th>TRACTCE</th><th>NAME</th><th>TRACTID</th><th>NEW_CODE</th><th>CHNG_TYPE</th><th>EFF_DATE</th><th>TRACTTYP</th></tr></thead><tbody><tr><td>0</td><td>0</td><td>48</td><td>251</td><td>130100</td><td>1301</td><td>48251130100</td><td></td><td></td><td></td><td></td></tr><tr><td>1</td><td>1</td><td>48</td><td>251</td><td>130204</td><td>1302.04</td><td>48251130204</td><td></td><td></td><td></td><td></td></tr><tr><td>2</td><td>2</td><td>48</td><td>251</td><td>130205</td><td>1302.05</td><td>48251130205</td><td></td><td></td><td></td><td></td></tr><tr><td>3</td><td>3</td><td>48</td><td>251</td><td>130207</td><td>1302.07</td><td>48251130207</td><td></td><td></td><td></td><td></td></tr><tr><td>4</td><td>4</td><td>48</td><td>251</td><td>130208</td><td>1302.08</td><td>48251130208</td><td></td><td></td><td></td><td></td></tr><tr><td>5</td><td>5</td><td>48</td><td>251</td><td>130210</td><td>1302.10</td><td>48251130210</td><td></td><td></td><td></td><td></td></tr><tr><td>6</td><td>6</td><td>48</td><td>251</td><td>130211</td><td>1302.11</td><td>48251130211</td><td></td><td></td><td></td><td></td></tr><tr><td>7</td><td>7</td><td>48</td><td>251</td><td>130212</td><td>1302.12</td><td>48251130212</td><td></td><td></td><td></td><td></td></tr><tr><td>8</td><td>8</td><td>48</td><td>251</td><td>130213</td><td>1302.13</td><td>48251130213</td><td></td><td></td><td></td><td></td></tr><tr><td>9</td><td>9</td><td>48</td><td>251</td><td>130214</td><td>1302.14</td><td>48251130214</td><td></td><td></td><td></td><td></td></tr><tr><td>10</td><td>10</td><td>48</td><td>251</td><td>130215</td><td>1302.15</td><td>48251130215</td><td></td><td></td><td></td><td></td></tr><tr><td>11</td><td>11</td><td>48</td><td>251</td><td>130302</td><td>1303.02</td><td>48251130302</td><td></td><td></td><td></td><td></td></tr><tr><td>12</td><td>12</td><td>48</td><td>251</td><td>130303</td><td>1303.03</td><td>48251130303</td><td></td><td></td><td></td><td></td></tr><tr><td>13</td><td>13</td><td>48</td><td>251</td><td>130304</td><td>1303.04</td><td>48251130304</td><td></td><td></td><td></td><td></td></tr></tbody></table>		FEATURE_ID	STATEFP	COUNTYFP	TRACTCE	NAME	TRACTID	NEW_CODE	CHNG_TYPE	EFF_DATE	TRACTTYP	0	0	48	251	130100	1301	48251130100					1	1	48	251	130204	1302.04	48251130204					2	2	48	251	130205	1302.05	48251130205					3	3	48	251	130207	1302.07	48251130207					4	4	48	251	130208	1302.08	48251130208					5	5	48	251	130210	1302.10	48251130210					6	6	48	251	130211	1302.11	48251130211					7	7	48	251	130212	1302.12	48251130212					8	8	48	251	130213	1302.13	48251130213					9	9	48	251	130214	1302.14	48251130214					10	10	48	251	130215	1302.15	48251130215					11	11	48	251	130302	1303.02	48251130302					12	12	48	251	130303	1303.03	48251130303					13	13	48	251	130304	1303.04	48251130304				
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	If columns are not visible in the attribute data table, drag the edge of the dialog box outward to widen the view, or move the dialog box to another location by clicking inside the box and dragging it.																																																																																																																																																																					

Step	Action and Result
<b>Step 4</b>	<p>Use the <b>Search</b> feature <u>at the bottom of the dialog box</u> to filter the table layers by specific attributes (e.g., full name, MTFCC, change type, etc.). This example uses <b>CHNG_TYPE</b>.</p>  <p>Participants can run this tool with this specific column name selected to identify the changes made during their review.</p>
<b>Step 5</b>	<p>In the drop-down menu next to the Column Name, select the attribute value by which to filter and click the <b>Search</b> button. This example uses <b>E – New Entity / New District</b> as the attribute value. <i>Based on the column name choice and attribute value chosen, the search filters the attribute table to show the rows for the new CDPs in this working county. Leaving the attribute value blank would return all records with a value in the CHNG_TYPE field.</i></p> 
<b>Step 6</b>	<p>Selecting the record from the attribute table activates the <b>Zoom</b> menu and quickly zooms the map view to the selection.</p>
<b>Step 7</b>	<p>To return to the attribute table to see the full (<i>un-filtered</i>) layer, click the <b>Refresh</b> button in the upper right-hand corner of the dialog box.</p>

Step	Action and Result
Step 8	<p><b>Note:</b> When filtering the table by some attributes (e.g., state and county FIPS code or MTFCC), no drop-down menu appears from which to select.</p> <p>Some attribute codes are too numerous to make scrolling through a list practical. Instead participants receive a blank box in which they may type the search value. For example, if filtering the area landmarks layer by MTFCC and want to see hospitals in the layer, type in the MTFCC for hospitals (K1231), and then click <b>Search</b>.</p> 

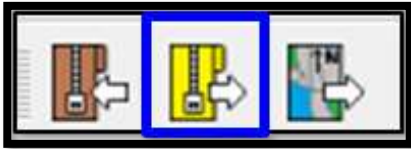
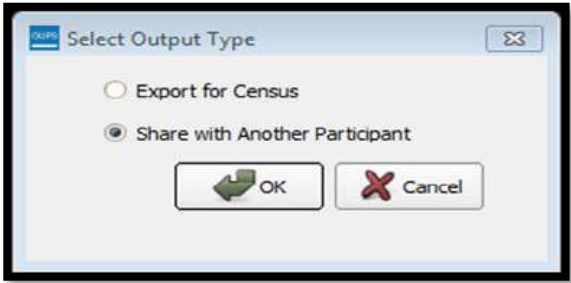
## 10.4 Export to Zip Button


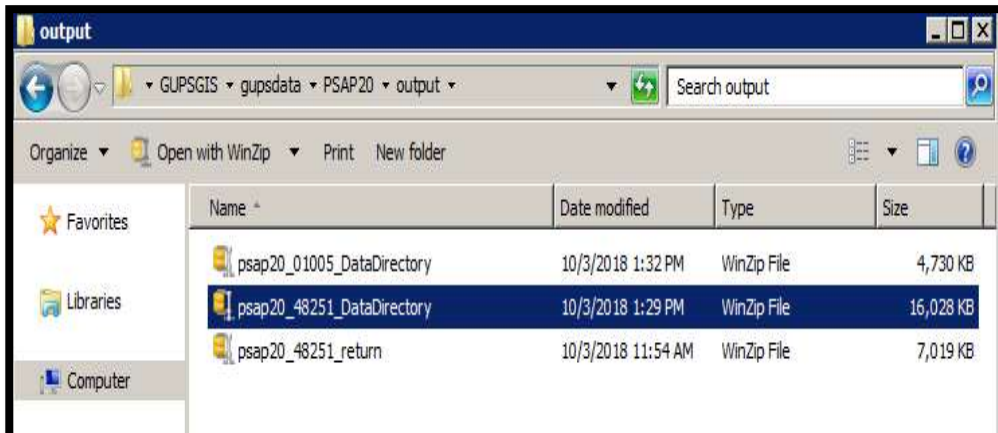
When creating export .zip files, participants have two options. They may export the file to share with another reviewer or they may export the file for submission to the Census Bureau. In either case, GUPS automatically names the output .zip file, packages all the files required by the Census Bureau (including any documentation uploaded into GUPS) into the .zip file, and saves it in a preset location created on the computer during the installation process. [Section 8.4.2.6](#) introduced this tool. This section repeats much of the information presented earlier, but serves as a closure to Chapter 9.

### 10.4.1 Export to Zip – Share with Another Participant

To export a file to share with another participant, follow the steps in [Table 59](#). A participant might find this functionality useful if they need to show their supervisor their work or if they split the review work of geographies among staff; i.e., someone reviews the census tracts and block groups, while someone else reviews the CDPs.

**Table 59: Export a File to Share with Another Participant**

Step	Action and Result
Step 1	Download and review the data as described in <a href="#">Section 7.2, Open GUPS and Start a New Project</a> .
Step 2	<p>Click the <b>Export to Zip</b> button.</p>  <p>The <b>Select Output Type</b> dialog box opens.</p>  <p>Click the <b>Share with Another Participant</b> radio button. Then click <b>OK</b>.</p>


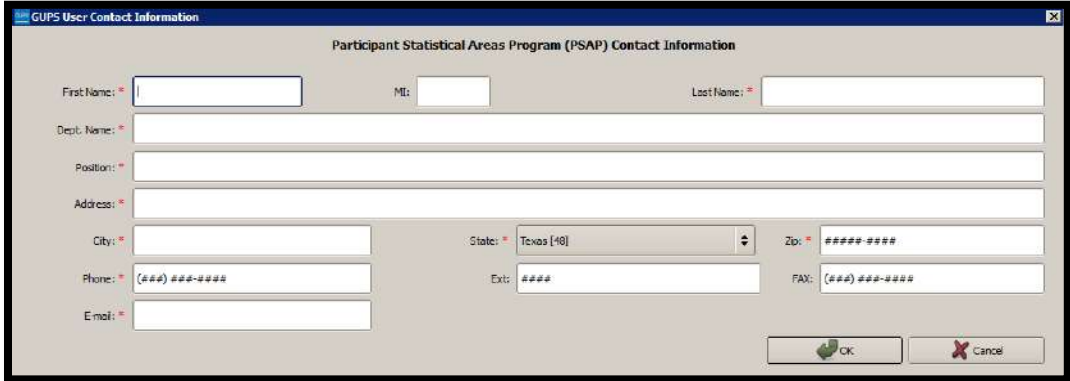
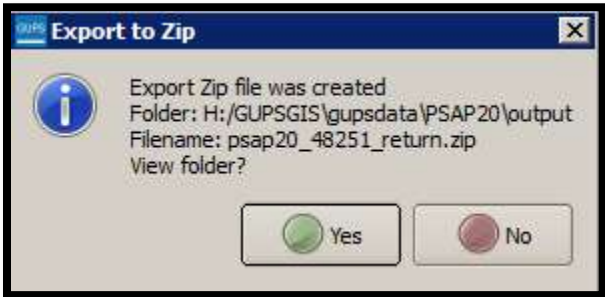
Step	Action and Result
Step 3	<p>The <b>Export to Zip</b> dialog box opens. GUPS generates a .zip file, stores it in the output directory that the GUPS installer placed on the computer during the installation process, and gives it a name that includes "DataDirectory."</p> 
Step 4	<p>If participants click <b>Yes</b>, as shown in this example, GUPS automatically opens a windows explorer to the output folder location on the computer. If they click <b>No</b>, the <b>Export to Zip</b> dialog box closes.</p> 
Step 5	<p>Participants may now share the file with others who would then use the <b>Import Project ZIP file</b> button in the <b>Map Management</b> window or the <b>Import County Zip</b> button on the <b>PSAP toolbar</b> to open the shared .zip file as described in <a href="#">Section 8.4.2.5</a>.</p>

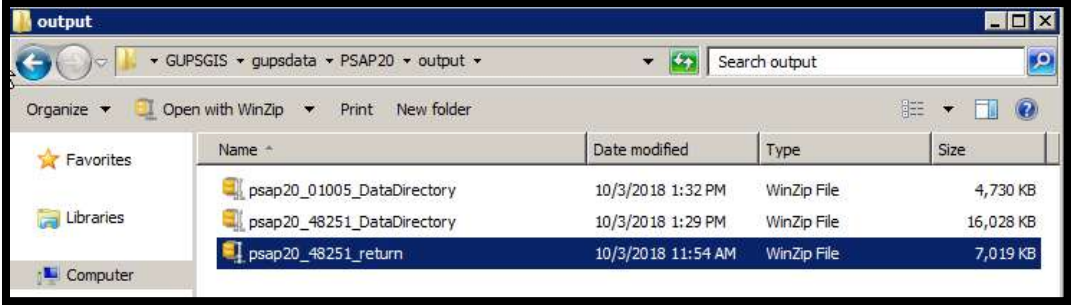
### 10.4.2 Export to Zip – Export for Census

To export a file to submit to the Census Bureau as the final submission for any working county, follow the steps in [Table 60](#).

**IMPORTANT:** The Census Bureau accepts complete submissions for each working county and will not accept partial submissions. This means a participant cannot submit a .zip file when they complete their review and update of census tracts, then submit another .zip file to include their review and update of the block groups. A county must be totally complete in order to be submitted for processing to the Census Bureau. If a participant splits work among reviewers, ensure all the work is complete prior to executing this button and submission of the .zip file to the Census Bureau.

**Table 60: Export a File for Submission to the Census Bureau**

Step	Action and Result
<b>Step 1</b>	<p>Click the <b>Export to Zip</b> button.</p>  <p>The <b>Select Output Type</b> dialog box opens.</p>
<b>Step 2</b>	<p>Select the <b>Export for Census</b> radio button. Click <b>OK</b>.</p>
<b>Step 3</b>	<p>A <b>GUPS User Contact Information</b> window opens with the <b>Export for Census</b> option. It requests contact information from the participant. All fields denoted with a red star are required for submission. Completion of this information helps the Census Bureau communicate with the participant should any questions or issues arise.</p> 
<b>Step 4</b>	<p>Following the completion of the <b>GUPS User Contact Information</b>, the <b>Export to Zip</b> dialog box opens. GUPS generates a .zip file, stores it in the output directory that the GUPS installer placed on the computer during the installation process, and gives it a name that includes “return.”</p>  <p><b>IMPORTANT:</b> Make note of the location of the file listed in this dialog box because participants must navigate to the directory to submit this file using SWIM.</p>

Step	Action and Result
<b>Step 5</b>	<p>As with the <b>Share with Another Participant</b> example, if participants click <b>Yes</b>, <i>GUPS</i> automatically opens a windows explorer to the output folder location on the computer. This feature is useful for participants ready to use SWIM to submit their file. If they click <b>No</b>, the <b>Export to Zip</b> dialog box closes.</p> 
<b>Step 6</b>	<p>With the completion of this step, participants can proceed with uploading the file to the Census Bureau. Refer to <a href="#">Chapter 11</a> for details on using SWIM.</p>

## CHAPTER 11. SECURE WEB INCOMING MODULE (SWIM)

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If PSAP participants perform updates, using either the 2020 proposed plan or the 2010 geographies, they must utilize the Census Bureau's Secure Web Incoming Module, or SWIM, to submit their updated working county .zip file for processing. Use the steps outlined in this chapter to learn how to use SWIM to make a submission.

### 11.1 SWIM Background and Requirements

The Census Bureau provided one SWIM registration token per PSAP participant with their delineation materials cover letter. We recommend either the official liaison or the technical contact utilize the token to create an account once they determine updates are necessary.

Some PSAP participants may have established a SWIM account for other Census geography programs. If so, there is no need to establish a new account just for PSAP. Participants without a SWIM account need to utilize the 12-digit registration token to establish an account. To determine whether an account exists, click "[Forgot your password?](#)" on the main SWIM page and enter the email address to check for account existence. If SWIM does not locate an account associated with the email address, it returns the following message, *"No account registered for this email. Go to Account Registration."* Choosing the Account Registration link opens a window to establish a SWIM account.

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**Note:** The components of the email and password of SWIM system accounts are case-sensitive. Make note of the case-sensitive format used when establishing the SWIM account (e.g., [jane@anytown.org](#) or [Jane@anytown.org](#) or [JANE@ANYTOWN.ORG](#)). The Census Bureau recommends the use of lowercase characters and recommends safe retention of this information in a secure location for future reference.

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SWIM allows four attempts to login before it temporarily locks the account for 15 minutes. After the 15-minute lock expires, participants may try to login again or reset their password using the "Forgot your password?" link on the login page. Once selected, 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.

Participants continuing to experience logon issues should confirm use of the current internet browser version (or one previous version). If the browser version is older, upgrade to a newer version. If problems with SWIM still occur, contact 1-844-788-4921 for assistance. An additional SWIM token may be necessary to create another account.

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**IMPORTANT:** Do not use email to send the 2020 Census PSAP submission to the Census Bureau.

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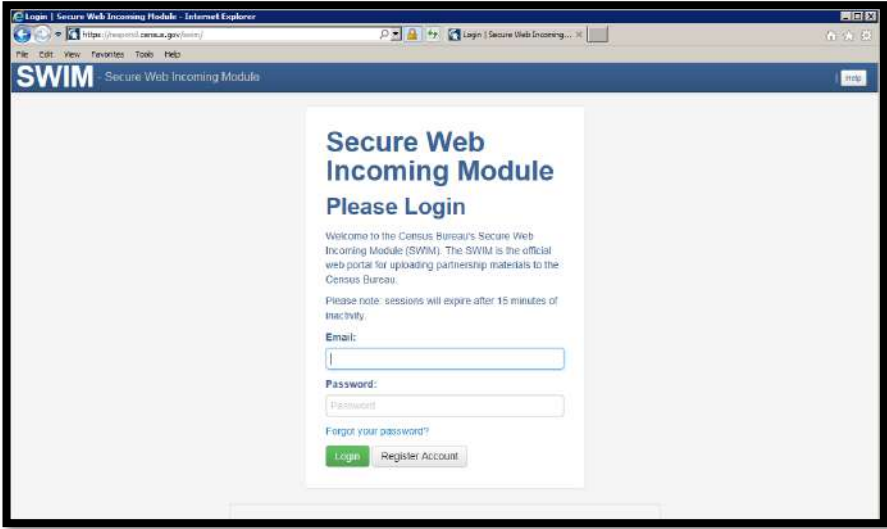
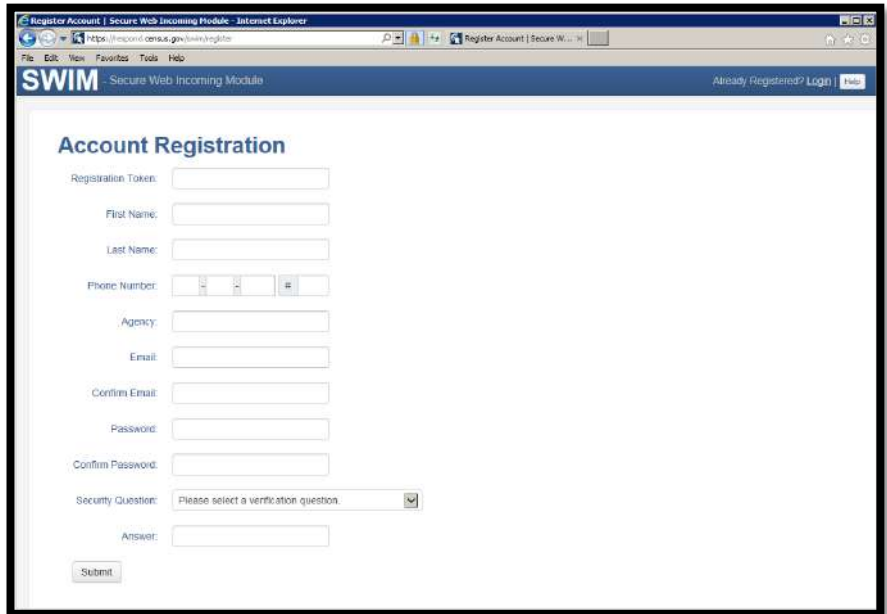

The following list contains the file requirements for using SWIM:

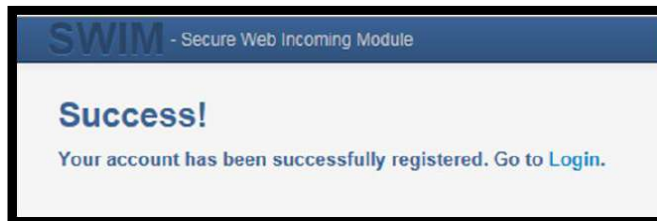
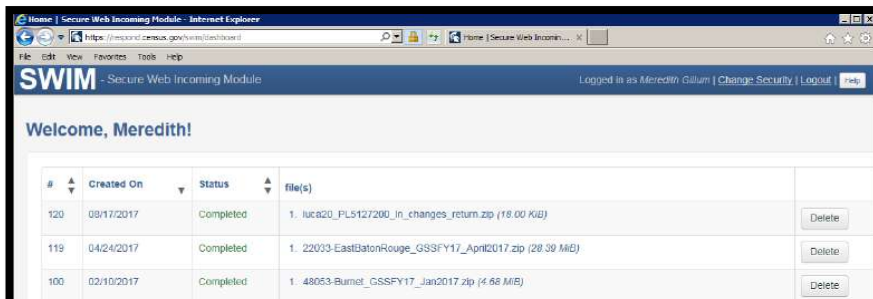
- File to upload must be .zip file format.
- The .zip file may not include another .zip file as a component.
- The .zip file must not be larger than 250 megabytes in size.


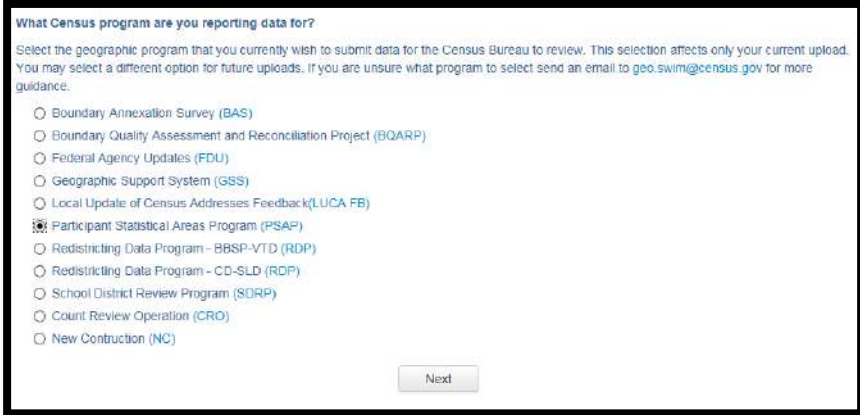
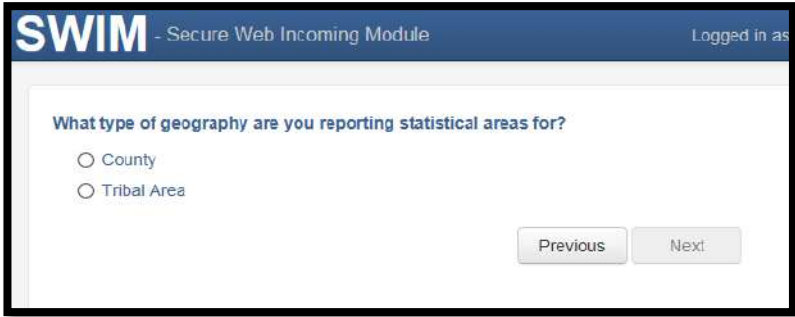

## 11.2 SWIM Submission Example

Refer to [Table 61](#) for instructions on utilizing the SWIM application to submit PSAP updates.

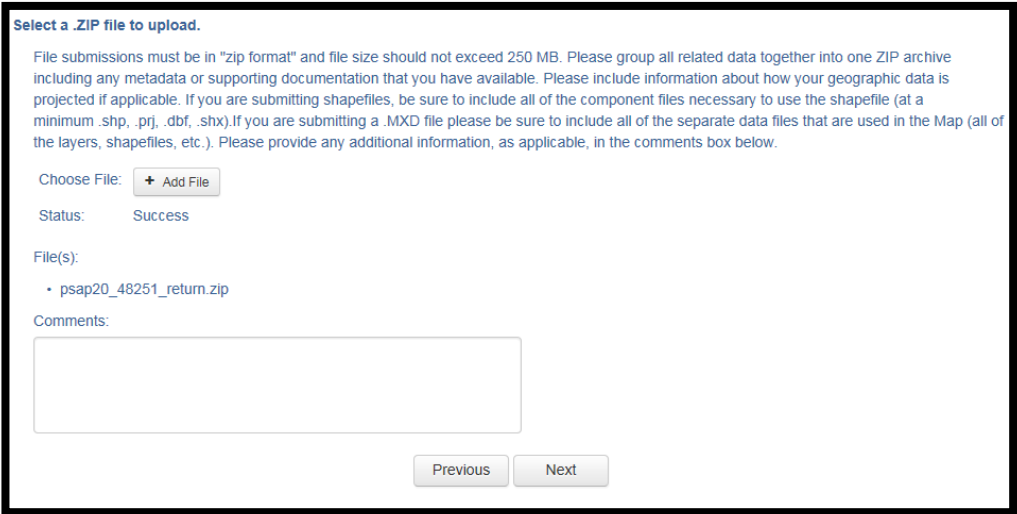
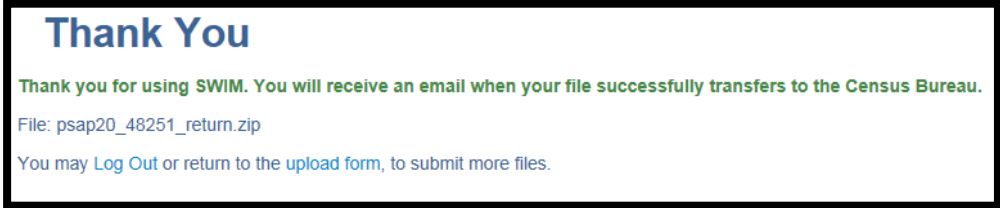
**Table 61: SWIM Submission**


Step	Action and Result
Step 1	<p>Open a new browser window and enter the SWIM URL &lt;<a href="https://respond.census.gov/swim">https://respond.census.gov/swim</a>&gt;. The <b>SWIM Please Login</b> screen opens.</p> 
Step 2	<p>For participants with an existing SWIM account, enter the email address and password and then click the <b>Login</b> button. The <b>Welcome</b> screen opens. Go to <b>Step 8</b>.</p>
Step 3	<p>For participants without a SWIM account, have the 12-digit registration token provided by the Census Bureau ready for account registration. Choose the <b>Register Account</b> button after accessing the SWIM URL. The <b>Account Registration</b> screen opens.</p> 
	<p>All fields on the Account Registration screen are required.</p>

Step	Action and Result
Step 4	Enter the registration token, name, phone number, agency or organization, email address in the appropriate fields.
Step 5	<p>Create a password using the following criteria:</p> <ol style="list-style-type: none"><li>1. Must be at least 8-characters in length.</li><li>2. Must have at least one uppercase character.</li><li>3. Must have at least one lowercase character.</li><li>4. Must have at least one number.</li><li>5. Must have at least one special character. Valid choices are as follows: #, !, \$, *, &amp;, ?, and ~.</li></ol> <p><b>Note:</b> The comma shown in the previous list are for spacing purposes only. The comma is not a valid special character for use in the password.</p>
Step 6	<p>Establish a security question. Click arrow to the right of the <b>Security Question</b> field and select a question from the drop-down menu. Enter an answer in the <b>Answer</b> field. Click the <b>Submit</b> button when finished. <i>A <b>Success</b> screen opens to confirm the successful creation of a SWIM account.</i></p> <div></div>
Step 7	On the <b>Success</b> screen, select <b>Login</b> to return to the <b>SWIM Please Login</b> screen (shown in Step 1) to proceed with the login process.
Step 8	<p>Enter the email and password information and click the green <b>Login</b> button to log into SWIM. <i>The <b>Welcome</b> screen opens.</i> If the account has uploaded other PSAP working counties or other files for different geography programs administered by the Census Bureau, <i>a list of files previously uploaded by the SWIM user displays, as shown in the example below.</i> The list includes the creation date of the file upload, the name of the file, and the corresponding size of the .zip file.</p> <div></div>

Step	Action and Result
<p><b>Step 9</b></p>	<p>To begin a new upload, click the <b>Start New Upload</b> button at the bottom of the screen.</p>  <p>The <b>“What Census program are you reporting data for?”</b> screen opens. Choose the <b>Participant Statistical Areas Program (PSAP)</b> radio button and click the <b>Next</b> button.</p> 
<p><b>Step 10</b></p>	<p>The <b>“What type of statistical area are you reporting for?”</b> screen opens.</p>  <p>Click the radio button for the entity type to upload and click the <b>Next</b> button. Standard statistical geography participants choose <b>County</b>. <i>The choice of <b>County</b> opens the <b>Select a State and County</b> screen.</i></p> 

Step	Action and Result
<p><b>Step 11</b></p>	<p>Following the selection of the statistical area to upload, the <b>Select a .ZIP file to upload</b> screen opens. Click the <b>+Add File</b> button to launch the <b>Choose File to Upload</b> window and navigate to the directory where the .zip file resides. Refer to <a href="#">Table 60</a> to identify the location of the .zip file to upload. The .zip file resides in the “GUPSGIS\gupsdata\psap20\output” folder on the default drive selected during installation. This is likely the “C:” drive.</p> <div> <p><b>Select a .ZIP file to upload.</b></p> <p>File submissions must be in "zip format" and file size should not exceed 250 MB. Please group all related data together into one ZIP archive including any metadata or supporting documentation that you have available. Please include information about how your geographic data is projected if applicable. If you are submitting shapefiles, be sure to include all of the component files necessary to use the shapefile (at a minimum .shp, .prj, .dbf, .shx). If you are submitting a .MXD file please be sure to include all of the separate data files that are used in the Map (all of the layers, shapefiles, etc.). Please provide any additional information, as applicable, in the comments box below.</p> <p>Choose File: <input type="button" value="+ Add File"/></p> <p>Status:</p> <p>File(s):</p> <p>Comments:</p> <div></div> <p><input type="button" value="Previous"/> <input type="button" value="Next"/></p> </div> <div> </div> <p><b>Note:</b> State and Regional Agency participants perform county based uploads. This means a participant with 10 counties will perform the upload process 10 times if they wish to submit updates for all 10 of those counties. SWIM does not allow for the selection of multiple .zip files within the <b>Choose File to Upload</b> window because of the way other systems receive and process the information from SWIM.</p>

Step	Action and Result
<b>Step 12</b>	<p>Once the file upload completes, the <b>Status</b> field shows “<b>Success.</b>” The name of the file appears in the <b>File(s)</b> field. Participants can add comments to the <b>Comment</b> section if they choose. Click the <b>Next</b> button to proceed with the upload.</p> 
<b>Step 13</b>	<p>The <b>Thank You</b> screen appears. It thanks the participant and indicates a forthcoming email once transfer completes.</p> 
<b>Step 14</b>	<p>To submit files for an additional county (i.e., for State and Regional Agency participants), choose ‘<b>upload form</b>’ in the phrase “<b>You may Log Out or return to the upload form to submit more files</b>” sentence to return to the <b>Welcome</b> screen and begin the upload process again. If complete with the upload process, choose <b>Log Out</b>.</p>

Step	Action and Result										
	<p>It is important to mention that SWIM sessions deactivate after 15 minutes of inactivity. Participants taking longer than 15 minutes to upload a file must log back into the system and start again. <i>They receive a message noting the period of inactivity on the Login screen.</i></p> <div><h2>Secure Web Incoming Module</h2><h3>Please Login</h3><p>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.</p><p>Please note: sessions will expire after 15 minutes of inactivity.</p><p>You have been logged out due to inactivity.</p><p>Email:</p><div></div><p>Password:</p><div>Password</div><p><a href="#">Forgot your password?</a></p><div><div>Login</div><div>Register Account</div></div></div> <p>When they reach the <b>Welcome</b> screen, a record listed with a <b>Status</b> of “<b>In progress, Continue?</b>” appears with that day’s date in the <b>Created On</b> field. Participants can choose the “<b>Continue?</b>” link to continue uploading or they can delete the item by choosing the <b>Delete</b> button to the far right of the row.</p> <div><p>Welcome, Meredith!</p><table><tr><th>#</th><th>Created On</th><th>Status</th><th>file(s)</th><th></th></tr><tr><td>1</td><td>10/11/2016</td><td>In Progress. <a href="#">Continue?</a></td><td></td><td><div>Delete</div></td></tr></table></div>	#	Created On	Status	file(s)		1	10/11/2016	In Progress. <a href="#">Continue?</a>		<div>Delete</div>
#	Created On	Status	file(s)								
1	10/11/2016	In Progress. <a href="#">Continue?</a>		<div>Delete</div>							

## PART 4 NEXT STEPS FOR 2020 CENSUS PSAP

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Congratulations on the completion of the delineation phase of 2020 Census PSAP. While this is a major step, it does not conclude participation in 2020 Census PSAP. The final part to this document describes the next steps for 2020 Census PSAP. These steps include a high-level description of the processing of participant's submissions conducted by the Census Bureau that must occur prior to the verification phase. The document concludes by highlighting the plans for the verification and closeout phases of 2020 Census PSAP.

Once received through the SWIM process, the Census Bureau begins its review. This process includes running the same validation checks in GUPS described in [Part 3](#), checking for block group numbering gaps, and conducting basic quality assessments to ensure the specific criteria for each statistical geography is enforced.

After completing the review of the updated delineation materials, the Census Bureau uses the newly suggested geographies to generate the final version of the proposed plan, reviewed by participants during the verification phase. The verification phase begins January 2020 with participants having 90 days to review the verification materials for accuracy of the updates they provided during the delineation phase and respond with suggested corrections. Participants receive a prepaid, verification phase postcard asking them to verify, accept, or reject the final version of the proposed plan. The Census Bureau plans to conduct follow-up with non-responding participants in order to ensure receipt of a response from each that participated during the delineation phase. Once the Census Bureau receives the verification phase postcard with the approval or acceptance of the verification plan or after they receive the suggested corrections, they can finalize the 2020 Census statistical boundaries.

In October 2020, the Census Bureau begins the closeout phase of the 2020 Census PSAP to ensure there are no outstanding changes submitted by participants or to communicate the reasoning for not making participant suggested changes. The timing of this phase begins after allowing time for processing any updates from the verification phase.

More details on both the verification and closeout phases will appear on the PSAP website as they become available. In addition, further communication occurs in advance of each of the last two phases. This concludes the instructional content for the delineation phase for 2020 Census PSAP.

## APPENDICES

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## Appendix A GLOSSARY

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**Alaska Native Regional Corporation (ANRC)** – A corporate geographic area established under the Alaska Native Claims Settlement Act (Pub. L. 92–203, 85 Stat. 688 (1971)) to conduct both the business and nonprofit affairs of Alaska Natives. Twelve ANRCs cover the entire State of Alaska except for the Annette Island Reserve.

**Alaska Native village statistical area (ANVSA)** – A statistical geographic entity that represents the residences, permanent and/or seasonal, for Alaska Natives who are members of or receiving government services from the defining ANV that are located within the region and vicinity of the ANV’s historic and/or traditional location. ANVSAs are intended to represent the relatively densely settled portion of each ANV and should include only an area where Alaska Natives, especially members of the defining ANV, represent a significant proportion of the population during at least one season of the year (at least three consecutive months).

**American Community Survey (ACS)** – A survey conducted by the Census Bureau that uses a series of monthly samples to produce annually updated data for the same small areas (census tract and block groups) as the decennial census long-form sample previously surveyed. The Census Bureau last utilized the long-form during Census 2000.

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

**American Indian off-reservation trust land (ORTL)** – An area of land located outside the boundaries of an AIR, whose boundaries are established by deed, and which are held in trust by the U.S. federal government for a federally recognized American Indian tribe or members of that tribe.

**American Indian reservation (AIR)** – An area of land with boundaries established by final treaty, statute, executive order, and/or court order and over which a federally recognized, American Indian tribal government has governmental authority. Along with “reservation” primary governmental or administrative division of a county in 28 states and the “reservation” designations such as colonies, communities, pueblos, rancherias, and reserves apply to AIRs.

**American Indian tribal subdivision** – A legal subdivision of a federally recognized American Indian reservation, off-reservation trust land, or a statistical subdivision of Oklahoma tribal statistical areas. These entities are internal units of self-government or administration that serve social, cultural, and/or economic purposes for American Indians.

**Boundary** – A line, either invisible or coincident with a visible feature that identifies the extent of a geographic entity, such as a census tract, city, county, state, or reservation. A boundary marks the limits of an area.

**Boundary and Annexation Survey (BAS)** – An annual survey to collect information about selected legally defined geographic areas. The Census Bureau uses BAS as a means to update information about the legal boundaries and names of all governmental units in the United States.

**Census block** – A census block is an area bounded by visible and/or invisible features shown on Census Bureau maps. A census block is the smallest geographic area created by the Census Bureau for which it collects and tabulates decennial census data. Census blocks are numbered within block groups and are uniquely numbered within census tracts.

**Census block group** – Block groups are statistical geographic divisions of a census tract, defined for the tabulation and dissemination of census data from the decennial censuses, the ACS, and other select surveys.

**Census block number** – Census block numbers contain a 4-digit number. Census blocks are numbered uniquely within each census tract.

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

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

**Census county division (CCD)** – Statistical geographic entities in 21 states where minor civil divisions either do not exist or have been unsatisfactory for reporting statistical data. The Census Bureau, in cooperation with state, tribal, and local officials, delineate these areas solely for statistical purposes. CCDs have no legal function and are not legal governmental units. The primary goal of CCDs is to establish and maintain a set of sub-county geographies with stable boundaries and recognizable names. Naming of each CCD is based on a place, county, or well-known local name that identifies its location. In most cases, census tracts nest within CCDs, but in less populated counties CCDs nest within census tracts.

**Census designated place (CDP)** – Statistical geographic entities representing closely settled, unincorporated communities that are locally recognized and identified by name. CDPs are the statistical equivalent of incorporated places, with the primary differences being the lack of both a legally defined boundary and an active, functioning governmental structure chartered by the state and administered by elected official.

**Census tract** – A small, relatively permanent statistical subdivision of a county or statistically equivalent entity delineated for data presentation. Designed to be relatively homogeneous units with respect to population characteristics, economic status, and living conditions at the time of establishment, census tracts generally contain between 1,000 and 8,000 people, with an optimum size of 4,000 people. Delineated with the intention of being stable over many decades, census tract boundaries generally follow relatively permanent visible features.

However, they may follow governmental unit boundaries and other invisible features in some instances; the boundary of a state or county (or statistically equivalent entity) is always a census tract boundary.

**Census tract number** – Unique numbers to identify census tracts within a county or statistically equivalent entity. Census tract numbers contain up to a 4-digit number followed by a decimal point and a 2-digit number for suffixed tracts, e.g., 1234.01. For census tracts without a suffix, the number will contain a period with zero fill, e.g., 4567.00. Leading zeros for census tracts, e.g., 0001.00, are not shown on Census Bureau maps. This tract would appear as “1” on maps.

**City-style address** – The Census Bureau’s definition of a city style address is an address consisting of a house number and street or road name. For example, 201 Main Street is a city style address. The address may or may not be used for the delivery of mail and may include apartment numbers/designations or similar identifiers.

**Coextensive** – The Census Bureau defines coextensive as two or more geographic entities that cover exactly the same area, with all boundaries shared.

**Conjoint** – The Census Bureau defines conjoint as a boundary line shared by two adjacent geographic entities.

**Colonia** – A small, generally unincorporated community located in one of the states on the U.S.-Mexico border where residents often build or provide their own housing and that may lack utilities, paved roads, and other infrastructure typically found other similarly sized communities.

**Comunidad** – A CDP in Puerto Rico that is not related to a municipio’s seat of government, called an aldea or a ciudad prior to the 1990 Census.

**Contiguous** – The Census Bureau defines contiguous as areas sharing common boundary lines, more than a single point, such that the areas, when combined, form a single piece of territory. Non-contiguous areas form disjoint pieces.

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

**Edges** – All linear features contained in the MAF/TIGER database.

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

**Faces** – Topological areas in the MAF/TIGER database formed by edges.

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

**Federal Information Processing Series (FIPS)**—These are codes formerly known as Federal Information Processing Standards codes, until the National Institute of Standards and Technology (NIST) announced its decision in 2005 to remove geographic entity codes from its

oversight. The Census Bureau continues to maintain and issue codes for geographic entities covered under FIPS oversight, albeit with a revised meaning for the FIPS acronym. Geographic entities covered under FIPS include states, counties, congressional districts, core based statistical areas, places, county subdivisions, sub-minor civil divisions, consolidated cities, and all types of American Indian, Alaska Native, and Native Hawaiian areas. FIPS codes are assigned alphabetically according to the name of the geographic entity and may change to maintain alphabetic sort when new entities are created or names change. FIPS codes for specific geographic entity types are usually unique within the next highest level of geographic entity with which a nesting relationship exists. For example, FIPS state, congressional district, and core based statistical area codes are unique within nation; FIPS county, place, county subdivision, and sub-minor civil division codes are unique within state. The codes for American Indian, Alaska Native, and Native Hawaiian areas also are unique within state; those areas in multiple states will have different codes for each state.

**Geocodes** – Codes that place an individual address in its correct geographic location, which includes the correct state, county, census tract, and census block codes. Because the Census Bureau counts people where they live, geocodes provide information to Census enumerators for locating an address. Accurate geocoding also ensures the Census Bureau counts housing units, and the people associated with them, in the correct census geography.

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

**Geographic Update Partnership Software (GUPS)** – A self-contained GIS update and processing package provided by the Census Bureau for participation in a variety of Census geography programs, including 2020 Census PSAP. Pre-packaged to include all of the components for 2020 Census PSAP, the GUPS contains the Census Bureau’s TIGER partnership shapefiles necessary to participate. GUPS allows the participant to add external geospatial data (shapefiles, geodatabases, and imagery) for comparison and update purposes.

**Group quarters** – The Census Bureau defines group quarters as a location where people live or stay in a group living arrangement that is owned or managed by an entity or organization providing housing and/or services for the residents. This is not a typical household-type living arrangement. These services may include custodial or medical care as well as other types of assistance, and residency is commonly restricted to those receiving these services. People living in group quarters are usually not related to each other. Group quarters include such places as college residence halls, residential treatment centers, skilled nursing facilities, group homes, military barracks, correctional facilities, and workers’ dormitories.

**Housing unit** – The Census Bureau defines a housing unit as a house, an apartment, a mobile home or trailer, or a group of rooms or a single room occupied as a separate living quarter or, if vacant, intended for occupancy as a separate living quarter. Separate living quarters are those in which the occupants live and eat separately from any other residents of the building and which have direct access from outside the building or through a common hall.

**Incorporated place** —A type of governmental unit, incorporated under state law as a city, town

(except in New England, New York, and Wisconsin), borough (except in Alaska and New York), or village, generally to provide governmental services for a concentration of people within legally prescribed boundaries.

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

**Master Address File (MAF)** – The Census Bureau's nationwide database of all addresses and physical/location descriptions known to the Census Bureau used to support many of the Census Bureau's operations. Besides containing mailing addresses and ZIP Codes, a MAF record also contains geographic information about the location of addresses. The Census Bureau's Geography Division regularly updates the MAF/TIGER Database from various sources, including the United States Postal Service (USPS) Delivery Sequence File (DSF) and other sources of updates such as current surveys and locally provided sources.

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

**MAF/TIGER Feature Classification Code (MTFCC)** – A 5-digit code assigned by the Census Bureau to classify and describe geographic objects or features in the MAF/TIGER database and its output products.

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

**Minor civil division (MCD)** – The primary governmental or administrative division of a county in 29 states and the Island Areas having legal boundaries, names, and descriptions. The MCDs represent many different types of legal entities with a wide variety of characteristics, powers, and functions depending on the state and type of MCD. In some states, some or all of the incorporated places also constitute MCDs. MCDs are identified by a variety of terms, such as town (in eight states), township, and/or district. They include both functioning and nonfunctioning government entities.

**Municipio** – A type of governmental unit that is the primary legal subdivision of Puerto Rico. The Census Bureau treats the municipio as the statistical equivalent of a county.

**Non-city style address** – The Census Bureau's definition of a non-city style address is one that does not have a house number and/or street name or may not include a complete house number and street name address. This includes rural route and box number address and highway contract route addresses, etc., which may include a box number, post office boxes and drawers, and general delivery.

**Nonvisible feature** – The Census Bureau defines a nonvisible feature as one that is not visible on the ground and/or in imagery such as a city or county boundary through space, a property line, or line-of-sight extension of a road.

**Participant Statistical Areas Program (PSAP)** – A Census Bureau program offered every 10 years that allows identified participants, following established criteria and guidelines, to review

and update existing statistical geographies and delineate new statistical geographies as appropriate. The standard statistical geographies include census tracts, block groups, census designated places, and census county divisions.

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

**PSAP official liaison** – A person at the PSAP participating government or organization identified to serve as the primary point of contact for PSAP.

**PSAP technical contact** – A person serving as the technical point of contact for a PSAP participant that likely conducts the actual program work using the Census Bureau’s Geographic Update Partnership Software (GUPS) or paper maps (for tribal participants).

**Regional Census Center (RCC)** – Temporary offices set up approximately two years prior to the decennial census. The geographic staff from the Regional Offices are assigned to their respective RCC and assist with the execution of various geographic operations as well as provide support for the field operations conducted during the decennial.

**Regional Office (RO)** – One of the permanent Census Bureau offices responsible for the Census Bureau’s office and field operations within its region.

**Retracting** – The Census Bureau defines retracting as substantially changing the boundaries of a census tract so that comparability over decades is lost.

**Shapefile** – Digital representations of geographic features, such as roads and boundaries used to create maps. A shapefile stores non-topological geometry and attribute information for the spatial features in a dataset. The Census Bureau provides county-based shapefiles in Esri shapefile format.

**Special use census tract/block group** – A type of census tract or block group designated as a specific use type (e.g., state park or large lake) and has an official name (e.g. Cleburne State Park or Lake Minnetonka). Special use geographies should contain no (or very little) population or housing, and must not create a noncontiguous census tract/block group.

**Standard statistical geographic entity (standard statistical geographies)** – A geographic entity specifically defined and delineated (census tract, block group, census designated place, census county division) so that the Census Bureau may tabulate data for it. Designation as a statistical entity neither conveys nor confers legal ownership, entitlement, or jurisdictional authority.

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

**Topologically Integrated Geographic Encoding and Referencing (TIGER)**—The Census Bureau’s digital map, including the geographic coordinates and names of streets, water features, other linear features, and boundaries for all jurisdictions and statistical areas that provide the geospatial framework for collecting and tabulating census data. TIGER also contains the structure coordinates of address records in the Master Address File (MAF) and address ranges

along street features used for geocoding MAF records to census geography.

**Visible feature** – The Census Bureau defines a visible feature as one that can be seen on the ground and/or in imagery. Visible features include a street, railroad tract, major above ground transmission line or pipeline, stream, shoreline, fence, distinctly defined mountain ridge, or cliff. A non-standard visible feature is a visible feature that may not be clearly defined on the ground (such as a ridgeline), may be seasonal (such as an intermittent stream), or may be relatively impermanent (such as a fence). The Census Bureau generally requests verification that nonstandard visible features used for statistical geographies pose no problem during fieldwork necessary to conduct a census or survey.

## Appendix B 2020 CENSUS PSAP CRITERIA

The population and housing unit criteria for the standard statistical geographies in the 2020 Census PSAP. In [Part 1](#) of the Respondent Guide, individual tables reflect each of the geographies separately. This table shows the four standard statistical geographies and their associated population and housing criteria in one table, with the exception of the special use census tracts and block groups. The criteria for special use geographies is located in the respective chapters for census tracts and block groups.

**Table 62: Standard Statistical Geographies and their Population and Housing Criteria**

Standard statistical geography	Nests Within	Population Criteria		Housing Unit Criteria	
<b>Census tracts</b>	County	Optimum	4,000	Optimum	1,600
		Minimum	1,200	Minimum	480
		Maximum	8,000	Maximum	3,200
<b>Block groups</b>	Census Tract	Optimum	1,500	Optimum	None
		Minimum	600	Minimum	240
		Maximum	3,000	Maximum	1,200
<b>Census designated places (CDPs)</b>	State	A CDP cannot have zero population and zero housing units.		A CDP cannot have zero population and zero housing units.	
<b>Census county divisions (CCDs)</b>	County	None		None	

## Appendix C PSAP HISTORICAL BACKGROUND

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### C.1 History of Census Tracts

In 1905, Dr. Walter Laidlaw originated the concept of permanent, small geographic areas as a framework for studying change from one decennial census to another in neighborhoods within New York City. For the 1910 Census, eight cities—New York, Baltimore, Boston, Chicago, Cleveland, Philadelphia, Pittsburgh, and St. Louis—delineated census tracts (then termed “districts”) for the first time. No additional jurisdictions delineated census tracts until just prior to the 1930 Census, when an additional ten cities chose to do so. The increased interest in census tracts for the 1930 Census is attributed to the promotional efforts of Howard Whipple Green, who was a statistician in Cleveland, Ohio, and later the chairman of the American Statistical Association's Committee on Census Enumeration Areas. For more than twenty-five years, Mr. Green strongly encouraged local citizens, via committees, to establish census tracts and other census statistical geographic areas. The committees created by local citizens were known as Census Tract Committees, later called Census Statistical Areas Committees.

After 1930, the Census Bureau saw the need to standardize the delineation, review, and updating of census tracts and published the first set of census tract criteria in 1934. The goal of the criteria has remained unchanged; that is, to assure comparability and data reliability through the standardization of the population thresholds for census tracts, as well as requiring that their boundaries follow specific types of geographic features that do not change frequently. The Census Bureau began publishing census tract data as part of its standard tabulations beginning with the 1940 Census. Prior to that time, census tract data were published as special tabulations.

For the 1940 Census, the Census Bureau began publishing census block data for all cities with 50,000 or more people. Census block numbers were assigned, where possible, by census tract, but for those cities that had not yet delineated census tracts, “block areas” (called “block numbering areas” [BNAs] in later censuses) were created to assign census block numbers.

Starting with the 1960 Census, the Census Bureau assumed a greater role in promoting and coordinating the delineation, review, and update of census tracts. For the 1980 Census, criteria for BNAs were changed to make them more comparable in size and shape to census tracts. For the 1990 Census, all counties contained either census tracts or BNAs.

Census 2000 was the first decade in which census tracts were defined in all counties. In addition, the Census Bureau increased the number of geographic areas whose boundaries could be used as census tract boundaries. It also allowed tribal governments of federally recognized American Indian tribes with a reservation and/or off-reservation trust lands to delineate tracts without regard to state and/or county boundaries, provided the tribe had a 1990 Census population of at least 1,000.

For the 2010 Census, the Census Bureau adopted changes to census tract criteria that recognized their utility as a framework of small geographic areas for presenting and analyzing statistical and other data for a variety of communities, settlement patterns, and landscapes. The Census Bureau augmented its minimum, maximum, and optimum population threshold with housing unit thresholds for use in defining census tracts for seasonal communities that

have no or low population on census day (April 1). In addition, the Census Bureau formalized criteria for census tracts defined for employment centers, airports, parks, large water bodies, and other special land uses that had been permitted in previous decades, but never specified within the criteria. The Census Bureau also established tribal census tracts as a geographic framework defined within federally recognized American Indian reservations and off-reservation trust lands that is fully separate from the standard census tracts defined within counties.

## **C.2 History of Block Groups**

The Census Bureau first delineated block groups as statistical geographic divisions of census tracts for the 1970 Census, comprising contiguous combinations of census blocks for data presentation purposes. At that time, census block groups only existed in urbanized areas in with census blocks. Defined without regard to political and administrative boundaries, block groups contained an average population of 1,000, and were approximately equal in area.

As use of census block, block group, and census tract data increased among data users, the Census Bureau expanded these programs to cover additional geographic areas while redefining the population threshold criteria to more adequately suit data users' needs. The 1990 Census was the first decennial census in which census blocks and block groups were defined throughout the entirety of the United States, Puerto Rico, and the Island Areas. For the 2000 Census, the Census Bureau increased the number of geographic areas whose boundaries could be used as block group boundaries. The Census Bureau allowed tribal governments of federally recognized American Indian tribes with a reservation and/or off-reservation trust lands to delineate tribal block groups without regard to state and/or county boundaries, provided the tribe had a 1990 Census population of at least 1,000.

For the 2010 Census, the Census Bureau adopted changes to block group criteria that recognized their utility as a framework of small geographic areas for presenting and analyzing statistical and other data for a variety of communities, settlement patterns, and landscapes. The Census Bureau augmented its minimum and maximum population threshold with housing unit thresholds for use in defining block groups for seasonal communities that have no or low population on census day (April 1). In addition, the Census Bureau formalized criteria for block groups defined for employment centers, airports, parks, large water bodies, and other special land uses permitted in previous decades, but never specified within the criteria. The Census Bureau also established tribal block groups as a geographic framework defined within federally recognized American Indian reservations and off-reservation trust lands that is fully separate from the standard block groups defined within counties.

## **C.3 History of Census Designated Places (CDPs)**

In response to data user needs for place-level data, the CDP concept and delineation criteria have evolved over the past seven decades. This evolution has taken into account differences in the way in which places were perceived, and the propensity for places to incorporate in various states. Over time, the result has been an increase in the number and types of unincorporated communities identified as CDPs, as well as an increasing consistency in the relationship between the CDP concept and the kinds of places encompassed by the incorporated place category, or a compromise between localized perceptions of place and a concept that would be

familiar to data users throughout the United States, Puerto Rico, and the Island Areas.

Although not as numerous as incorporated places, CDPs have been important geographic entities since their introduction for the 1950 Census (CDPs were referred to as “unincorporated places” from 1950 through the 1970 decennial censuses). For the 1950 Census, CDPs were defined only outside urbanized areas and were required to have at least 1,000 residents. For the 1960 Census, CDPs could also be identified inside urbanized areas outside of New England, but these were required to have at least 10,000 residents. The Census Bureau modified the population threshold within urbanized areas to 5,000 residents in 1970, allowed for CDPs in urbanized areas in New England in 1980, and lowered the threshold for CDPs within urbanized areas to 2,500 in 1990. In time, other population thresholds were adopted for identification of CDPs in Alaska, Puerto Rico, the Island Areas, and on American Indian reservations (AIRs). The Census Bureau eliminated all population threshold requirements for Census 2000, achieving consistency between CDPs and incorporated places, for which the Census Bureau historically has published data without regard to population size.

According to the 2010 Census, more than 38.7 million people in the United States, Puerto Rico, and the Island Areas lived in CDPs. The relative importance of CDPs varies from state to state depending on laws governing municipal incorporation and annexation, but also depending on local preferences and attitudes regarding the identification of places.

## **C.4 History of Census County Divisions (CCDs)**

When CCDs were introduced prior to the 1950 Census, few alternatives were available for the provision of statistical data related to relatively stable, subcounty geographic units. Census tracts were defined in only a subset of metropolitan area counties. MCDs existed in all counties, but in some states, MCD boundaries changed frequently enough that they were not useful for comparing statistical data from one decade to another.

For much of the period from the 1950 Census through the 1980 Census, county subdivisions (MCDs and CCDs) provided the only subcounty unit of geography at which data users could obtain statistical data for complete coverage of counties nationwide. The introduction of block numbering areas (BNAs) in counties without census tracts for the 1990 Census offered an alternate subcounty entity for which data could be tabulated. For Census 2000, the Census Bureau introduced census tracts nationwide (in many counties, BNAs were simply relabeled as “census tracts”), increasing the dissemination of, and ability to analyze, data at the census tract level, and providing an alternative set of subcounty statistical geographic areas in each county in addition to MCDs and CCDs. Nevertheless, CCDs and MCDs remain useful for presenting subcounty statistics and, in less populous counties containing only one or two census tracts, can provide greater spatial resolution when analyzing the distribution of population and characteristics.

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## Appendix E SUPPLEMENTAL SOURCES FOR PSAP REVIEW

This section describes four supplemental sources to consider using while performing PSAP review: TIGERweb, American Indian Areas layer, area landmark and point landmark layers, and parcel boundaries. Not all of these sources may be available or applicable to each participants' universe of counties.

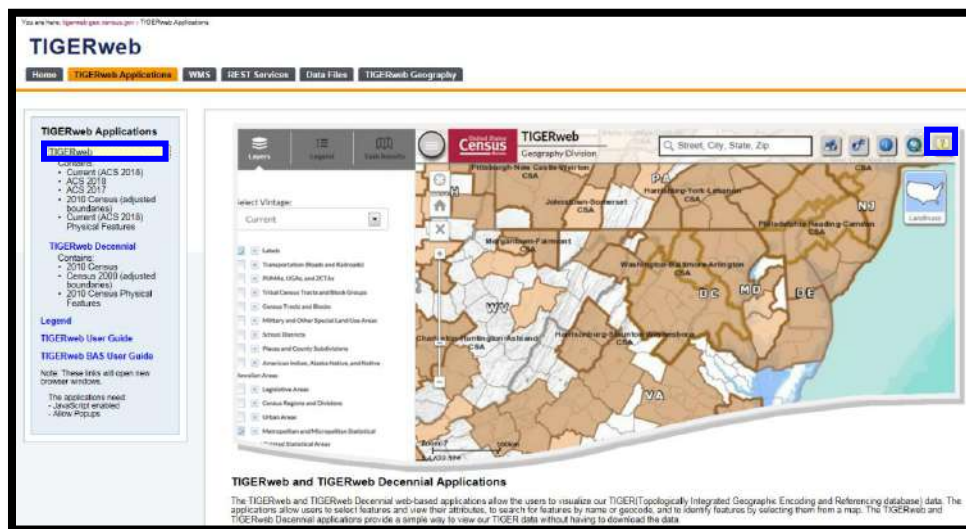
### TIGERweb

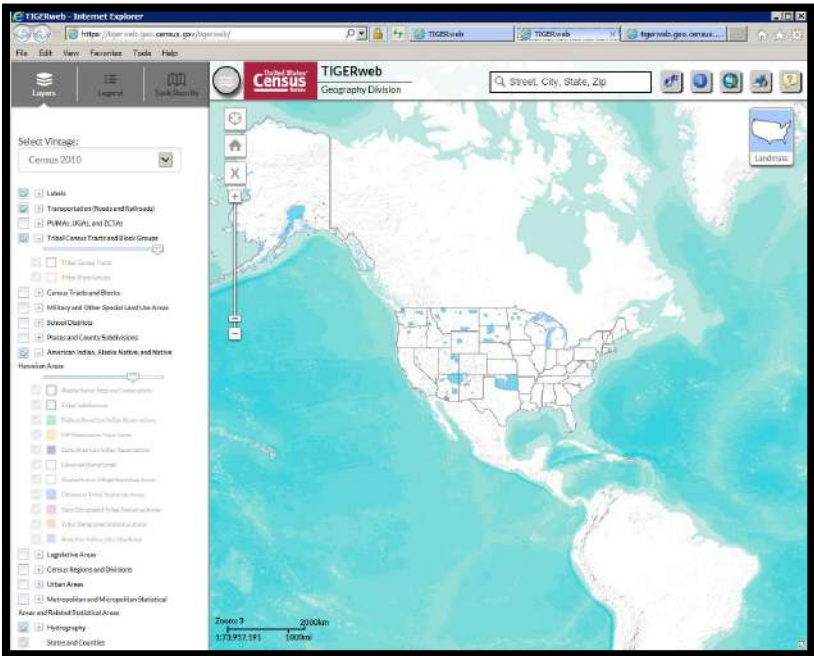

The Census Bureau's TIGERweb online map viewer, located at <https://tigerweb.geo.census.gov/tigerweb/>, allows participants to view the Census Bureau's 2010 census geographies layers outside of the GUPS environment. TIGERweb allows viewing, at street level detail, features such as roads, waterways, and county, place/city, CDP, census tracts, block groups and other boundaries, and satellite imagery.

Participants may find this additional tool beneficial to visualize the 2010 census tracts and block groups for comparison to their 2020 proposed plan in order to verify the changes or determine if there is a need to make additional changes. Because it resides outside of GUPS, participants can open TIGERweb in a separate window or on a second, dual monitor for a side-by-side visual comparison. Follow the steps in [Table 63](#) for instructions on accessing and using TIGERweb.

**Table 63: Display the TIGERweb Online Map Viewer**

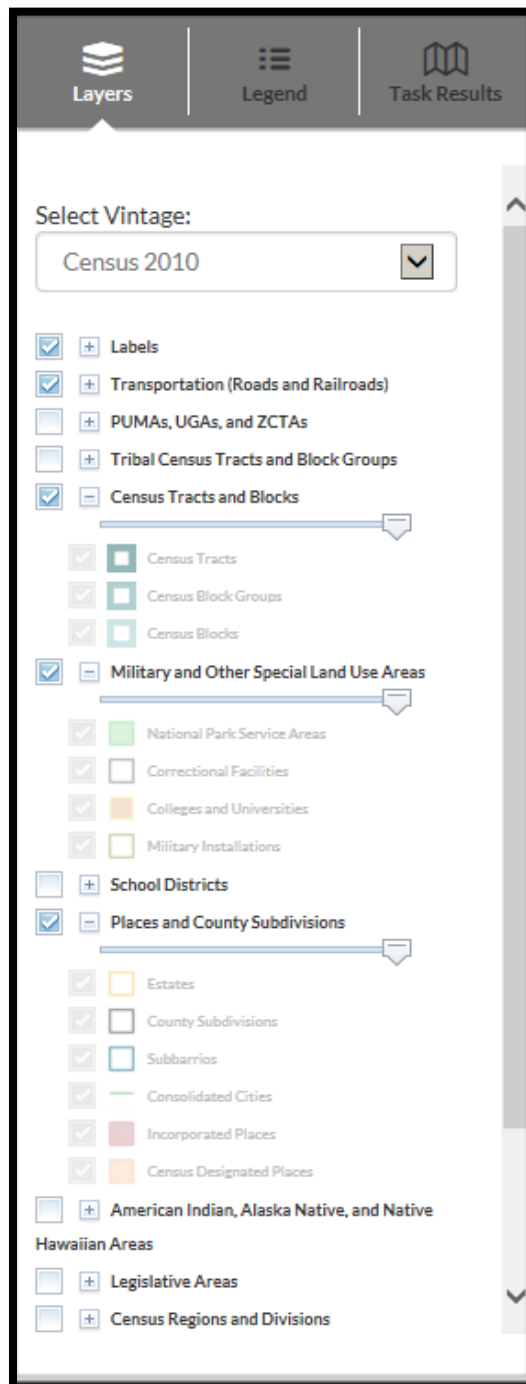
Step	Action and Result
<b>Step 1</b>	Navigate to the TIGERweb web site located at: <a href="https://tigerweb.geo.census.gov/">https://tigerweb.geo.census.gov/</a> . TIGERweb currently supports Microsoft Internet Explorer, Mozilla Firefox, Opera, and Google Chrome internet browsers.
<b>Step 2</b>	Click the <b>TIGERweb Applications</b> tab.
<b>Step 3</b>	Click the <b>TIGERweb</b> link under the orange <b>TIGERweb Applications</b> tab on the left side of the screen. <b>Do not click the TIGERweb Decennial link.</b> The built-in user guide is located by clicking the <b>"Help/About"</b> icon in the upper right corner of the TIGERweb window.



Step	Action and <i>Result</i>
<b>Step 4</b>	<p>After opening TIGERweb the map display, navigation tools, the Layers panel, a legend, and map vintage becomes visible.</p> 
	<p>The <b>Layers</b> panel shows the list of available features and geographic areas. Several display upon startup organized into separate groups, called map services. The geographic type forms the basis of the groupings. Expand each map service by clicking on the '+' symbol to see all of the available layers that include physical features such as roads and water features, as well as legal and statistical boundaries, census blocks and incorporated places. Limit the amount of data on the map by selecting only the applicable types of linear features and geographic entities. Click on the '+' sign to expand a map layer and view the 'Slider' tool to make the layer more or less transparent.</p>

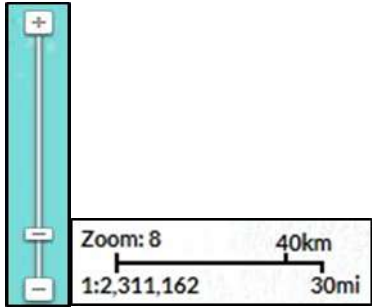
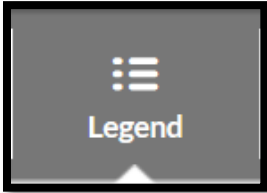

**Step 5**

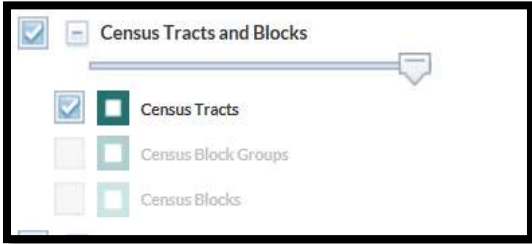


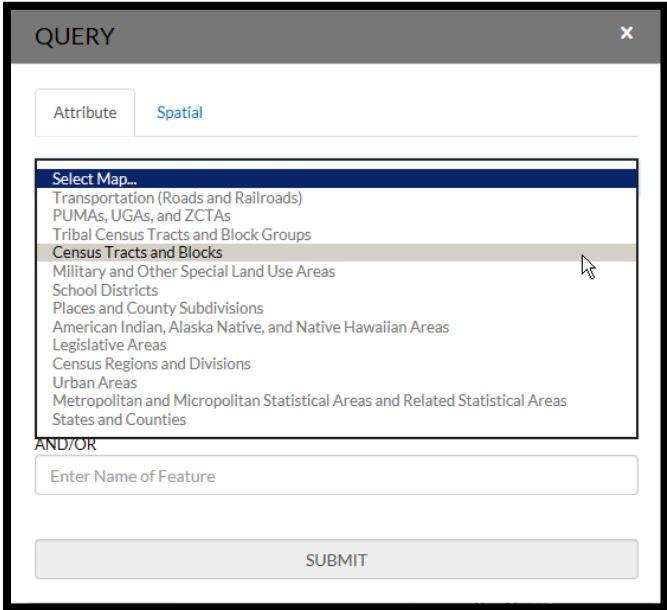
The **Select Vintage** from the drop-down menu in the **Layers** panel shows the vintages of TIGERweb geographies that are available for display in the application. Select **Census 2010** to view the 2010 geographies. Click on the '+' sign next to each map service in the **Layers** panel to expand the map service and view the layers within it. *This example shows the selection of the Transportation, Tribal Census Tracts and Block Groups, American Indian, Alaska Native, and Native Hawaiian Areas, and Hydrography map layers.*

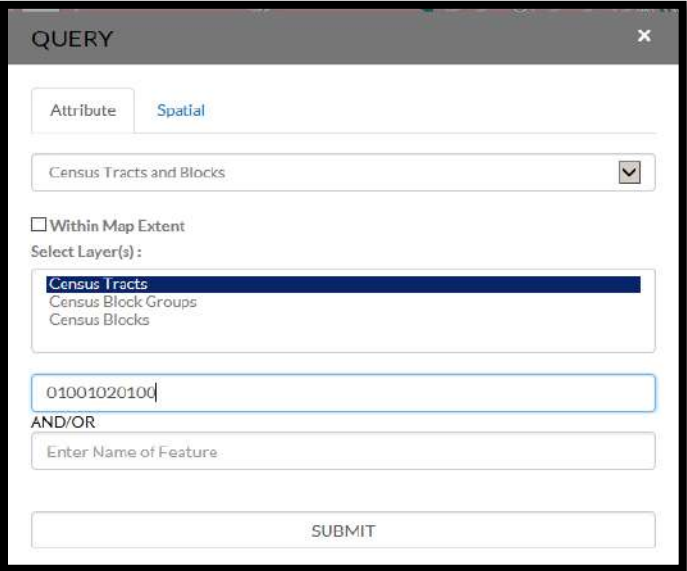
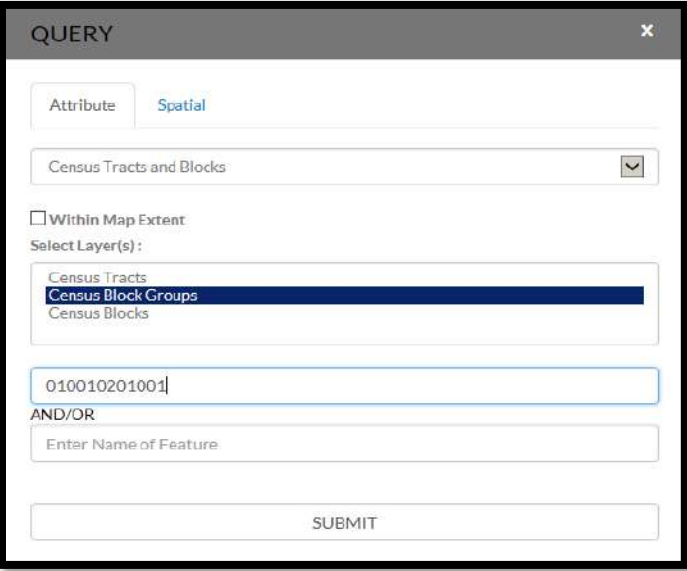


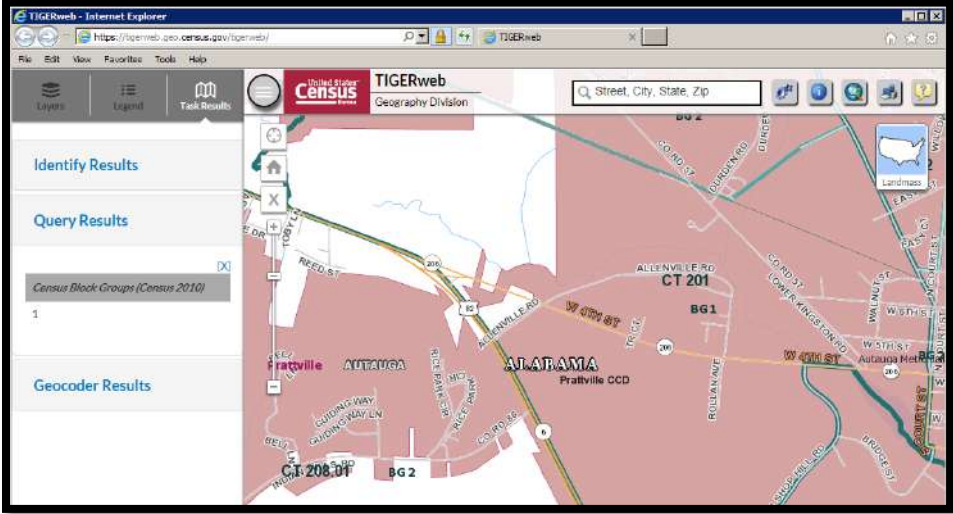
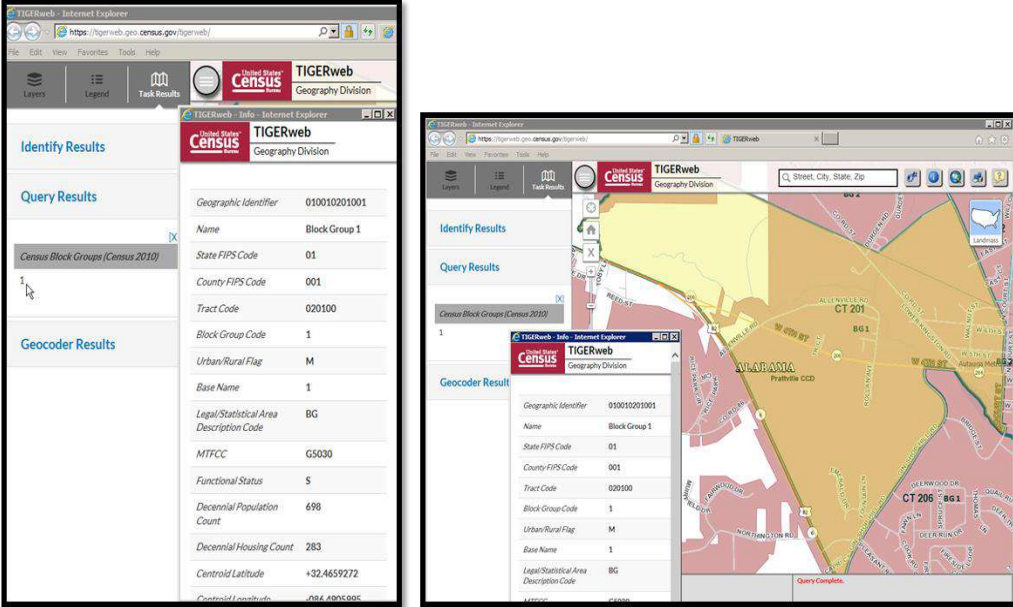
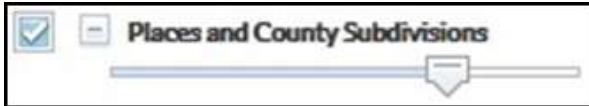
The features and geographic areas contained in the map services do not immediately appear because each layer has a range of zoom levels at which it will display. In other words, visibility of layers is scale dependent. More details appear when zooming in on the map. [Table 64](#) provides a summary of many of TIGERweb tools and functionality.



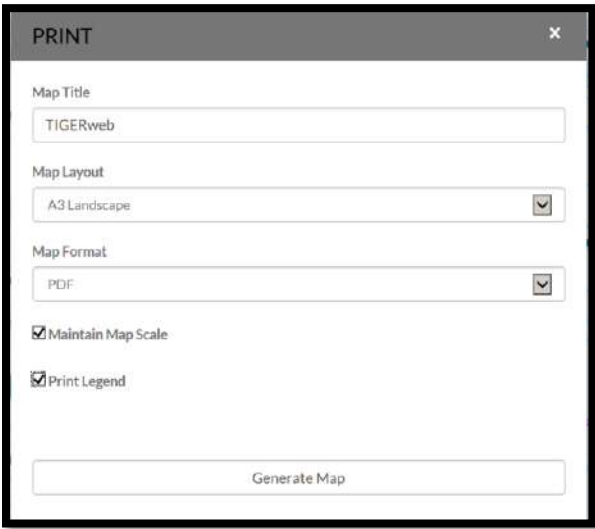
**Table 64: TIGERweb Tools and Functions**

Step	Action and Result
Step 1	<p>The vertical <b>Zoom In Scale Bar</b>, shown on the left. Click on the '+' to zoom in for more detail or click on the '-' to zoom out for less detail. By rolling the wheel on the computer's mouse, participants can zoom in or zoom out from the current scale.</p> <p><b>Note:</b> At Zoom level 6, counties appear; at zoom level 9, Census Tracts and Places appear, at zoom level 10, Roads and Railroads appear, and at zoom level 13, Block Groups appear.</p> 
Step 2	<p>Click the <b>Legend</b> tool at the top of the screen to view the <b>Detailed Legend</b> and layers symbology.</p> 
Step 3	<p>Click the <b>Detailed Legend</b> to see at what zoom level the layer and labels appear.</p> 

Step	Action and Result
<b>Step 4</b>	<p>Click off the <b>Legend</b> and back in the <b>Layers</b> panel to turn them on or off to display boundaries for only active layers. <i>The example shows the Census Block Groups and Census Blocks unchecked.</i></p> 
<b>Step 5</b>	<p>One of the easiest ways to determine information for any given entity is to use the <b>Identify</b> button along the top right of the TIGERweb window.</p>  <p>After zooming into the area of interest, click the <b>Identify</b> button and then click anywhere inside of the tribal entity displayed on the screen. <i>The <b>Task Results</b> window populates with <b>Identify Results</b> with all of the information about the exact area clicked.</i></p>
<b>Step 6</b>	<p>TIGERweb allows PSAP participants to quickly locate an entity visually using the <b>Zoom In</b> tool or by using the <b>Query</b> button to search for a census tract or block group by its geographic ID, also known as its GEOID.</p> <p>To locate a 2010 Census Tract: Select the <b>Query</b> button along the top right of the TIGERweb window.</p>  <p>From the <b>Select Map</b> drop-down menu, select <b>Census Tracts and Blocks</b>.</p> 

Step	Action and Result
<b>Step 7</b>	<p>Select to highlight the <b>Census Tracts</b> from the <b>Select Layer(s)</b> list.</p> <p>Enter the census tracts GEOID number to locate. The GEOID is an 11-digit number that represent the following: two-digit State FIPS code followed with the three-digit County FIPS code and then the six-digit census tract code (e.g. "01001020100" is the numeric GEOID of census tract 0201.00 in 01001).</p>  <p>Click <b>Submit</b>.</p>
<b>Step 8</b>	<p>To locate a 2010 Block Group:</p> <p>Execute the same steps described above, except from the <b>Census Tracts and Blocks</b> menu select the <b>Census Block Groups</b> from the <b>Select Layer(s)</b> list.</p> <p>Enter the block group's GEOID number. The block group GEOID is a 12-digit number that represent the following: two-digit State FIPS code followed with the three-digit County FIPS code followed with the six-digit census tract code and the one-digit block group code (e.g., "010010201001" is the numeric GEOID of block group 1 in 01001, census tract 0201.00).</p>  <p>Click <b>Submit</b>.</p>

Step	Action and Result
<p><b>Step 9</b></p>	<p>Click the <b>Query Results</b> tab to the left of the map. <i>TIGERweb displays the result(s) of the query.</i></p> 
<p><b>Step 10</b></p>	<p>If participants click the value within the query result section, <i>TIGERweb displays the <b>Info</b> panel containing attribute data for the queried entity.</i> Minimize or close the <b>Info</b> panel by clicking on the “-” or “X” symbols in the top right of the <b>Info</b> panel, respectively.</p>  <p><i>TIGERweb displays the selected entity (block group 010010201001) highlighted in the center of the map.</i></p>
<p><b>Step 11</b></p>	<p>Change the transparency of each layer within the <b>Layers</b> panel by moving the sliding bar below the layer name to the left or right.</p> 

Step	Action and Result
<b>Step 12</b>	<p>TIGERweb allows users to select landmass, satellite imagery, or terrain as a background of the map display from the upper right corner of the map view. <i>The <b>Landmass</b> displays by default when opening TIGERweb.</i> To change options, click the button to toggle through all three choices. Select the <b>Satellite</b> button to display satellite imagery.</p> 
<b>Step 13</b>	<p>Click the <b>Print</b> button when using TIGERweb to print and save a map. <i>The <b>PRINT</b> window displays.</i></p>  <p>From the <b>PRINT</b> window, select a <b>Map Title</b>, <b>Map Layout</b>, <b>Map Format</b>, then Click the <b>Generate Map</b> to create a map and print.</p> 

With the tools and functionality described above, participants can navigate their working county outside of GUPS and may find this easier for comparison sake.

### American Indian Areas Layer

The American Indian Areas layer within GUPS provides a supplemental source for understanding what entities cause tracts to code in the 94XX range and can serve as a very strong legal feature for establishing and correcting tract and block group boundaries.

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**Note:** This layer will not exist within GUPS for counties without an American Indian Area.

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Although tribal statistical geography falls under a different universe for review, the 94XX code series is reserved for standard census tracts that are delineated either within or primarily to cover an American Indian Reservation or off-reservation trust land while also adhering to the standard census tract criteria. Some areas of the country, primarily in the Southwest, have counties with the majority of tracts coded to the 94XX range. Major changes to reservation areas happen infrequently, so the Census Bureau does not anticipate that PSAP will produce any new 94XX coded tracts.

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**IMPORTANT:** 94XX are not tribal tracts but a special use area with a type denoted as tribal. Tribal tracts are a part of a distinct system, separate from standard census geography.

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### **Area and Point Landmark Layers**

As a tool for determining whether a census tract or block group could be a special land use area, it can sometimes be helpful to activate the area landmark (arealm) or point landmark (pointlm) layers within GUPS. While providing a useful visual, many landmarks do not qualify as special use areas because of their areal extent. Additionally, existing landmarks may not have any distinguishing features in aerial imagery to help with drawing boundaries and may not necessarily map to the extent of the special land use geographic entity. As a supplemental layer, area landmarks give participants another tool to describe a special land use area that is apparent directly from the visible land use characteristics.

### **Parcel Boundaries**

In some situations, non-visible, legal, linear features can be preferred as boundaries for census tracts and block groups. At the smallest scale, participants can use parcel boundaries for reference to developments or contiguous personal plots if no other solution for splitting an area is present. Parcel boundaries are particularly useful when working census tracts that contain neighborhoods characterized by cul-de-sacs that form ‘dangling’ edges in the database, meaning that there is frequently not a closed circuit of visible features available to connect all of the housing units associated with the development.

Participants with access to digital map data for parcels can utilize the Manage Layers toolbar to add in external data. Review [Section 8.4.3](#) for details on using the specific buttons with respect to the local data type.

## Appendix F MAF/TIGER FEATURE CLASSIFICATION CODES

The MAF/TIGER Feature Classification Code (MTFCC) is a 5-digit code assigned by the Census Bureau to classify and describe geographic objects or features in Census Bureau MAF/TIGER products. GUPS participants may need these codes if they edit existing or add new linear features for creating new statistical boundaries.

An electronic list of MTFCCs is located within the technical documentation for the TIGER/Line Shapefiles on the Census Bureau's website <<https://www.census.gov/geo/maps-data/data/tiger-line.html>>. Within that specific documentation, it is Appendix E.

**Table 65: MTFCCs, Feature Classes, and Descriptions**

MTFCC	Feature Class	Description
C3022	Mountain Peak or Summit	A prominent elevation rising above the surrounding level of the Earth's surface.
C3023	Island	An area of dry or relatively dry land surrounded by water or low wetland [including archipelago, atoll, cay, hammock, hummock, isla, isle, key, moku and rock].
C3024	Levee	An embankment flanking a stream or other flowing water feature to prevent overflow.
C3026	Quarry (not water-filled), Open Pit Mine or Mine	An area from which commercial minerals are or were removed from the Earth; not including an oilfield or gas field.
C3027	Dam	A barrier built across the course of a stream to impound water and/or control water flow.
C3061	Cul-de-sac	An expanded paved area at the end of a street used by vehicles for turning around. For mapping purposes, the Census Bureau maps it only as a point feature.
C3062	Traffic Circle	A circular intersection allowing for continuous movement of traffic at the meeting of roadways.
C3066	Gate	A movable barrier across a road.
C3067	Toll Booth	A structure or barrier where a fee is collected for using a road.
C3071	Lookout Tower	A manmade structure, higher than its diameter, used for observation.
C3074	Lighthouse Beacon	A manmade structure, higher than its diameter, used for transmission of light and possibly sound generally to aid in navigation.
C3075	Tank/Tank Farm	One or more manmade structures, each higher than its diameter, used for liquid (other than water) or gas storage or for distribution activities.
C3076	Windmill Farm	One or more manmade structures used to generate power from the wind.
C3077	Solar Farm	One or more manmade structures used to generate power from the sun.
C3078	Monument or Memorial	A manmade structure to educate, commemorate, or memorialize an event, person, or feature.
C3079	Boundary Monument Point	A material object placed on or near a boundary line to preserve and identify the location of the boundary line on the ground.
C3080	Survey Control Point	A point on the ground whose position (horizontal or vertical) is known and can be used as a base for additional survey work.

MTFCC	Feature Class	Description
C3081	Locality Point	A point that identifies the location and name of an unbounded locality (e.g., crossroad, community, populated place or locale).
C3085	Alaska Native Village Official Point	A point that serves as the core of an Alaska Native village and is used in defining Alaska Native village statistical areas.
G2100	American Indian Area	A legally defined state- or federally recognized reservation and/or off-reservation trust land (excludes statistical American Indian Areas).
G2120	Hawaiian Home Land	A legal area held in trust for the benefit of Native Hawaiians.
G2130	Alaska Native Village Statistical Area	A statistical geographic entity that represents the residences, permanent and/or seasonal, for Alaska Natives who are members of or receiving governmental services from the defining legal Alaska Native Village corporation.
G2140	Oklahoma Tribal Statistical Area	A statistical entity identified and delineated by the Census Bureau in consultation with federally recognized American Indian tribes that have no current reservation, but had a former reservation in Oklahoma.
G2150	State-designated Tribal Statistical Area	A statistical geographic entity identified and delineated for the Census Bureau by a state-appointed liaison for a state-recognized American Indian tribe that does not currently have a reservation and/or lands in trust.
G2160	Tribal Designated Statistical Area	A statistical geographic entity identified and delineated for the Census Bureau by a federally recognized American Indian tribe that does not currently have a reservation and/or off-reservation trust land.
G2170	American Indian Joint Use Area	An area administered jointly and/or claimed by two or more American Indian tribes.
G2200	Alaska Native Regional Corporation	Corporate entities established to conduct both business and nonprofit affairs of Alaska Natives pursuant to the Alaska Native Claims Settlement Act of 1972 (Public Law 92-203). There are twelve geographically defined ANRCs and they are all within and cover most of the State of Alaska (the Annette Island Reserve-an American Indian reservation-is excluded from any ANRC). The boundaries of ANRCs have been legally established.
G2300	Tribal Subdivision	Administrative subdivisions of federally recognized American Indian reservations, off-reservation trust lands, or Oklahoma tribal statistical areas (OTSAs). These entities are internal units of self-government or administration that serve social, cultural, and/or economic purposes for the American Indians on the reservations, off-reservation trust lands, or OTSAs.
G2400	Tribal Census Tract	A relatively small and permanent statistical subdivision of a federally recognized American Indian reservation and/or off-reservation trust land, delineated by American Indian tribal participants or the Census Bureau for the purpose of presenting demographic data.
G2410	Tribal Block Group	A cluster of census blocks within a single tribal census tract delineated by American Indian tribal participants or the Census Bureau for the purpose of presenting demographic data.
G3100	Combined Statistical Area	A grouping of adjacent metropolitan and/or micropolitan statistical areas that have a degree of economic and social integration, as measured by commuting.

MTFCC	Feature Class	Description
G3110	Metropolitan and Micropolitan Statistical Area	An area containing a substantial population nucleus together with adjacent communities having a high degree of economic and social integration with that core, as measured by commuting. Defined using whole counties and equivalents.
G3120	Metropolitan Division	A county or grouping of counties that is a subdivision of a Metropolitan Statistical Area containing an urbanized area with a population of 2.5 million or more.
G3200	Combined New England City and Town Area	A grouping of adjacent New England city and town areas that have a degree of economic and social integration, as measured by commuting.
G3210	New England City and Town Metropolitan and Micropolitan Statistical Area	An area containing a substantial population nucleus together with adjacent communities having a high degree of economic and social integration with that core, as measured by commuting. Defined using Minor Civil Divisions (MCDs) in New England.
G3220	New England City and Town Division	A grouping of cities and towns in New England that is a subdivision of a New England City and Town Area containing an urbanized area with a population of 2.5 million or more.
G3500	Urban Area	Densely settled territory that contains at least 2,500 people. The subtypes of this feature are Urbanized Area (UA), which consists of 50,000 + people and Urban Cluster, which ranges between 2,500 and 49,999 people.
G4000	State or Equivalent Feature	The primary governmental divisions of the United States. The District of Columbia is treated as a statistical equivalent of a state for census purposes, as is Puerto Rico.
G4020	County or Equivalent Feature	The primary division of a state or state equivalent area. The primary divisions of 48 states are termed County, but other terms are used such as Borough in Alaska, Parish in Louisiana, and Municipio in Puerto Rico. This feature includes independent cities, which are incorporated places that are not part of any county.
G4040	County Subdivision	The primary divisions of counties and equivalent features for the reporting of Census Bureau data. The subtypes of this feature are Minor Civil Division, Census County Division/Census Subarea, and Unorganized Territory. This feature includes independent places, which are incorporated places that are not part of any county subdivision.
G4050	Estate	Estates are subdivisions of the three major islands in the United States Virgin Islands (USVI).
G4060	Subbarrio (Subminor Civil Division)	Legally defined divisions (subbarrios) of minor civil divisions (barrios-pueblo and barrios) in Puerto Rico.
G4110	Incorporated Place	A legal entity incorporated under state law to provide general-purpose governmental services to a concentration of population. Incorporated places are generally designated as a city, borough, municipality, town, village, or, in a few instances, have no legal description.
G4120	Consolidated City	An incorporated place that has merged governmentally with a county or minor civil division, but one or more of the incorporated places continues to function within the consolidation. It is a place that contains additional separately incorporated places.

MTFCC	Feature Class	Description
G4210	Census Designated Place	A statistical area defined for a named concentration of population and the statistical counterpart of an incorporated place.
G4300	Economic Census Place	The lowest level of geographic area for presentation of some types of Economic Census data. It includes incorporated places, consolidated cities, census designated places (CDPs), minor civil divisions (MCDs) in selected states, and balances of MCDs or counties. An incorporated place, CDP, MCD, or balance of MCD qualifies as an economic census place if it contains 5,000 or more residents, or 5,000 or more jobs, according to the most current data available.
G5020	Census Tract	Relatively permanent statistical subdivisions of a County or equivalent feature delineated by local participants as part of the Census Bureau's Participant Statistical Areas Program.
G5030	Block Group	A cluster of census blocks having the same first digit of their four-digit identifying numbers within a Census Tract. For example, block group 3 (BG 3) within a Census Tract includes all blocks numbered from 3000 to 3999.
G5035	Block Area Grouping	A user-defined group of islands forming a single census tabulation block. A BAG must: (1) consist of two or more islands, (2) have a perimeter entirely over water, (3) not overlap, and (4) not cross the boundary of other tabulation geographies, such as county or incorporated place boundaries.
G5040	Tabulation Block	The lowest-order census defined statistical area. It is an area, such as a city block, bounded primarily by physical features but sometimes by invisible city or property boundaries. A tabulation block boundary does not cross the boundary of any other geographic area for which the Census Bureau tabulates data. The subtypes of this feature are Count Question Resolution (CQR), current, and census.
G5200	Congressional District	The 435 areas from which people are elected to the U.S. House of Representatives. Additional equivalent features exist for state equivalents with nonvoting delegates or no representative. The subtypes of this feature are 106th, 107th, 108th, 109th, and 111th Congressional Districts, plus subsequent Congresses.
G5210	State Legislative District (Upper Chamber)	Areas established by a state or equivalent government from which members are elected to the upper or unicameral chamber of a state governing body. The upper chamber is the senate in a bicameral legislature, and the unicameral case is a single house legislature (Nebraska).
G5220	State Legislative District (Lower Chamber)	Areas established by a state or equivalent government from which members are elected to the lower chamber of a state governing body. The lower chamber is the House of Representatives in a bicameral legislature.
G5240	Voting District	The generic name for the geographic features, such as precincts, wards, and election districts, established by state, local, and tribal governments for the purpose of conducting elections.
G5400	Elementary School District	A geographic area within which officials provide public elementary grade-level educational services for residents.
G5410	Secondary School District	A geographic area within which officials provide public secondary grade-level educational services for residents.

MTFCC	Feature Class	Description
G5420	Unified School District	A geographic area within which officials provide public educational services for all grade levels for residents.
G6120	Public-Use Microdata Area	A decennial census area with a population of at least 100,000 or more persons for which the Census Bureau provides selected extracts of household-level data that are screened to protect confidentiality.
G6300	Traffic Analysis District	An area delineated by Metropolitan Planning Organizations (MPOs) and state Departments of Transportation (DOTs) for tabulating journey-to-work and place-of-work data. A Traffic Analysis District (TAD) consists of one or more Traffic Analysis Zones (TAZs).
G6320	Traffic Analysis Zone	An area delineated by Metropolitan Planning Organizations (MPOs) and state Departments of Transportation (DOTs) for tabulating journey-to-work and place-of-work data.
G6330	Urban Growth Area	An area defined under state authority to manage urbanization that the Census Bureau includes in the MAF/TIGER® System in agreement with the state.
G6350	ZIP Code Tabulation Area (Five-Digit)	An approximate statistical-area representation of a U.S. Postal Service (USPS) 5-digit ZIP Code service area.
G6400	Commercial Region	For the purpose of presenting economic statistical data, municipios in Puerto Rico are grouped into commercial regions.
H1100	Connector	A known, but nonspecific, hydrographic connection between two nonadjacent water features.
H2025	Swamp/Marsh	A poorly drained wetland, fresh or saltwater, wooded or grassy, possibly covered with open water [includes bog, cienega, marais and pocosin].
H2030	Lake/Pond	A standing body of water that is surrounded by land.
H2040	Reservoir	An artificially impounded body of water.
H2041	Treatment Pond	An artificial body of water built to treat fouled water.
H2051	Bay/Estuary/Gulf/Sound	A body of water partly surrounded by land [includes arm, bight, cove and inlet].
H2053	Ocean/Sea	The great body of salt water that covers much of the earth.
H2060	Gravel Pit/Quarry filled with water	A body of water in a place or area from which commercial minerals were removed from the Earth.
H2081	Glacier	A body of ice moving outward and down slope from an area of accumulation. An area of relatively permanent snow or ice on the top or side of a mountain or mountainous area [includes ice field and ice patch].
H3010	Stream/River	A natural flowing waterway [includes anabranch, awawa, branch, brook, creek, distributary, fork, kill, pup, rio, and run].
H3013	Braided Stream	A natural flowing waterway with an intricate network of interlacing channels.
H3020	Canal, Ditch or Aqueduct	An artificial waterway constructed to transport water, to irrigate or drain land, to connect two or more bodies of water, or to serve as a waterway for watercraft [includes lateral].
K1225	Crew-of-Vessel Location	A point or area in which the population of military or merchant marine vessels at sea are assigned, usually being at or near the home port pier.

MTFCC	Feature Class	Description
K1231	Hospital/Hospice/Urgent Care Facility	One or more structures where the sick or injured may receive medical or surgical attention [including infirmary].
K1235	Juvenile Institution	A facility (correctional and non-correctional) where groups of juveniles reside; this includes training schools, detention centers, residential treatment centers and orphanages.
K1236	Local Jail or Detention Center	One or more structures that serve as a place for the confinement of adult persons in lawful detention, administered by a local (county, municipal, etc.) government.
K1237	Federal Penitentiary, State Prison, or Prison Farm	An institution that serves as a place for the confinement of adult persons in lawful detention, administered by the federal government or a state government.
K1238	Other Correctional Institution	One or more structures that serve as a place for the confinement of adult persons in lawful detention, not elsewhere classified or administered by a government of unknown jurisdiction.
K1239	Convent, Monastery, Rectory, Other Religious Group Quarters	One or more structures intended for use as a residence for those having a religious vocation.
K1246	Community Center	Community Center.
K2110	Military Installation	An area owned and/or occupied by the Department of Defense for use by a branch of the armed forces (such as the Army, Navy, Air Force, Marines, or Coast Guard), or a state owned area for the use of the National Guard.
K2165	Government Center	A place used by members of government (either federal, state, local, or tribal) for administration and public business.
K2167	Convention Center	An exhibition hall or conference center with enough open space to host public and private business and social events.
K2180	Park	Parkland defined and administered by federal, state, and local governments.
K2181	National Park Service Land	Area—National parks, National Monuments, and so forth—under the jurisdiction of the National Park Service.
K2182	National Forest or Other Federal Land	Land under the management and jurisdiction of the federal government, specifically including areas designated as National Forest, and excluding areas under the jurisdiction of the National Park Service.
K2183	Tribal Park, Forest, or Recreation Area	A place or area set aside for recreation or preservation of a cultural or natural resource and under the administration of an American Indian tribe.
K2184	State Park, Forest, or Recreation Area	A place or area set aside for recreation or preservation of a cultural or natural resource and under the administration of a state government.
K2185	Regional Park, Forest, or Recreation Area	A place or area set aside for recreation or preservation of a cultural or natural resource and under the administration of a regional government.
K2186	County Park, Forest, or Recreation Area	A place or area set aside for recreation or preservation of a cultural or natural resource and under the administration of a county government.
K2187	County Subdivision Park, Forest, or Recreation Area	A place or area set aside for recreation or preservation of a cultural or natural resource and under the administration of a minor civil division (town/township) government.

MTFCC	Feature Class	Description
K2188	Incorporated Place Park, Forest, or Recreation Area	A place or area set aside for recreation or preservation of a cultural or natural resource and under the administration of a municipal government.
K2189	Private Park, Forest, or Recreation Area	A privately owned place or area set aside for recreation or preservation of a cultural or natural resource.
K2190	Other Park, Forest, or Recreation Area (quasi-public, independent park, commission, etc.)	A place or area set aside for recreation or preservation of a cultural or natural resource and under the administration of some other type of government or agency such as an independent park authority or commission.
K2191	Post Office	An official facility of the U.S. Postal Service used for processing and distributing mail and other postal material.
K2193	Fire Department	Fire Department.
K2194	Police Station	Police Station.
K2195	Library	Library.
K2196	City/Town Hall	City/Town Hall.
K2400	Transportation Terminal	A facility where one or more modes of transportation can be accessed by people or for the shipment of goods; examples of such a facility include marine terminal, bus station, train station, airport and truck warehouse.
K2424	Marina	A place where privately owned, light-craft are moored.
K2432	Pier/Dock	A platform built out from the shore into the water and supported by piles. This platform may provide access to ships and boats, or it may be used for recreational purposes.
K2451	Airport or Airfield	A manmade facility maintained for the use of aircraft [including airstrip, landing field and landing strip].
K2452	Train Station, Trolley or Mass Transit Rail Station	A place where travelers can board and exit rail transit lines, including associated ticketing, freight, and other commercial offices.
K2453	Bus Terminal	A place where travelers can board and exit mass motor vehicle transit, including associated ticketing, freight, and other commercial offices.
K2454	Marine Terminal	A place where travelers can board and exit water transit or where cargo is handled, including associated ticketing, freight, and other commercial offices.
K2455	Seaplane Anchorage	A place where an airplane equipped with floats for landing on or taking off from a body of water can debark and load.
K2456	Airport—Intermodal Transportation Hub/Terminal	A major air transportation facility where travelers can board and exit airplanes and connect with other (i.e. non-air) modes of transportation.
K2457	Airport—Statistical Representation	The area of an airport adjusted to include whole 2000 census blocks used for the delineation of urban areas
K2458	Park and Ride Facility/Parking Lot	A place where motorists can park their cars and transfer to other modes of transportation.
K2459	Runway/Taxiway	A fairly level and usually paved expanse used by airplanes for taking off and landing at an airport.
K2460	Helicopter Landing Pad	A fairly level and usually paved expanse used by helicopters for taking off and landing.
K2540	University or College	A building or group of buildings used as an institution for post-secondary study, teaching, and learning [including seminary].

MTFCC	Feature Class	Description
K2543	School or Academy	A building or group of buildings used as an institution for preschool, elementary or secondary study, teaching, and learning [including elementary school and high school].
K2545	Museum, Visitor Center, Cultural Center, or Tourist Attraction	An attraction of historical, cultural, educational or other interest that provides information or displays artifacts.
K2561	Golf Course	A place designed for playing golf.
K2582	Cemetery	A place or area for burying the dead [including burying ground and memorial garden].
K2586	Zoo	A facility in which terrestrial and/or marine animals are confined within enclosures and displayed to the public for educational, preservation, and research purposes.
K3544	Place of Worship	A sanctified place or structure where people gather for religious worship; examples include church, synagogue, temple, and mosque.
L4010	Pipeline	A long tubular conduit or series of pipes, often underground, with pumps and valves for flow control, used to transport fluid (e.g., crude oil, natural gas), especially over great distances.
L4020	Powerline	One or more wires, often on elevated towers, used for conducting high-voltage electric power.
L4031	Aerial Tramway/Ski Lift	A conveyance that transports passengers or freight in carriers suspended from cables and supported by a series of towers.
L4110	Fence Line	A manmade barrier enclosing or bordering a field, yard, etc., usually made of posts and wire or wood, used to prevent entrance, to confine, or to mark a boundary.
L4121	Ridge Line	The line of highest elevation along a ridge.
L4125	Cliff/Escarpment	A very steep or vertical slope [including bluff, crag, head, headland, nose, palisades, precipice, promontory, rim and rimrock].
L4130	Point-to-Point Line	A line defined as beginning at one location point and ending at another, both of which are in sight.
L4140	Property/Parcel Line (Including PLSS)	This feature class may denote a nonvisible boundary of either public or private lands (e.g., a park boundary) or it may denote a Public Land Survey System or equivalent survey line.
L4150	Coastline	The line that separates either land or Inland water from Coastal, Territorial or Great Lakes water. Where land directly borders Coastal, Territorial or Great Lakes water, the shoreline represents the Coastline. Where Inland water (such as a river) flows into Coastal, Territorial or Great Lakes water, the closure line separating the Inland water from the other class of water represents the Coastline.
L4165	Ferry Crossing	The route used to carry or convey people or cargo back and forth over a waterbody in a boat.
P0001	Nonvisible Linear Legal/Statistical Boundary	A legal/statistical boundary line that does not correspond to a shoreline or other visible feature on the ground.
P0002	Perennial Shoreline	The more-or-less permanent boundary between land and water for a water feature that exists year-round.
P0003	Intermittent Shoreline	The boundary between land and water (when water is present) for a water feature that does not exist year-round.

MTFCC	Feature Class	Description
P0004	Other non-visible bounding Edge (e.g., Census water boundary, boundary of an aerial feature)	A bounding Edge that does not represent a legal/statistical boundary, and does not correspond to a shoreline or other visible feature on the ground. Many such Edges bound area landmarks, while many others separate water features from each other (e.g., where a bay meets the ocean).
R1011	Railroad Feature (Main, Spur, or Yard)	A line of fixed rails or tracks that carries mainstream railroad traffic. Such a rail line can be a main line or spur line, or part of a rail yard.
R1051	Carline, Streetcar Track, Monorail, Other Mass Transit	Mass transit rail lines (including lines for rapid transit, monorails, streetcars, light rail, etc.) that are typically inaccessible to mainstream railroad traffic and whose tracks are not part of a road right-of-way.
R1052	Cog Rail Line, Incline Rail Line, Tram	A special purpose rail line for climbing steep grades that is typically inaccessible to mainstream railroad traffic. Note that aerial tramways and streetcars (which may also be called "trams") are accounted for by other MTFCCs and do not belong in R1052.
S1100	Primary Road	Primary roads are generally divided, limited-access highways within the interstate highway system or under state management, and are distinguished by the presence of interchanges. These highways are accessible by ramps and may include some toll highways.
S1200	Secondary Road	Secondary roads are main arteries, usually in the U.S. Highway, State Highway or County Highway system. These roads have one or more lanes of traffic in each direction, may or may not be divided, and usually have at-grade intersections with many other roads and driveways. They often have both a local name and a route number.
S1400	Local Neighborhood Road, Rural Road, City Street	Generally, a paved non-arterial street, road, or byway that usually has a single lane of traffic in each direction. Roads in this feature class may be privately or publicly maintained. Scenic park roads would be included in this feature class, as would (depending on the region of the country) some unpaved roads.
S1500	Vehicular Trail (4WD)	An unpaved dirt trail where a four-wheel drive vehicle is required. These vehicular trails are found almost exclusively in very rural areas. Minor, unpaved roads usable by ordinary cars and trucks belong in the S1400 category.
S1630	Ramp	A road that allows controlled access from adjacent roads onto a limited access highway, often in the form of a cloverleaf interchange. These roads are unaddressable and do not carry a name in the MAF/TIGER System.
S1640	Service Drive usually along a limited access highway	A road, usually paralleling a limited access highway, that provides access to structures along the highway. These roads can be named and may intersect with other roads.
S1710	Walkway/Pedestrian Trail	A path that is used for walking, being either too narrow for or legally restricted from vehicular traffic.
S1720	Stairway	A pedestrian passageway from one level to another by a series of steps.
S1730	Alley	A service road that does not generally have associated addressed structures and is usually unnamed. It is located at the rear of buildings and properties and is used for deliveries.

MTFCC	Feature Class	Description
S1740	Private Road for service vehicles (logging, oil fields, ranches, etc.)	A road within private property that is privately maintained for service, extractive, or other purposes. These roads are often unnamed.
S1750	Internal U.S. Census Bureau use	Internal U.S. Census Bureau use.
S1780	Parking Lot Road	The main travel route for vehicles through a paved parking area.
S1820	Bike Path or Trail	A path that is used for manual or small, motorized bicycles, being either too narrow for or legally restricted from vehicular traffic.
S1830	Bridle Path	A path that is used for horses, being either too narrow for or legally restricted from vehicular traffic.
S2000	Road Median	The unpaved area or barrier between the carriageways of a divided road.

## Appendix G ACCEPTABLE LINEAR FEATURES FOR STATISTICAL BOUNDARIES

Below is a list of linear features that make acceptable or questionable statistical geography boundaries. Refer to this list while reviewing existing boundaries, but also when creating new geographies or modifying existing boundaries. Except in instances described in [Table 4](#) for non-visible boundaries, this appendix is the source for the Census Bureau during their review of participant submissions. A complete list of MAF/TIGER Feature Classification Codes (MTFCCs) is located on the Census Bureau's geography reference website: [<https://www.census.gov/geo/reference/mtfcc.html>](https://www.census.gov/geo/reference/mtfcc.html).

**Table 66: Acceptable Linear Features for Statistical Boundaries**

Feature Name	MTFCC	Acceptable	Questionable
Aerial Tramway/Ski Lift	L4031	X	
Alley	S1730	X	
Bike Path or Trail	S1820		X
Braided Stream	H3013	X	
Bridle Path/Horse Trail	S1830		X
Canal, Ditch, or Aqueduct (intermittent)	H3020		X
Canal, Ditch, or Aqueduct (perennial)	H3020	X	
Carline, Streetcar Track, Monorail, Other Mass Transit Rail	R1051	X	
Cliff/Escarpment	L4125	X	
Cog Rail Line, Incline Rail Line, Tram	R1052	X	
Dam	C3027	X	
Fence Line	L4110		X
Ferry Crossing	L4165	X	
Intermittent Shoreline	P0003		X
Interstate Highway or Primary Road with limited access	S1100	X	
Levee	C3024	X	
Local Neighborhood Road, Rural Road, City Street	S1400	X	
Parking Lot Road	S1780		X
Perennial Shoreline	P0002	X	
Pier/Dock	K2432	X	
Pipeline (above ground)	L4010	X	
Point-to-Point Line	L4130		X
Power line (above ground, high tension)	L4020	X	

Feature Name	MTFCC	Acceptable	Questionable
Primary Road without limited access, US Highway, State Highway, or County Highway, Secondary and connecting roads	S1200	X	
Private Driveway	S1750		X
Private Road for service vehicles (logging, oil fields, ranches, etc.)	S1740		X
Property/Parcel Line (PLSS, airport, airfield, military installation or other)	L4140		X
Railroad Feature (Main, Spur, or Yard)	R1011	X	
Ridge Line	L4121	X	
Runway/Taxiway	K2459	X	
Service Drive/Service Road (usually along limited access highway)	S1640	X	
Stairway	S1720		X
Stream/River (intermittent)	H3010		X
Stream/River (perennial)	H3010	X	
Vehicular Trail (4WD)	S1500		X
Walkway/Pedestrian Trail	S1710		X

## Appendix H STANDARD STREET TYPE ABBREVIATIONS

The street name types and their abbreviations shown below provide background to PSAP participants that may need to add linear features in order to split statistical geographies. Use the standard street type abbreviations to assign the street type to any newly added linear features that are streets.

**Table 67: Standard Street Type Abbreviations**

Street Type	Standard Abbreviation
ALLEY	ALY
ANEX	ANX
ARCADE	ARC
AVENUE	AVE
BAYOU	BYU
BEACH	BCH
BEND	BND
BLUFF	BLF
BLUFFS	BLFS
BOTTOM	BTM
BOULEVARD	BLVD
BRANCH	BR
BRIDGE	BRG
BROOK	BRK
BROOKS	BRKS
BURG	BG
BURGS	BGS
BYPASS	BYP
CAMP	CP
CANYON	CYN
CAPE	CPE
CAUSEWAY	CSWY
CENTER	CTR
CENTERS	CTRS
CIRCLE	CIR
CIRCLES	CIRS
CLIFF	CLF
CLIFFS	CLFS
CLUB	CLB
COMMON	CMN
COMMONS	CMNS
CORNER	COR
CORNERS	CORS
COURSE	CRSE
COURT	CT
COURTS	CTS
COVE	CV
COVES	CVS
CREEK	CRK
CRESCENT	CRES
CREST	CRST
CROSSING	XING

Street Type	Standard Abbreviation
CROSSROAD	XRD
CROSSROADS	XRDS
CURVE	CURV
DALE	DL
DAM	DM
DIVIDE	DV
DRIVE	DR
DRIVES	DRS
ESTATE	EST
ESTATES	ESTS
EXPRESSWAY	EXPY
EXTENSION	EXT
EXTENSIONS	EXTS
FALL	FALL
FALLS	FLS
FERRY	FRY
FIELD	FLD
FIELDS	FLDS
FLAT	FLT
FLATS	FLTS
FORD	FRD
FORDS	FRDS
FOREST	FRST
FORGE	FRG
FORGES	FRGS
FORK	FRK
FORKS	FRKS
FORT	FT
FREEWAY	FWY
GARDEN	GDN
GARDENS	GDNS
GATEWAY	GTWY
GLEN	GLN
GLENS	GLNS
GREEN	GRN
GREENS	GRNS
GROVE	GRV
GROVES	GRVS
HARBOR	HBR
HARBORS	HBRs
HAVEN	HVN
HEIGHTS	HTS
HIGHWAY	HWY
HILL	HL
HILLS	HLS
HOLLOW	HOLW
INLET	INLT
ISLAND	IS
ISLANDS	ISS
ISLE	ISLE
JUNCTION	JCT

Street Type	Standard Abbreviation
JUNCTIONS	JCTS
KEY	KY
KEYS	KYS
KNOLL	KNL
KNOLLS	KNLS
LAKE	LK
LAKES	LKS
LAND	LAND
LANDING	LNDG
LANE	LN
LIGHT	LGT
LIGHTS	LGTS
LOAF	LF
LOCK	LCK
LOCKS	LCKS
LODGE	LDG
LOOP	LOOP
MALL	MALL
MANOR	MNR
MANORS	MNRS
MEADOW	MDW
MEADOWS	MDWS
MEWS	MEWS
MILL	ML
MILLS	MLS
MISSION	MSN
MOTORWAY	MTWY
MOUNT	MT
MOUNTAIN	MTN
MOUNTAINS	MTNS
NECK	NCK
ORCHARD	ORCH
OVAL	OVAL
OVERPASS	OPAS
PARK	PARK
PARKS	PARK
PARKWAY	PKWY
PARKWAYS	PKWY
PASS	PASS
PASSAGE	PSGE
PATH	PATH
PIKE	PIKE
PINE	PNE
PINES	PNES
PLACE	PL
PLAIN	PLN
PLAINS	PLNS
PLAZA	PLZ
POINT	PT
POINTS	PTS
PORT	PRT

Street Type	Standard Abbreviation
PORTS	PRTS
PRAIRIE	PR
RADIAL	RADL
RAMP	RAMP
RANCH	RNCH
RAPID	RPD
RAPIDS	RPDS
REST	RST
RIDGE	RDG
RIDGES	RDGS
RIVER	RIV
ROAD	RD
ROADS	RDS
ROUTE	RTE
ROW	ROW
RUE	RUE
RUN	RUN
SHOAL	SHL
SHOALS	SHLS
SHORE	SHR
SHORES	SHRS
SKYWAY	SKWY
SPRING	SPG
SPRINGS	SPGS
SPUR	SPUR
SPURS	SPUR
SQUARE	SQ
SQUARES	SQS
STATION	STA
STRAVENUE	STRA
STREAM	STRM
STREET	ST
STREETS	STS
SUMMIT	SMT
TERRACE	TER
THROUGHWAY	TRWY
TRACE	TRCE
TRACK	TRAK
TRAFFICWAY	TRFY
TRAIL	TRL
TRAILER	TRLR
TUNNEL	TUNL
TURNPIKE	TPKE
UNDERPASS	UPAS
UNION	UN
UNIONS	UNS
VALLEY	VLV
VALLEYS	VLVS
VIADUCT	VIA
VIEW	VW
VIEWS	VWS

Street Type	Standard Abbreviation
VILLAGE	VLG
VILLAGES	VLGS
VILLE	VL
VISTA	VIS
WALK	WALK
WALKS	WALK
WALL	WALL
WAY	WAY
WAYS	WAYS
WELL	WL
WELLS	WLS

## Appendix I SHAPEFILE NAMES

County-based shapefiles exist for use within GUPS. Participants need not worry about opening these files independently from GUPS. The information in this section serves as basic metadata about the files used by GUPS. Not all files listed below appear in each county's data. For example, the Consolidated Cities layer only exists in counties with that type of geography.

PVS\_18\_v2\_<layername>\_<SSCCC>.shp, where <SSCCC> is the number corresponding FIPS number for the state and county, (e.g. "24001" corresponds to Allegany County, Maryland) and <layername> is the abbreviation for the shapefile layer, describe in detail below.

For example, PVS\_18\_v2\_curtracts\_24001.shp is the current census tract shapefile layer for Allegany County, Maryland. The source of the current census tracts is still the 2010 geography, but if spatial updates occurred to the 2010 census tracts, they exist in this layer, not the tract2010 layer. Files in this set of shapefiles correspond to the 2010 geographies vintage in GUPS.

**Table 68: County Shapefiles Names (PVS\_18\_v2\_)**

Shapefile Layer	<layername>
American Indian Areas (AIA) – Legal	aial
American Indian Areas (AIA) – Statistical	aias
American Indian Tribal Subdivisions (AITS) - Legal	aitsl
American Indian Tribal Subdivisions (AITS) - Statistical	aitss
Alaska Native Regional Corporations (ANRC) – State 02 only	anrc
Area Landmark	arealm
Block Area Groups	bag
Block Groups	bg
Metropolitan Statistical Area/Metropolitan Statistical Area	cbsa
Census County Divisions	ccd
Congressional Districts	cd
Census Designated Place	cdp
Consolidated Cities	concity
Counties and Equivalent Areas	county
Census Tracts - Current	curtracts
All Lines	edges
Elementary School Districts	elsd
Topological Faces (2-cells with all geocodes)	faces
Hawaiian Home Lands (HHL) – State 15 only	hhl
County Subdivisions - Legal	mcd
New England City and Town Areas	necta
Offsets	offset

Shapefile Layer	<layername>
Incorporated Places	place
Point Landmarks	pointlm
2010 Public Use Microdata Areas	puma2010
Secondary School Districts	scsd
State Legislative Districts Lower	sldl
State Legislative Districts Upper	sldu
Subbarrios – State 72 only	submcd
Census Blocks - Current	tabblock
2010 Census Blocks	tabblock2010
2010 Traffic Analysis Delineation	tad2010
2010 Traffic Analysis Zones	taz2010
2010 Census Tracts	tracts2010
Census Urban Areas	uac
Urban Growth Area	uga
Unified School Districts	unsd
Hydrography - Area	water
Relationship Tables	<layername>
Address Ranges	addr
Topological Faces - Area Landmark Relationship	areafaces
Topological Faces - Area Hydrography Relationship	hydrofaces
Linear Feature Names - Fielded	allnames

PVS\_18\_v3\_<layername>\_<SSCCC>.shp correspond to the 2020 proposed plans in GUPS. They follow the same naming convention as the v2 files. Only four layers exist for this version of shapefiles geography: block groups, census tracts, edges, and faces.

**Table 69: County Shapefile Names (PVS\_18\_v3\_)**

Shapefile Layer	<layername>
Block Groups	bg
Census Tracts - Current	curtracts
All Lines	edges
Topological Faces (2-cells with all geocodes)	faces

**Figure 24** shows an example of a Windows Explorer window with the PVS\_18\_v2 and PVS\_18\_v3 county shapefiles.

PVS_18_v2_addr_06071.cpg	PVS_18_v2_ccd_06071.dbf	PVS_18_v2_faces_06071.shp	PVS_18_v2_sldl_06071.shp	PVS_18_v2_uac_06071.cpg
PVS_18_v2_addr_06071.dbf	PVS_18_v2_ccd_06071.prj	PVS_18_v2_faces_06071.shx	PVS_18_v2_sldl_06071.shx	PVS_18_v2_uac_06071.dbf
PVS_18_v2_aial_06071.cpg	PVS_18_v2_ccd_06071.shp	PVS_18_v2_hydrofaces_06071.cpg	PVS_18_v2_sldu_06071.cpg	PVS_18_v2_uac_06071.prj
PVS_18_v2_aial_06071.dbf	PVS_18_v2_ccd_06071.shx	PVS_18_v2_hydrofaces_06071.dbf	PVS_18_v2_sldu_06071.dbf	PVS_18_v2_uac_06071.shp
PVS_18_v2_aial_06071.prj	PVS_18_v2_cd_06071.cpg	PVS_18_v2_mcd_06071.cpg	PVS_18_v2_sldu_06071.prj	PVS_18_v2_uac_06071.shx
PVS_18_v2_aial_06071.shp	PVS_18_v2_cd_06071.dbf	PVS_18_v2_mcd_06071.dbf	PVS_18_v2_sldu_06071.shp	PVS_18_v2_uga_06071.cpg
PVS_18_v2_aial_06071.shx	PVS_18_v2_cd_06071.prj	PVS_18_v2_mcd_06071.prj	PVS_18_v2_sldu_06071.shx	PVS_18_v2_uga_06071.dbf
PVS_18_v2_aias_06071.cpg	PVS_18_v2_cd_06071.shp	PVS_18_v2_mcd_06071.shp	PVS_18_v2_tabblock_06071.cpg	PVS_18_v2_uga_06071.prj
PVS_18_v2_aias_06071.dbf	PVS_18_v2_cd_06071.shx	PVS_18_v2_mcd_06071.shx	PVS_18_v2_tabblock_06071.dbf	PVS_18_v2_uga_06071.shp
PVS_18_v2_aias_06071.prj	PVS_18_v2_cdp_06071.cpg	PVS_18_v2_necta_06071.cpg	PVS_18_v2_tabblock_06071.prj	PVS_18_v2_uga_06071.shx
PVS_18_v2_aias_06071.shp	PVS_18_v2_cdp_06071.dbf	PVS_18_v2_necta_06071.dbf	PVS_18_v2_tabblock_06071.shp	PVS_18_v2_unsd_06071.cpg
PVS_18_v2_aias_06071.shx	PVS_18_v2_cdp_06071.prj	PVS_18_v2_necta_06071.prj	PVS_18_v2_tabblock_06071.shx	PVS_18_v2_unsd_06071.dbf
PVS_18_v2_aitsl_06071.cpg	PVS_18_v2_cdp_06071.shp	PVS_18_v2_necta_06071.shp	PVS_18_v2_tabblock2010_06071.cpg	PVS_18_v2_unsd_06071.prj
PVS_18_v2_aitsl_06071.dbf	PVS_18_v2_cdp_06071.shx	PVS_18_v2_necta_06071.shx	PVS_18_v2_tabblock2010_06071.dbf	PVS_18_v2_unsd_06071.shp
PVS_18_v2_aitsl_06071.prj	PVS_18_v2_concity_06071.cpg	PVS_18_v2_offset_06071.cpg	PVS_18_v2_tabblock2010_06071.prj	PVS_18_v2_unsd_06071.shx
PVS_18_v2_aitsl_06071.shp	PVS_18_v2_concity_06071.dbf	PVS_18_v2_offset_06071.dbf	PVS_18_v2_tabblock2010_06071.shp	PVS_18_v2_water_06071.cpg
PVS_18_v2_aitsl_06071.shx	PVS_18_v2_concity_06071.prj	PVS_18_v2_offset_06071.prj	PVS_18_v2_tabblock2010_06071.shx	PVS_18_v2_water_06071.dbf
PVS_18_v2_aits_06071.cpg	PVS_18_v2_concity_06071.shp	PVS_18_v2_offset_06071.shp	PVS_18_v2_tad2010_06071.cpg	PVS_18_v2_water_06071.prj
PVS_18_v2_aits_06071.dbf	PVS_18_v2_concity_06071.shx	PVS_18_v2_offset_06071.shx	PVS_18_v2_tad2010_06071.dbf	PVS_18_v2_water_06071.shp
PVS_18_v2_aits_06071.prj	PVS_18_v2_county_06071.cpg	PVS_18_v2_place_06071.cpg	PVS_18_v2_tad2010_06071.prj	PVS_18_v2_water_06071.shx
PVS_18_v2_aits_06071.shp	PVS_18_v2_county_06071.dbf	PVS_18_v2_place_06071.dbf	PVS_18_v2_tad2010_06071.shp	PVS_18_v3_bg_06071.cpg
PVS_18_v2_aits_06071.shx	PVS_18_v2_county_06071.prj	PVS_18_v2_place_06071.prj	PVS_18_v2_tad2010_06071.shx	PVS_18_v3_bg_06071.dbf
PVS_18_v2_allnames_06071.cpg	PVS_18_v2_county_06071.shp	PVS_18_v2_place_06071.shp	PVS_18_v2_taz2010_06071.cpg	PVS_18_v3_bg_06071.prj
PVS_18_v2_allnames_06071.dbf	PVS_18_v2_county_06071.shx	PVS_18_v2_place_06071.shx	PVS_18_v2_taz2010_06071.dbf	PVS_18_v3_bg_06071.shp
PVS_18_v2_areafaces_06071.cpg	PVS_18_v2_curtracts_06071.cpg	PVS_18_v2_pointlm_06071.cpg	PVS_18_v2_taz2010_06071.prj	PVS_18_v3_bg_06071.shx
PVS_18_v2_areafaces_06071.dbf	PVS_18_v2_curtracts_06071.dbf	PVS_18_v2_pointlm_06071.dbf	PVS_18_v2_taz2010_06071.shp	PVS_18_v3_curtracts_06071.cpg
PVS_18_v2_areafaces_06071.prj	PVS_18_v2_curtracts_06071.prj	PVS_18_v2_pointlm_06071.prj	PVS_18_v2_taz2010_06071.shx	PVS_18_v3_curtracts_06071.dbf
PVS_18_v2_areafaces_06071.shp	PVS_18_v2_curtracts_06071.shp	PVS_18_v2_pointlm_06071.shp	PVS_18_v2_tbg_06071.cpg	PVS_18_v3_curtracts_06071.prj
PVS_18_v2_areafaces_06071.shx	PVS_18_v2_edges_06071.cpg	PVS_18_v2_puma2010_06071.cpg	PVS_18_v2_tbg_06071.dbf	PVS_18_v3_curtracts_06071.shp
PVS_18_v2_bg_06071.cpg	PVS_18_v2_edges_06071.dbf	PVS_18_v2_puma2010_06071.dbf	PVS_18_v2_tbg_06071.prj	PVS_18_v3_curtracts_06071.shx
PVS_18_v2_bg_06071.dbf	PVS_18_v2_edges_06071.prj	PVS_18_v2_puma2010_06071.prj	PVS_18_v2_tbg_06071.shp	PVS_18_v3_edges_06071.cpg
PVS_18_v2_bg_06071.prj	PVS_18_v2_edges_06071.shp	PVS_18_v2_puma2010_06071.shp	PVS_18_v2_tbg_06071.shx	PVS_18_v3_edges_06071.dbf
PVS_18_v2_bg_06071.shp	PVS_18_v2_edges_06071.shx	PVS_18_v2_puma2010_06071.shx	PVS_18_v2_tct_06071.cpg	PVS_18_v3_edges_06071.prj
PVS_18_v2_bg_06071.shx	PVS_18_v2_elsd_06071.cpg	PVS_18_v2_scsd_06071.cpg	PVS_18_v2_tct_06071.dbf	PVS_18_v3_edges_06071.shp
PVS_18_v2_cbsa_06071.cpg	PVS_18_v2_elsd_06071.dbf	PVS_18_v2_scsd_06071.dbf	PVS_18_v2_tct_06071.prj	PVS_18_v3_edges_06071.shx
PVS_18_v2_cbsa_06071.dbf	PVS_18_v2_elsd_06071.prj	PVS_18_v2_scsd_06071.prj	PVS_18_v2_tct_06071.shp	PVS_18_v3_faces_06071.cpg
PVS_18_v2_cbsa_06071.prj	PVS_18_v2_elsd_06071.shp	PVS_18_v2_scsd_06071.shp	PVS_18_v2_tct_06071.shx	PVS_18_v3_faces_06071.dbf
PVS_18_v2_cbsa_06071.shp	PVS_18_v2_elsd_06071.shx	PVS_18_v2_scsd_06071.shx	PVS_18_v2_tracts2010_06071.cpg	PVS_18_v3_faces_06071.prj
PVS_18_v2_cbsa_06071.shx	PVS_18_v2_faces_06071.cpg	PVS_18_v2_sldl_06071.cpg	PVS_18_v2_tracts2010_06071.dbf	PVS_18_v3_faces_06071.shp
PVS_18_v2_ccd_06071.cpg	PVS_18_v2_faces_06071.dbf	PVS_18_v2_sldl_06071.dbf	PVS_18_v2_tracts2010_06071.prj	PVS_18_v3_faces_06071.shx
	PVS_18_v2_faces_06071.prj	PVS_18_v2_sldl_06071.prj	PVS_18_v2_tracts2010_06071.shp	
			PVS_18_v2_tracts2010_06071.shx	

**Figure 24. Windows Explorer Example of County Shapefiles (v2 and v3)**

## Appendix J SHAPEFILE LAYOUTS

This appendix includes several tables with the most common shapefiles used in 2020 Census PSAP and their file layout.

**Table 70: Edges Shapefile (PVS\_18\_v2\_edges)**

Attribute Field	Length	Type	Description
FID	10	Integer	Feature ID
Shape	8	String	Type of shape (Polyline)
STATEFP	2	String	FIPS State code
COUNTYFP	3	String	FIPS County code
TLID	10	Integer	TIGER/Line Permanent Edge ID
TFIDL	10	Integer	TIGER/Line Permanent Face ID (left)
TFIDR	10	Integer	TIGER/Line Permanent Face ID (right)
MTFCC	5	String	MAF/TIGER Feature Classification Code
FIDELITY	1	String	Indication to a respondent when their entity boundary has changed through spatial enhancement
FULLNAME	40	String	Decoded feature name with abbreviated qualifier, direction, and feature type
SMID	22	Double	Spatial Tmeta ID
SMIDTYPE	1	String	Spatial type
BBSPFLG	1	String	Redistricting Data Project participant's submitted request of an EDGE for selection as a block boundary
CBBFLG	1	String	Indicates the status of an EDGE for a selection as a block boundary
BBSP_2020	1	String	New BBSP flag
CHNG_TYPE	4	String	Type of linear feature update
JUSTIFY	150	String	Justification of change
LTOADD	10	String	Left To address
RTOADD	10	String	Right To address
LFROMADD	10	String	Left From address
RFROMADD	10	String	Right From address
ZIPL	5	String	Left 5-digit ZIP Code
ZIPR	5	String	Right 5-digit ZIP Code
EXTTYP	1	String	Extension type
MTUPDATE	10	Date	Date of last MAF/TIGER update to the edge
RTTYP	1	String	Route type
GUPS	80	String	Used internally by GUPS during digitizing

**Table 71: Address Ranges Attribute File (PVS\_18\_v2\_addr)**

Attribute Field	Length	Type	Description
OID	8	String	Object ID
TLID	10	Integer	TIGER/Line Permanent Edge ID
STATEFP	2	String	FIPS State code
COUNTYFP	3	String	FIPS County code
FROMHN	12	String	From house number
TOHN	12	String	To house number
SIDE	1	String	Side of feature indicator flag (L or R)
ZIP	5	String	5-digit ZIP Code
PLUS4	4	String	ZIP+4 Code
LFROMADD	10	String	Left From address
LTOADD	10	String	Left To address
RFROMADD	10	String	Right From address
RTOADD	10	String	Right To address
ZIPL	5	String	Left 5-digit ZIP Code
ZIPR	5	String	Right 5-digit ZIP Code
ZIP4L	4	String	Left ZIP+4 Code
ZIP4R	4	String	Right ZIP+4 Code

**Table 72: Block Groups Shapefile (PVS\_18\_v2\_bg)**

Attribute Field	Length	Type	Description
FID	10	Integer	Feature ID
Shape	7	String	Type of shape (Polygon)
STATEFP	2	String	FIPS State code (48)
COUNTYFP	3	String	FIPS County code (251)
TRACTCE	6	String	Census tract code (130204)
BLKGRPCE	1	String	Block group code (1)
BLKGRPID	12	String	STATEFP, COUNTYFP, TRACTCE, and BLKGRPCE (482511302041)
CHNG_TYPE	2	String	Code for type of area update (E, B, M, and G)
EFF_DATE	8	Date	Effective date
BGTYP	1	String	Block group characteristic flag
RELATE	120	String	Relationship description
JUSTIFY	150	String	Justification of change to attribute of block group
VINTAGE	2	String	Vintage updated with returned data
POP10	10	Integer	2010 population count
HOUSING10	10	Integer	2010 housing unit count
TRACTID	11	String	STATEFP, COUNTYFP, and TRACTCE (48251130204)
SITE_NAME	100	String	Special use block group name
JSTFY_CNTG	150	String	Justification entered by participant to retain noncontiguous statistical geography
JSTFY_SLU	150	String	Justification entered by participant for a special use measurement threshold
EDITED	1	String	GUPS updates to indicate an edit by the participant

**Table 73: Census Tracts - Current Shapefile (PVS\_18\_v2\_curtracts)**

Attribute Field	Length	Type	Description
FID	10	Integer	Feature ID
Shape	7	String	Type of shape (Polygon)
STATEFP	2	String	FIPS State code (48)
COUNTYFP	3	String	FIPS County code (251)
TRACTCE	6	String	Census tract code (130204)
NAME	100	String	TRACTCE, decimal point, and two-digit suffix (if applicable) (1302.04)
TRACTID	11	String	STATEFP, COUNTYFP, and TRACTCE (48251130204)
NEW_CODE	6	String	Newly generated census tract code following change
CHNG_TYPE	2	String	Code for type of area update (E, M, B, and G)
EFF_DATE	8	Date	Effective date
TRACTTYP	1	String	Census tract characteristic flag
RELATE	120	String	Relationship description
JUSTIFY	150	String	Justification of change to attribute of census tract
TRACTLABEL	7	String	Name
VINTAGE	2	String	Vintage updated with returned data
POP10	10	Integer	2010 population count
HOUSING10	10	Integer	2010 housing unit count
SITE_NAME	100	String	Special use census tract name
JSTFY_CNTG	150	String	Justification entered by participant to retain noncontiguous statistical geography
JSTFY_SLU	150	String	Justification entered by participant for a special use measurement threshold
JSTFY_NAME	150	String	Justification entered by participant when the name is changed
JSTFY_RES	150	String	Justification entered by participant for a reservation related issue

**Table 74: Census County Divisions Shapefile (PVS\_18\_v2\_ccd)**

Attribute Field	Length	Type	Description
FID	10	Integer	Feature ID
Shape	7	String	Type of shape (Polygon)
STATEFP	2	String	FIPS State code
COUNTYFP	3	String	FIPS County code
COUSUBFP	5	String	FIPS 55 County Subdivision code
NAMELSAD	100	String	Name with translated LSAD
COUSUBNS	8	String	ANSI feature code for the county subdivision
LSAD	2	String	Legal/Statistical Area description
FUNCSTAT	1	String	Functional status
CLASSFP	2	String	FIPS 55 Class code describing an entity
CHNG_TYPE	2	String	Code for type of area update (E, M, B, and G)
RELATE	120	String	Relationship description
JUSTIFY	150	String	Justification of change
NAME	100	String	Entity name
VINTAGE	2	String	Vintage updated with returned data
JSTFY_CNTG	150	String	Justification entered by participant to retain noncontiguous statistical geography
JSTFY_NAME	150	String	Justification entered by participant when the name of the statistical geography is changed

**Table 75: Census Designated Place Shapefile (PVS\_18\_v2\_cdp)**

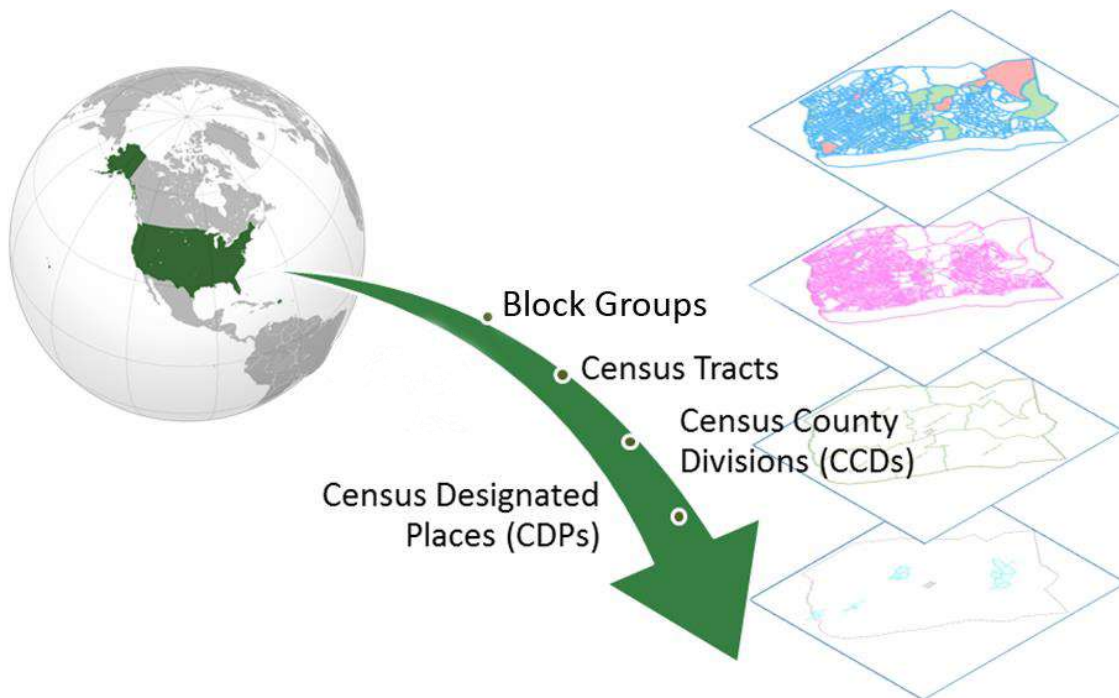
Attribute Field	Length	Type	Description
FID	10	Integer	Feature ID
Shape	7	String	Type of shape (Polygon)
STATEFP	2	String	FIPS State code
COUNTYFP	3	String	FIPS County code
PLACEFP	5	String	FIPS 55 Place code
PLACENS	8	String	ANSI feature code for the place
NAMELSAD	100	String	Name with translated LSAD
LSAD	2	String	Legal / Statistical Area description
FUNCSTAT	1	String	Functional status
CLASSFP	2	String	FIPS 55 class code describing and entity
PARTFLG	1	String	Indicates if only part of a feature is represented (Y or N)
CHNG_TYPE	2	String	Code for type of area update (E, B, G, and X)
EFF_DATE	8	Date	Effective date or vintage
RELATE	120	String	Relationship description
JUSTIFY	150	String	Justification of change
NAME	100	String	Entity name
VINTAGE	2	String	Vintage updated with returned data
POP10	10	Integer	2010 population count
HOUSING10	10	Integer	2010 housing unit count
JSTFY_NAME	150	String	Justification entered by participant when the name of the statistical geography is changed

## Appendix I

# 2020 Census Participant Statistical Areas Program (PSAP) Verification Respondent Guide

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*Instructions for Participants with Standard Statistical Geographies*  
November 2019



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## TABLE OF CONTENTS

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<b>Introduction .....</b>	<b>iv</b>
A. General Information .....	iv
B. 2020 Census PSAP Schedule .....	v
C. Training and Support .....	vi
D. Respondent Guide Organization.....	vi
<b>Part 1      Reviewing 2020 Statistical Areas.....</b>	<b>8</b>
<b>Chapter 1   Identifying a Plan for Conducting Verification .....</b>	<b>8</b>
<b>Chapter 2   Using TIGERweb to Review 2020 Statistical Areas .....</b>	<b>9</b>
2.1 TIGERweb Applications .....	10
2.2 TIGERweb WMS and TIGERweb REST Services.....	21
<b>Chapter 3   Using Online PDF Maps to Review 2020 Census Tract Coding .....</b>	<b>25</b>
<b>Chapter 4   Email Notification of Corrections to or Approval of the 2020 Statistical Areas ....</b>	<b>29</b>
<b>Part 2      Correcting 2020 Statistical Areas.....</b>	<b>31</b>
<b>Chapter 5   Using GUPS to Correct 2020 Statistical Areas .....</b>	<b>32</b>
5.1 Updating GUPS.....	32
5.1.1 Downloading and Installing GUPS and QGIS .....	33
5.2 Opening GUPS and Starting a New Project .....	38
5.3 Introducing GUPS Modifications for the Verification Phase .....	41
5.4 Reinforcing GUPS Tools for the Verification Phase .....	42
5.4.1 Clarifying Use of the Boundary Change Tools.....	43
5.4.2 Clarifying Use of the Undo Button .....	44
5.4.3 Reinforcing the Use of Imagery.....	45
5.5 Exporting a File for Submission.....	45
<b>Part 3      Submitting Corrections to the 2020 Statistical Areas .....</b>	<b>47</b>
<b>Chapter 6   Using the Secure Web Incoming Module (SWIM) for PSAP Verification .....</b>	<b>47</b>
<b>Chapter 7   Next Steps for the 2020 Census PSAP.....</b>	<b>51</b>
<b>Appendix A   Using TIGERweb to Compare 2020 Statistical Areas to 2010 Statistical Areas</b>	<b>A-1</b>
<b>Appendix B   Changing the Map Background within the TIGERweb Online Map Viewer ....</b>	<b>B-1</b>
<b>Appendix C   Adding a Delineation Phase Submission to a Verification Phase Project .....</b>	<b>C-1</b>
<b>Appendix D   Correcting Census Tract Coding .....</b>	<b>D-1</b>

## LIST OF TABLES

---

Table 1: 2020 Census PSAP Schedule .....	v
Table 2: Using the TIGERweb Online Map Viewer.....	10
Table 3: Using the TIGERweb WMS .....	21
Table 4: Using the TIGERweb REST Services .....	23
Table 5: Locating and Using the Online PDF Maps to Review 2020 Census Tract Coding .....	26
Table 6: Requirements for Hardware, Operating Systems, and Internet Browsers.....	33
Table 7: Downloading and Installing the Newer Version of GUPS and QGIS .....	34
Table 8: Getting Started with GUPS using Census Web .....	38
Table 9: SWIM Example .....	47
Table 10: Comparing 2020 and 2010 Statistical Areas in TIGERweb .....	A-1
Table 11: Using GUPS to Correct Census Tract Coding.....	D-1

## LIST OF FIGURES

---

Figure 1: Sample Verification Email Notification from Participant.....	29
Figure 2: Individual Statistical Geography Chapters in the G-730 Table of Contents .....	31
Figure 3: GUPS Information Window.....	42
Figure 4: Example of GUPS Table of Contents with Layers.....	43
Figure 5: Census Tract and Block Group Boundary Change Sections in the G-730 Table of Contents.....	44
Figure 6: CDP and CCD Boundary Change Sections in the G-730 Table of Contents .....	44
Figure 7: Select Output Type Window - Export for Census .....	45
Figure 8: Export to Zip Window for Verification Phase .....	46
Figure 9: TIGERweb Topography Button .....	B-1
Figure 10: Topography Button with All Base Map Choices .....	B-1
Figure 11: GUPS - Manage Layers toolbar - Add Vector Layer button .....	C-1

# INTRODUCTION

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## A. General Information

The U. S. Census Bureau completed processing of the 2020 Census Participant Statistical Areas Program (PSAP) delineation phase submissions and is now ready to begin the 2020 Census PSAP verification phase. The verification phase provides an opportunity to ensure the 2020 statistical areas are acceptable and reflect the edits made by participants and the Census Bureau during the delineation phase. It serves as the final review of the statistical areas used to tabulate the results of the 2020 Census, the American Community Survey (and Puerto Rico Community Survey), the Economic Census, and potentially other census surveys.

In some instances the Census Bureau revised participants' delineation phase submissions in order to meet established criteria and guidelines. For that reason, participants are encouraged to conduct a thorough review of the current 2020 statistical areas to determine if they work for the tabulation and distribution of statistical data and to provide corrections where needed. Participants can compare the current 2020 statistical area boundaries and attributes with the information submitted during the delineation phase or conduct a complete review without making a comparison to their delineation phase submission.

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<b>Note:</b>	Participant revisions to the 2020 statistical areas during the verification phase, that were not provided during the delineation phase, will be considered based on the scope of the revision, their merit for analytical purposes, and their adherence to the established criteria and guidelines.
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The Census Bureau requests participants use TIGERweb to review the 2020 statistical areas applicable to their county(s)<sup>1</sup> and to use the Geographic Update Partnership Software (GUPS) to make corrections where needed. The statistical areas eligible for review are census tracts, block groups, census designated places (CDPs), and census county divisions (CCDs). Please be aware CCDs only exist in the following 21 states: Alabama, Alaska (referred as census subarea), Arizona, California, Colorado, Delaware, Florida, Georgia, Hawaii, Idaho, Kentucky, Montana, Nevada, New Mexico, Oklahoma, Oregon, South Carolina, Texas, Utah, Washington, and Wyoming.

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<sup>1</sup> For Census Bureau purposes, the term "county" includes municipios in the Commonwealth of Puerto Rico; parishes in Louisiana; boroughs, city and boroughs, municipalities, and census areas in Alaska; independent cities in Maryland, Missouri, Nevada, and Virginia; districts and islands in American Samoa, and districts in the U.S. Virgin Islands; municipalities in the Commonwealth of the Northern Mariana Islands; and the areas constituting the District of Columbia and Guam. Henceforth in this document, the terms "county" or "counties" will refer to all of these entities.

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**IMPORTANT:** The verification phase provides the only opportunity for participants to review CDPs modified or created during the delineation phase. Locate the file that lists the new CDPs created since the delineation phase on the PSAP website. Please review the CDPs within the counties listed on the verification announcement to ensure each CDP captures the extent of the community it seeks to define (i.e., review the boundary) and is identified by the name locally used for that community (i.e., review the CDP name).

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For navigating the various products and software for PSAP verification, it is helpful to understand the unique entity identification codes used by the Census Bureau for counties. These codes appear on the verification announcement, in the file names for the Online Portable Document Format (PDF) maps of census tracts, and within GUPS.

The entity identification code for counties uses the two digit state Federal Information Processing Series (FIPS) code concatenated with the three-digit county FIPS code. For example, 27123 is the five-digit FIPS code for Ramsey County, Minnesota, where 27 is the two-digit state FIPS code for Minnesota and 123 is the three-digit county FIPS code for Ramsey County.

## B. 2020 Census PSAP Schedule

Below is the 2020 Census PSAP schedule that includes past, ongoing, and upcoming activities.

**Table 1: 2020 Census PSAP Schedule**

Dates	Event
March-May 2018	Census Bureau contacted 2010 Census PSAP participants to inquire about 2020 Census PSAP participation. ✓
July 2018	Census Bureau distributed 2020 Census PSAP invitation materials to 2020 Census PSAP participants. ✓
January 2019	2020 Census PSAP delineation phase began. Participants had 120 calendar days to submit updates. ✓
January-February 2019	Census Bureau conducted 2020 Census PSAP delineation phase webinar trainings. ✓
July 2019	Census Bureau conducted closeout of the 2020 Census PSAP delineation phase. ✓
January 2020	2020 Census PSAP verification phase begins. Participants have 90 calendar days upon receipt of verification announcement to review the 2020 statistical areas and submit corrections. ✓
April 2020	2020 Census PSAP verification phase ends.
September 2020	Census Bureau plans to conduct closeout of the 2020 Census PSAP verification phase.
November 2020 – February 2021	On a flow basis, beginning in November 2020 through February 2021, the 2020 statistical areas become available for public use.

## C. Training and Support

The Census Bureau provides assistance by answering questions; clarifying criteria, guidelines and procedures; and by providing information concerning specific situations that participants encounter when reviewing and verifying their 2020 statistical areas. A pre-recorded verification phase training video/demonstration is available on the PSAP website for participants to utilize as an on-demand training tool. The verification phase training video/demonstration provides an overview of the verification phase and of the updated PSAP website. It provides information on the following topics:

- Reviewing 2020 statistical areas.
- Making corrections to 2020 statistical areas.
- Submitting corrections to 2020 statistical areas.

The verification training video/demonstration does not include the detailed steps for using GUPS that are included in the delineation phase training materials; therefore, all of the delineation phase training materials (e.g., Standard GUPS presentation, script, and webinar recording) remain on the PSAP website for participants' use. No training webinars are planned for the verification phase.

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**IMPORTANT:** It is vital that participants use all of the existing training materials as they begin their verification phase review and potential corrections of 2020 statistical areas.

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For questions concerning technical matters with the GUPS application or specific programmatic questions, support from the Census Bureau is available by phone at 1-844-788-4921 or by email at [<geo.psap@census.gov>](mailto:geo.psap@census.gov).

## D. Respondent Guide Organization

This respondent guide consists of three parts: *Reviewing 2020 Statistical Areas*, *Correcting 2020 Statistical Areas*, and *Submitting Corrections to the 2020 Statistical Areas*. It includes information to enhance the instructions and details provided in the *2020 Census PSAP Standard Respondent Guide (G-730)*, created for use in the delineation phase, as well as new or updated information applicable to the verification phase.

For an overview of the 2020 statistical areas as well as the GUPS basics, participants must refer to the *2020 Census PSAP Standard Respondent Guide (G-730)*. Participants will also need to navigate the PSAP website, [<https://www.census.gov/programs-surveys/decennial-census/about/psap.html>](https://www.census.gov/programs-surveys/decennial-census/about/psap.html), to review other program materials such as the Quick Reference Guides for their specific statistical geographies, the Quick Program Guide, and the training materials.

As with the delineation phase respondent guide, two styles are implemented within this guide. The first provides specific instructions through “Step – Action and *Result*” tables. In these tables, the Action is usually a command or action to perform and the *Result(s)* of the action are

written in *italics*. For an example, the action “Double-click the icon” has the *result* of “*and the program automatically launches.*” The second is the use of **bold, blue colored font** to denote the presence of a cross-referenced hyperlink to other sections, figures, tables, or appendices. To skip directly to the linked item, use the Ctrl key and click the left mouse button while hovering over the **bold blue words**. The “Table 2” in section 2.1 is the first cross-referenced hyperlink in this document.

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**IMPORTANT:** At the time of creation of this respondent guide, the PSAP website, TIGERweb, GUPS, and the Online PDF maps of census tracts are in the final stages of development. As a result, the screenshots within this document may vary slightly from the final versions released to support the verification phase. While the examples may differ slightly, the overall instruction, action, and result remain consistent with what is anticipated with the final versions.

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## PART 1 REVIEWING 2020 STATISTICAL AREAS

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Reviewing the 2020 statistical areas to determine if any corrections are necessary is the first step of the verification phase. With 90 calendar days to conduct the review, it is important to begin your review as soon as possible after receipt of the verification announcement.

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**IMPORTANT:** A participant's focus should remain on whether the existing 2020 statistical areas work for the tabulation and distribution of statistical data and whether the census tract codes are consistent with long established census tract coding plans.

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The chapters within this part of the respondent guide discuss the following:

- Identifying a plan for conducting verification.
- Reviewing the 2020 statistical areas using TIGERweb to verify if the statistical area boundaries and attributes (e.g., census tract codes, block group codes, CDP names, and CCD names) align with expectations.
- Using the Online PDF maps, instead of, or in addition to, TIGERweb, to review the census tract codes.
- Detailing the email notification requested from participants to inform the Census Bureau of their intentions to make corrections or to approve the existing 2020 statistical areas.

### CHAPTER 1 IDENTIFYING A PLAN FOR CONDUCTING VERIFICATION

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The Census Bureau strongly recommends reviewing the current 2020 statistical area boundaries and attributes using TIGERweb to determine if they serve your county(s) for the tabulation and distribution of statistical data. Because time is a factor during verification, the Census Bureau recommends prioritizing the verification review as follows:

1. First, ensure a review of the census tract updates;
2. Then review the block group updates;
3. Then review new CDPs and any updates submitted for existing CDPs, if applicable. A list of new CDPs is available on the PSAP website beneath the **2020 Census PSAP Verification Materials** section within the **Additional Review Materials** sub-section.
4. Conclude with a review of CCDs, if applicable in your state.

If a long-established census tract coding pattern exists within the county(s) for review, conduct a complete county review of the census tract coding to ensure the pattern is maintained. As census tract splits and merges occur, the codes assigned by GUPS and processed during the delineation phase may not follow the established pattern. Participants can conduct this census tract coding review using TIGERweb or Online PDF maps. More details on both of those review tools is in upcoming chapters.

Participants that made specific boundary and attribute updates during the delineation phase may wish to conduct a review of those specific updates to determine if the Census Bureau applied those changes. They can do so by using TIGERweb Web Mapping Service (WMS), and TIGERweb Representational State Transfer (REST) Services described in the next chapter to pull the Current vintage into their own web mapping service or GIS for comparison.

The most common reason delineation phase updates were not applied relates to the improper application of guidelines or adherence to criteria for each specific statistical geography. If updates were made during delineation that resulted in statistical areas not complying with minimum criteria or not following the guidelines for the specific statistical area, and an adequate justification for the update was not supplied, the Census Bureau did not make those updates. Resupplying that change as a correction during the verification phase will likely result in the same outcome (i.e., the Census Bureau not accepting the correction to the statistical area).

If you determine a **significant amount of updates** were not applied and have questions about why the updates were not applied, please contact the Census Bureau by email at [<geo.psap@census.gov>](mailto:geo.psap@census.gov) or by phone at 1-844-788-4921 so they can research the county and provide you with background information from the delineation phase processing. Do not proceed with resubmitting delineation phase updates that were not applied to the 2020 statistical areas, or with making significant corrections to the statistical areas until a conversation with the Census Bureau occurs. They will provide instruction and guidance on how, or if, to proceed with making corrections.

## CHAPTER 2 USING TIGERWEB TO REVIEW 2020 STATISTICAL AREAS

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TIGERweb was first introduced as a supplemental source for use during the delineation phase. The *2020 Census PSAP Standard Respondent Guide (G-730)* includes *Appendix E* that provides tables with guidance for using TIGERweb to compare the 2010 statistical areas with the proposed 2020 statistical areas. For the verification phase, use the information in this chapter, in association with the guidance from *Appendix E* in the delineation phase respondent guide and the *TIGERweb User Guide* available within TIGERweb, to conduct a review of your 2020 statistical areas.

TIGERweb is a web-based system that allows users to visualize the Topologically Integrated Geographic Encoding and References system and database (TIGER) data in three ways: TIGERweb Applications, TIGERweb WMS, and TIGERweb REST Services.

The TIGERweb Applications choice allows users to select features and view their attributes, to search for features by name or geocode, and to identify features by selecting them from a map. It provides a simple way to view TIGER data without Geographic Information System (GIS) software and without downloading data. It uses the TIGERweb REST Services to provide an online, web-based method for reviewing the TIGER data.

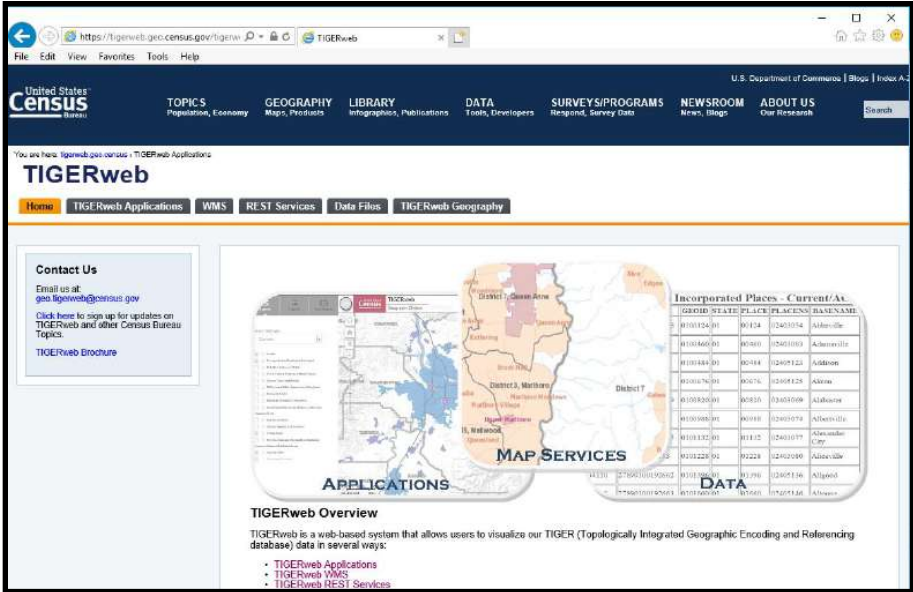
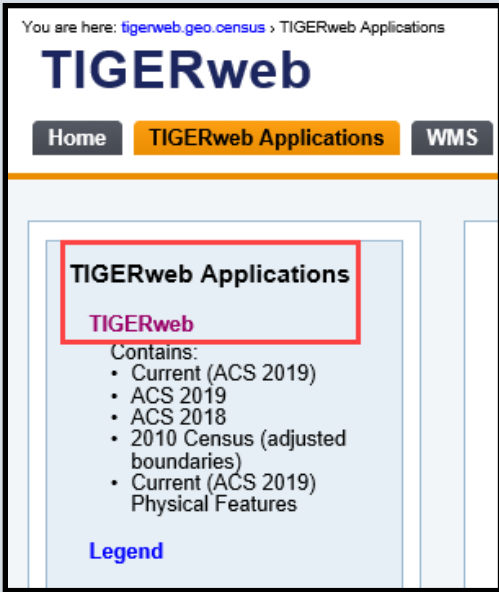
TIGERweb WMS and TIGERweb REST Services allow users to integrate census data into their own GIS or custom web-based application. Find more information about TIGERweb within the online documentation on its website:

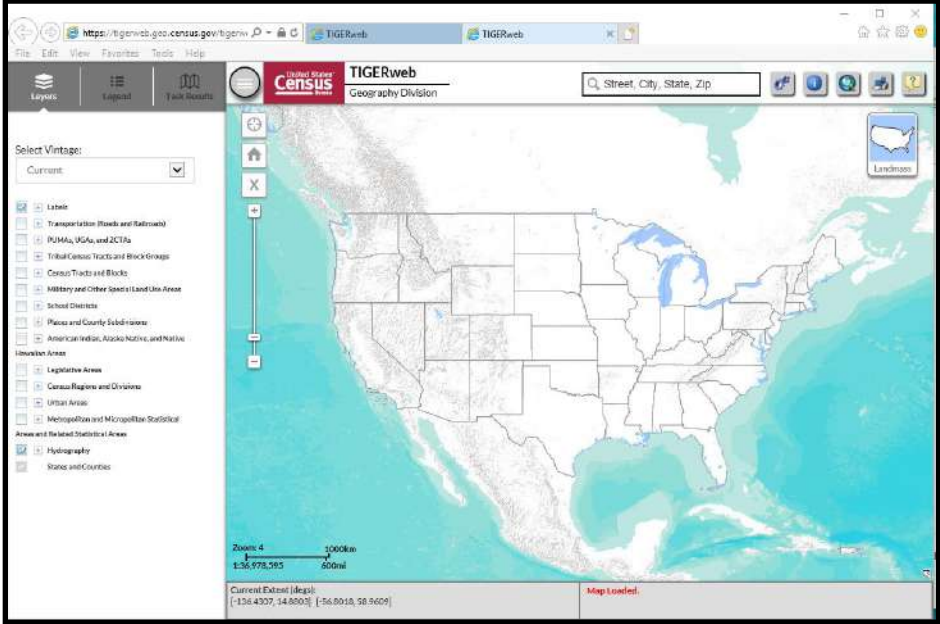


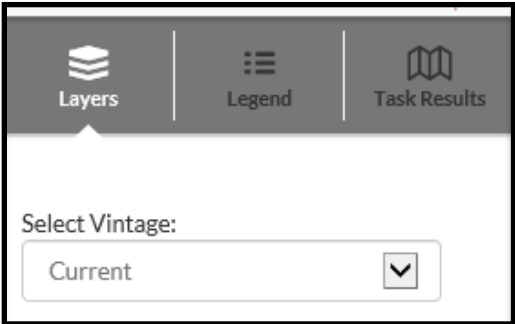
[<https://tigerweb.geo.census.gov/tigerwebmain/TIGERweb\\_main.html>](https://tigerweb.geo.census.gov/tigerwebmain/TIGERweb_main.html).

## 2.1 TIGERweb Applications

See [Table 2](#) for an example of using TIGERweb online map viewer to review county-based 2020 statistical areas. Refer to [Appendix A](#) for instructions on using the TIGERweb online map viewer to compare the 2020 statistical areas to the 2010 statistical areas.

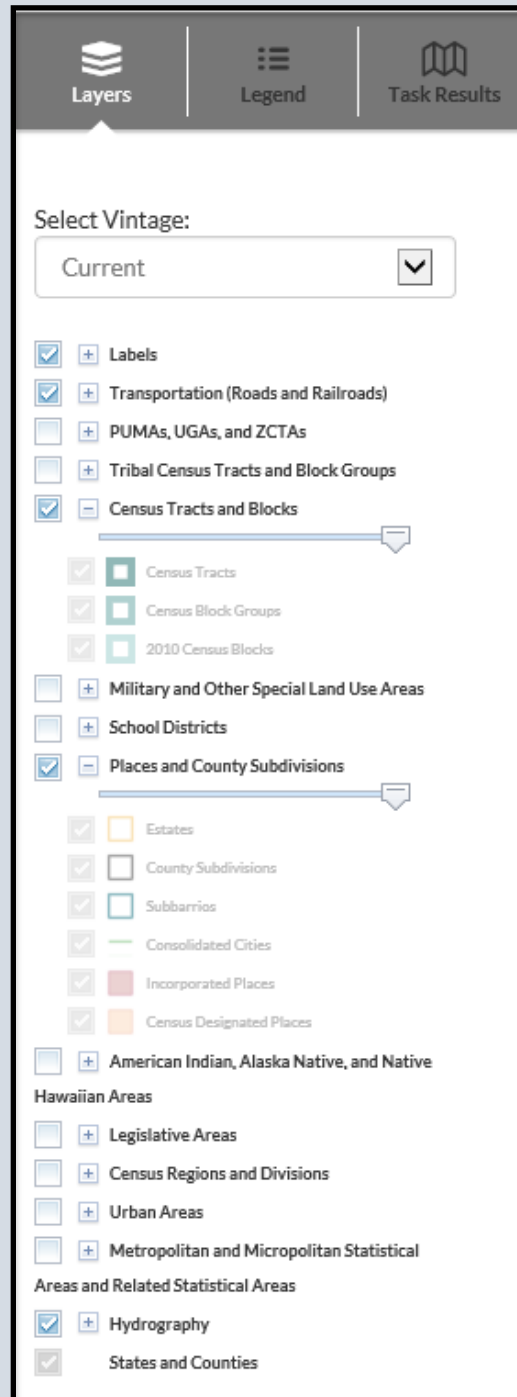
**Table 2: Using the TIGERweb Online Map Viewer**

Step	Action and Result
Step 1	<p>Open a new internet browser window and navigate to the TIGERweb website &lt;<a href="https://tigerweb.geo.census.gov/tigerwebmain/TIGERweb_main.html">https://tigerweb.geo.census.gov/tigerwebmain/TIGERweb_main.html</a>&gt;. The TIGERweb main page appears.</p>  <p><b>Note:</b> A link to TIGERweb is also available on the PSAP website.</p>
Step 2	<p>Click the <b>TIGERweb Applications</b> tab to the right of the <b>Home</b> tab, then <b>TIGERweb</b> along the left side of the screen. Do not select <b>TIGERweb Decennial</b> or <b>TIGERweb Economic Census</b>.</p> 


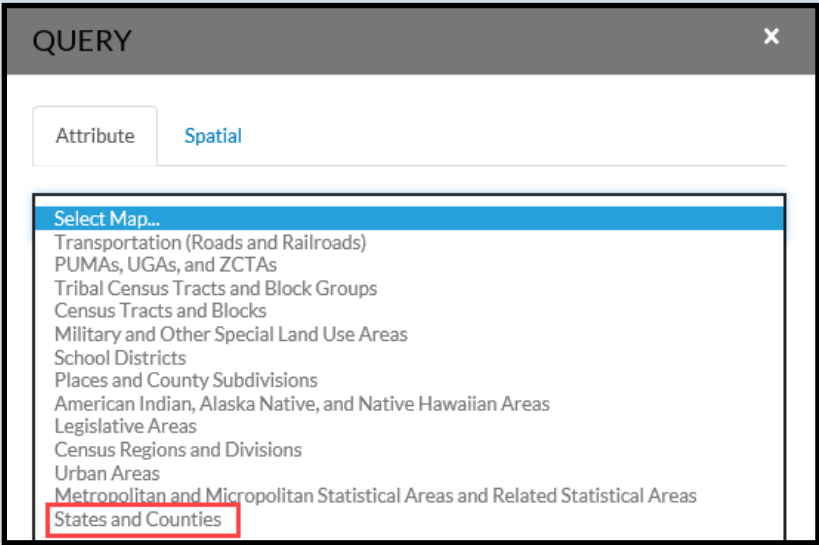
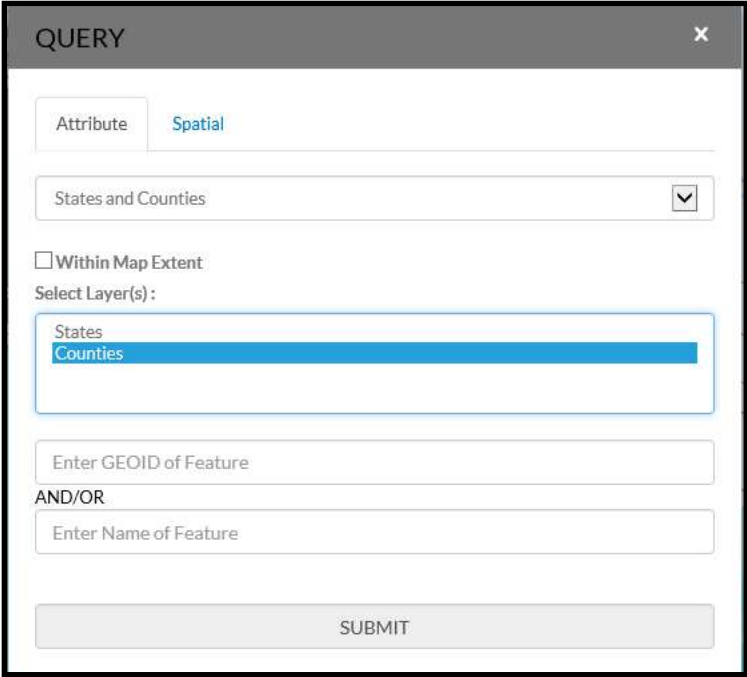
Step	Action and Result
Step 3	<p>The <i>TIGERweb</i> online map viewer application launches.</p> 
	<p>Access the <i>TIGERweb User Guide</i> from the <b>Help/About</b> button in the upper right corner of the screen after launching <b>TIGERweb</b> or along the left side of the screen within the <b>TIGERweb Applications</b> tab.</p> 
Step 4	<p>With the <b>Layers</b> tab active, ensure the <b>Select Vintage</b> section is set, and remains set, to <b>Current</b>. <b>Note:</b> Even though the 2020 statistical areas are included in the <b>Current</b> vintage and made available to the public through TIGERweb, they are not yet used in most data products since they will not be finalized until after the verification phase concludes.</p>  <p><b>IMPORTANT:</b> Refer to <i>Table 63</i> and <i>Table 64</i> in <i>Appendix E</i> of the <i>2020 Census PSAP Standard Respondent Guide (G-730)</i> for background on the map display, navigation tools, <b>Layers</b> panel, legend, and tools. The remaining steps in this table assume familiarity with TIGERweb and its functionality that is defined in the aforementioned respondent guide.</p>

Step 5


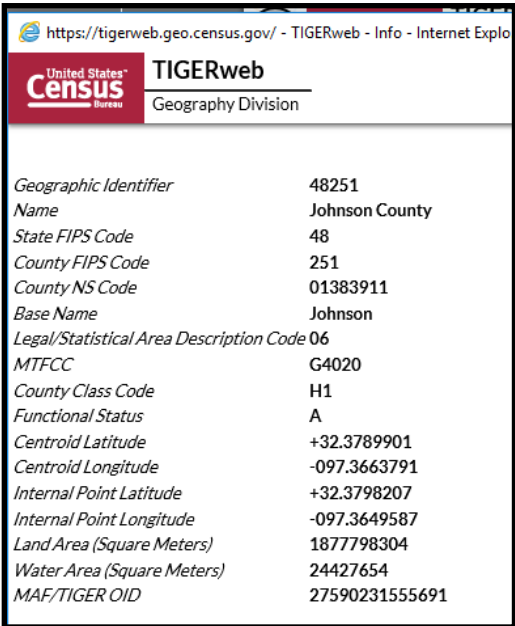

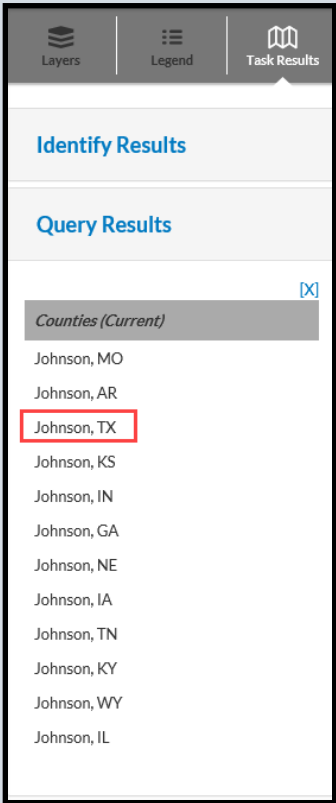
Check the **Census Tracts and Blocks** layer and the **Places and County Subdivisions** layer in the **Layers** panel. These two layers contain the 2020 statistical areas for census tracts, block groups, CDPs, and CCDs. Check the **Transportation (Roads and Railroads)** layer to assist with the review. Ensure the **Labels** layer and **Hydrography** layer remain checked.

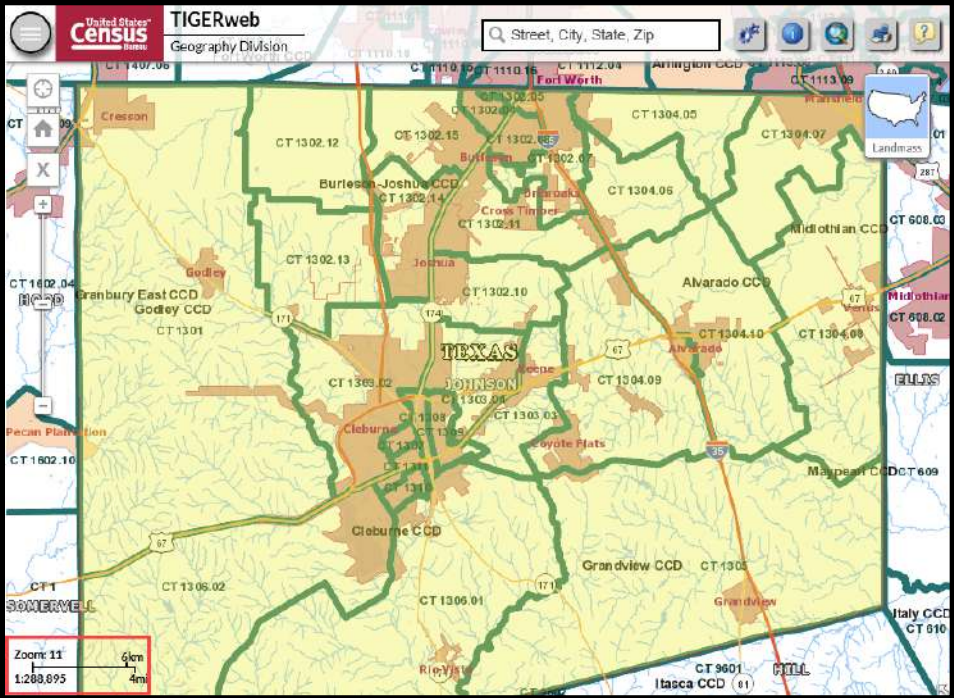


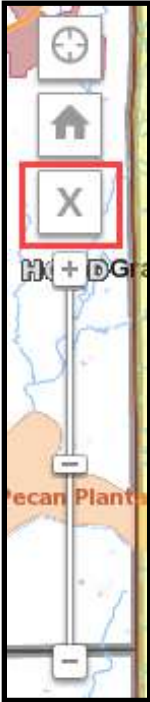
**Note:** Because geographic and locational context and relationships are important, TIGERweb determines which geographic entities and features may be visible based on the map scale. Participants can turn on/off layers in the **Layers** panel which limits the amount of data on the map that appear at a given scale. Additionally, when multiple layers display, one layer may obscure another. Change the transparency of the layer by moving the sliding bar beneath each layer name to the left or right. The **Census Tracts and Blocks** layer and the **Places and County Subdivisions** layer in the image above show the slide bar.

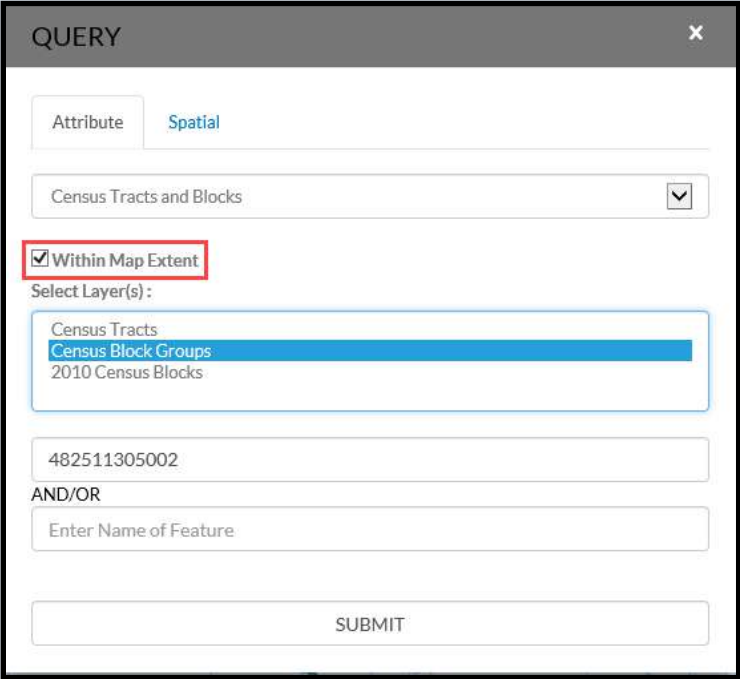
Step	Action and Result
Step 6	<p>Manually zoom in or use the <b>Query</b> tool to zoom to the extent of the county to review.</p> 
Step 7	<p>Within the <b>Query</b> tool, ensure the <b>Attribute</b> tab is active. Choose <b>States and Counties</b> from the <b>Select Map...</b> drop-down menu.</p> 
Step 8	<p>Select <b>Counties</b> within the <b>Select Layer(s)</b> section.</p> 

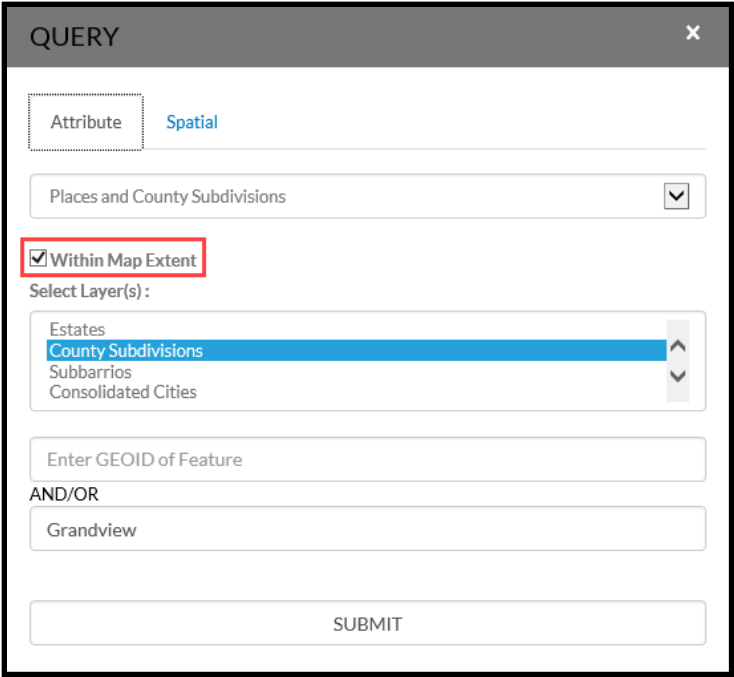

Step	Action and Result
<p>Step 9</p>	<p>Type all, or part of, the name of the county in the <b>Enter Name of Feature</b> section AND/OR all, or part of, the five digit state and county FIPS code, as described in <a href="#">Section A</a>, in the <b>Enter GEOID of Feature</b> section. Click <b>SUBMIT</b>.</p> <p><b>Note:</b> The state and county FIPS code(s) are listed at the end of the verification announcement.</p> <div> </div> <p>The map display zooms to the extent of the county and the name of the county name and state abbreviation appears in the <b>Query Results</b> section of the <b>Task Results</b> tab along the left side of the screen.</p> <div> </div>

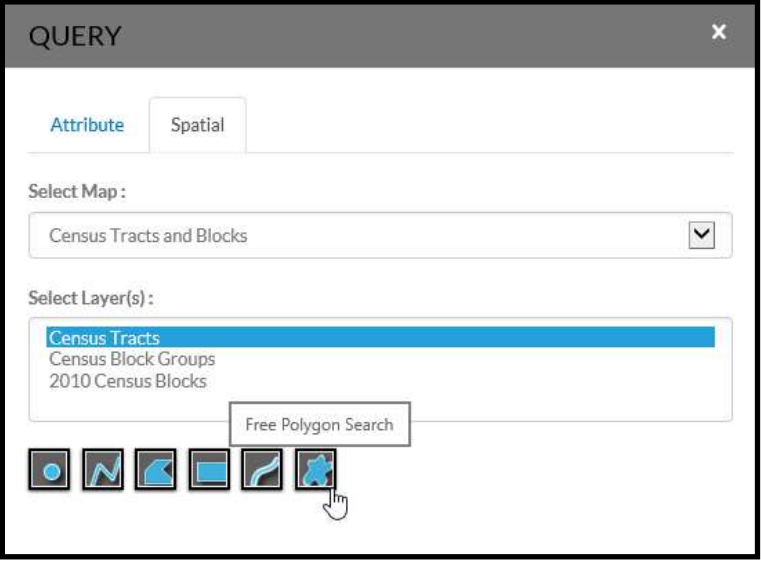
Step	Action and Result																																		
	<p>Clicking the county name in the <b>Query Results</b> section launches a <b>TIGERweb – Info</b> window with basic census and geographic information about the county and selects the county in the map display.</p>  <table border="1"> <thead> <tr> <th>Geographic Identifier</th> <th>48251</th> </tr> </thead> <tbody> <tr> <td>Name</td> <td>Johnson County</td> </tr> <tr> <td>State FIPS Code</td> <td>48</td> </tr> <tr> <td>County FIPS Code</td> <td>251</td> </tr> <tr> <td>County NS Code</td> <td>01383911</td> </tr> <tr> <td>Base Name</td> <td>Johnson</td> </tr> <tr> <td>Legal/Statistical Area Description Code</td> <td>06</td> </tr> <tr> <td>MTFCC</td> <td>G4020</td> </tr> <tr> <td>County Class Code</td> <td>H1</td> </tr> <tr> <td>Functional Status</td> <td>A</td> </tr> <tr> <td>Centroid Latitude</td> <td>+32.3789901</td> </tr> <tr> <td>Centroid Longitude</td> <td>-097.3663791</td> </tr> <tr> <td>Internal Point Latitude</td> <td>+32.3798207</td> </tr> <tr> <td>Internal Point Longitude</td> <td>-097.3649587</td> </tr> <tr> <td>Land Area (Square Meters)</td> <td>1877798304</td> </tr> <tr> <td>Water Area (Square Meters)</td> <td>24427654</td> </tr> <tr> <td>MAF/TIGER OID</td> <td>27590231555691</td> </tr> </tbody> </table>	Geographic Identifier	48251	Name	Johnson County	State FIPS Code	48	County FIPS Code	251	County NS Code	01383911	Base Name	Johnson	Legal/Statistical Area Description Code	06	MTFCC	G4020	County Class Code	H1	Functional Status	A	Centroid Latitude	+32.3789901	Centroid Longitude	-097.3663791	Internal Point Latitude	+32.3798207	Internal Point Longitude	-097.3649587	Land Area (Square Meters)	1877798304	Water Area (Square Meters)	24427654	MAF/TIGER OID	27590231555691
Geographic Identifier	48251																																		
Name	Johnson County																																		
State FIPS Code	48																																		
County FIPS Code	251																																		
County NS Code	01383911																																		
Base Name	Johnson																																		
Legal/Statistical Area Description Code	06																																		
MTFCC	G4020																																		
County Class Code	H1																																		
Functional Status	A																																		
Centroid Latitude	+32.3789901																																		
Centroid Longitude	-097.3663791																																		
Internal Point Latitude	+32.3798207																																		
Internal Point Longitude	-097.3649587																																		
Land Area (Square Meters)	1877798304																																		
Water Area (Square Meters)	24427654																																		
MAF/TIGER OID	27590231555691																																		
	<p>If a county name (or partial county name) repeats among states, the query returns all counties with that name in the <b>Query Results</b> section of the <b>Task Results</b> tab. Click the correct county to review and TIGERweb zooms to the spatial extent of that county.</p>  <p><b>Identify Results</b></p> <p><b>Query Results</b></p> <p>Counties (Current) [X]</p> <ul style="list-style-type: none"> <li>Johnson, MO</li> <li>Johnson, AR</li> <li><b>Johnson, TX</b></li> <li>Johnson, KS</li> <li>Johnson, IN</li> <li>Johnson, GA</li> <li>Johnson, NE</li> <li>Johnson, IA</li> <li>Johnson, TN</li> <li>Johnson, KY</li> <li>Johnson, WY</li> <li>Johnson, IL</li> </ul>																																		

Step	Action and Result
Step 10	<p>Continue to zoom in using either the <b>Zoom In scrollbar</b> or the rollerball on the mouse to visualize the statistical area boundaries and features used to form the boundaries. At the county extent, statistical area boundary review is likely impossible, so continue to zoom in and pan around the county to manually view the statistical area boundaries and attributes to verify they align with expectations.</p> <p><b>IMPORTANT:</b> While the census tract coding can be reviewed using TIGERweb, the Census Bureau also created Online PDF maps for each county for the sole purpose of reviewing the 2020 census tract coding. The Census Bureau encourages the use of both TIGERweb and the Online PDF maps to conduct a thorough verification review for each county. Refer to <a href="#">Chapter 3</a> for details on that map product.</p>
	<p>The <b>Scale Bar</b> at the bottom left of the map display displays the scale, but it also indicates the zoom level in the form of numbers. <i>At zoom level 6, county boundaries become visible. At zoom level 9, census tracts, CDPs/incorporated places, and CCDs appear. Labels appear at zoom level 11.</i></p>  <p>The screenshot shows the TIGERweb interface with a map of Texas. The map displays various statistical areas, including counties, census tracts, and CCDs. The scale bar at the bottom left indicates a zoom level of 11 and a scale of 1:288,895. The map also shows a search bar at the top and a zoom level indicator on the left side.</p>

Step	Action and Result
Step 11	<p>To start a new query or refresh the screen, click <b>Clear Map</b> (button with an “X”) on the navigation toolbar above the <b>Zoom-In scrollbar</b>. <i>The <b>TIGERweb – Info</b> window disappears and the located entity is no longer highlighted.</i></p> 

Step	Action and Result
Step 12	<p><b>IMPORTANT:</b> The <b>Query</b> tool can also be used to query <b>within the map extent</b> (the extent of the county zoomed from the previous steps) and zoom to individual census tracts, block groups, CDPs and CCDs.</p> <p>With TIGERweb zoomed to the extent of the queried county, change the <b>Select Map...</b> selection from <b>States and Counties</b> to <b>Census Tracts and Blocks</b> (for census tracts and block groups), check the <b>Within Map Extent</b> checkbox, then select the appropriate layer within the <b>Select Layer(s)</b> section, and key the appropriate <b>GEOID</b> or <b>Name</b>. The GEOID for census tracts and block groups is the state and county FIPS code concatenated with the census tract (and block group) codes.</p> <p>To zoom into census tract 1305.00 in Johnson County, Texas, with the map zoomed to the spatial extent of Johnson County Texas, change the <b>Select Map...</b> section from <b>States and Counties</b> to <b>Census Tracts and Blocks</b>, check the <b>Within Map Extent</b> checkbox, select <b>Census Tracts</b> in the <b>Select Layer(s)</b> section, key 48251130500 into the <b>GEOID</b> field and click <b>SUBMIT</b>. <i>TIGERweb zooms to the spatial extent of census tract 1305.00 within Johnson County, Texas.</i></p> <p>To zoom to block group 2 of census tract 1305.00, with the map zoomed to the spatial extent of census tract 1305.00, change the layer to <b>Census Block Groups</b>, key 482511305002 into the <b>GEOID</b> field, and click <b>SUBMIT</b>. <i>TIGERweb zooms to the spatial extent of block group 2 of census tract 1305.00 within Johnson County, Texas.</i></p> 

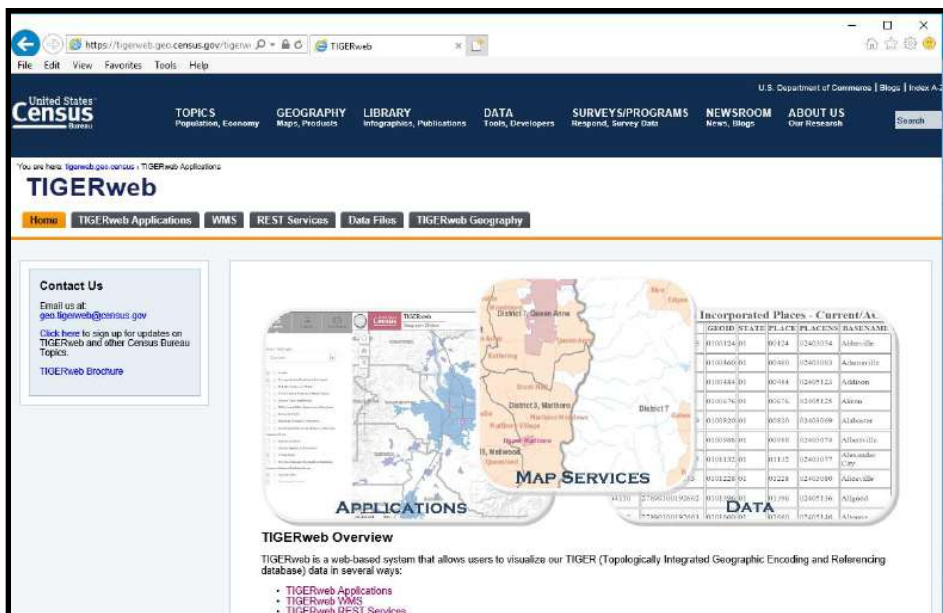
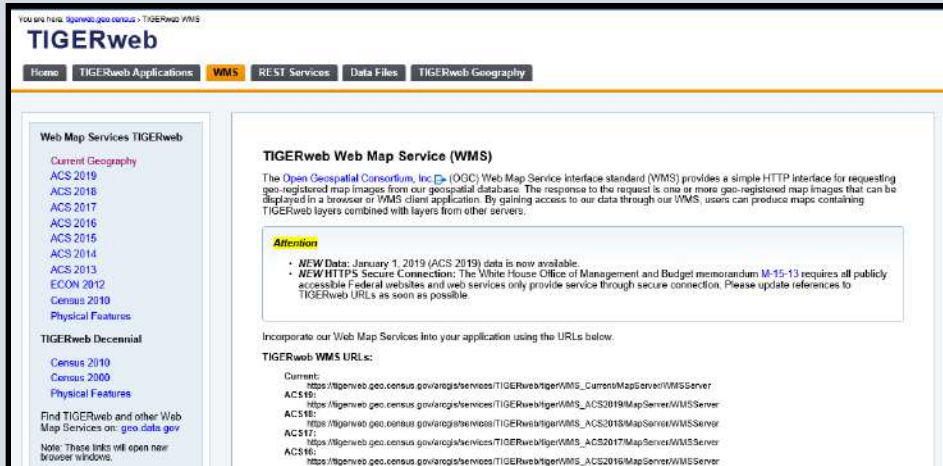
Step	Action and Result
Step 13	<p>To review the CDPs and CCDs, change the <b>Select Map...</b> section to <b>Places and County Subdivisions</b>, select the appropriate layer within the <b>Select Layer(s)</b> choices (e.g., <b>County Subdivisions</b> or <b>Census Designated Places</b>), key all or part of the <b>Name</b> rather than GEOID and click <b>SUBMIT</b>. <i>TIGERweb zooms to the spatial extent of the county subdivision or CDP in Johnson County, Texas.</i></p> <div>  </div> <p><b>Note:</b> This method of querying individual statistical areas may not be feasible for counties with a large number of statistical areas, but it may be helpful if a participant knows exactly what statistical areas they modified during the delineation phase.</p>
	<p>The use of satellite imagery or terrain in TIGERweb may also benefit a participant conducting a review of the 2020 statistical areas. Refer to <a href="#">Appendix B</a> for instructions on toggling between landmass, satellite imagery, and terrain within the TIGERweb online map viewer.</p>

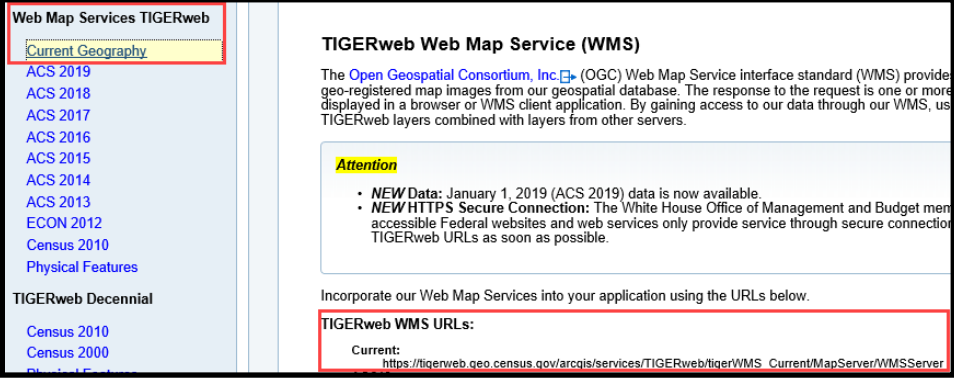
Step	Action and Result
Step 14	<p>Instead of an attribute query, some may want to perform a spatial query. Change the tab within the <b>Query</b> tool from <b>Attribute</b> to <b>Spatial</b>. Select the map from which to query in the <b>Select Map...</b> section and the appropriate layer within the <b>Select Layer(s)</b> section. Choose the spatial method symbol from the six choices: <b>Point</b>, <b>Polyline</b>, <b>Polygon</b>, <b>Rectangle</b>, <b>Free Line</b>, or <b>Free Polygon</b>. Once selected interactively touch/draw on the map display to define the spatial area to query.</p> 
Step 15	<p>If you are responsible for one county in PSAP, review the 2020 statistical areas and attributes in that county to determine if corrections are necessary. Using guidance in <a href="#">Chapter 4</a> of this respondent guide, send an email to the Census Bureau indicating whether you approve of the 2020 statistical areas or whether corrections are forthcoming. If no corrections are identified, your participation concludes after sending an email of approval to the Census Bureau. If corrections are identified, make note of which statistical areas and/or attributes need modification. A list of statistical areas in need of correction is useful when making the corrections in GUPS. Proceed to <a href="#">Part 2</a> of this respondent guide for guidance on correcting the 2020 statistical areas.</p> <p>If you are responsible for more than one county in PSAP, perform a quick review of the 2020 statistical areas and attributes in each county to identify whether or not corrections are necessary. As soon as one correction is identified, move to reviewing the next county until all counties under your responsibility for PSAP are reviewed. Using guidance in <a href="#">Chapter 4</a> of this respondent guide, send one email that gives a status (approved as-is or corrections forthcoming) for all of the counties in your verification universe. If no corrections are identified, your participation concludes after sending an email of approval to the Census Bureau. If corrections are needed, continue to identify corrections in each county, making note of which statistical areas and/or attributes need modification. A list of statistical areas in need of correction is useful when making the corrections in GUPS. Proceed to <a href="#">Part 2</a> of this respondent guide for guidance on correcting the 2020 statistical areas.</p>

## 2.2 TIGERweb WMS and TIGERweb REST Services

Rather than using the TIGERweb online map viewer, see [Table 3](#) for steps on reviewing the county-based 2020 statistical areas by using the TIGERweb WMS. See [Table 4](#) for steps on reviewing the county-based 2020 statistical areas by using the TIGERweb REST Services.

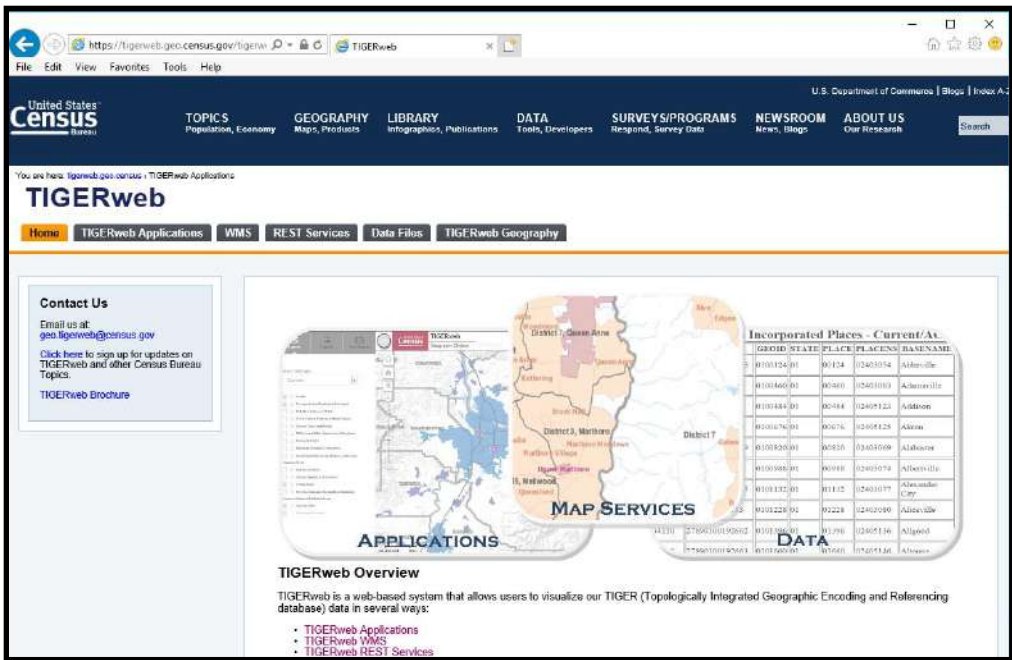
**Table 3: Using the TIGERweb WMS**

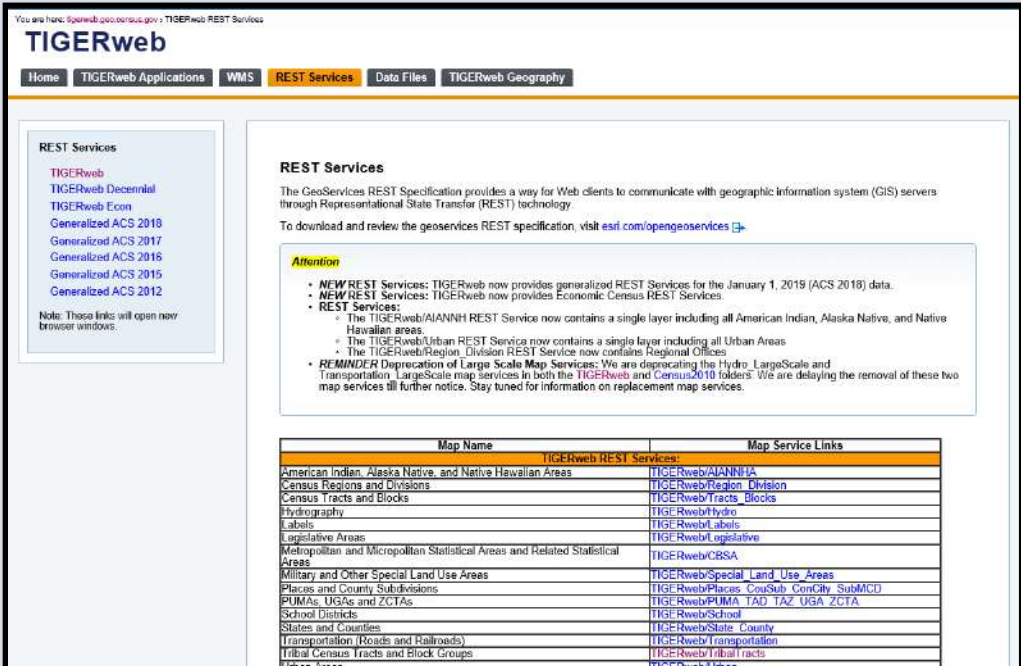
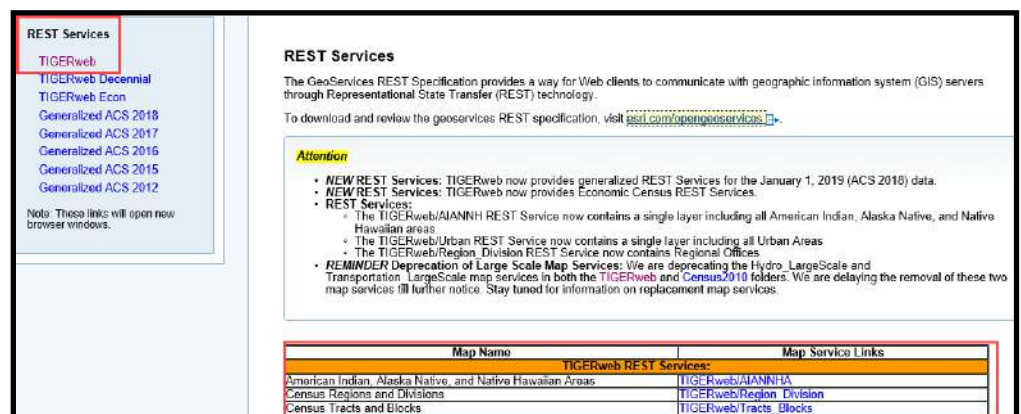
Step	Action and Result
Step 1	<p>Open a new internet browser window and navigate to the TIGERweb website &lt;<a href="https://tigerweb.geo.census.gov/tigerwebmain/TIGERweb_main.html">https://tigerweb.geo.census.gov/tigerwebmain/TIGERweb_main.html</a>&gt;. <i>The TIGERweb main page appears.</i></p> 
Step 2	<p>Click the <b>WMS</b> tab which is two tabs to the right of the <b>Home</b> button. <i>The TIGERweb Web Mapping Service (WMS) page opens.</i> Visit &lt;<a href="https://www.opengeospatial.org/standards/wms">https://www.opengeospatial.org/standards/wms</a>&gt; to download and review the WMS specification.</p> 

Step	Action and Result
Step 3	<p>Incorporate the <b>Current</b> URL from the <b>TIGERweb WMS URLs</b> section on the WMS main page into your local service/system OR select the <b>Current Geography</b> link along the left side of the WMS main page beneath the <b>Web Map Services TIGERweb</b> section to uncover additional WMS options.</p> 
Step 4	<p>Both methods provide the ability to load URLs for the <b>Current</b> vintage and <b>Census 2010 vintage</b> data into your local service/system for comparison. Follow the information on screen to complete loading the data. Compare the 2020 statistical areas to the 2010 statistical areas by turning the Census 2010 layer on/off in your local service/system.</p> <p><b>Note:</b> While having the Census 2010 layer for comparison is nice, a participant's focus should remain on whether the existing 2020 statistical areas work for the tabulation and distribution of statistical data and whether any attribute errors exist.</p>
Step 5	<p>Zoom and pan, or perform queries within your service/system, after incorporating the <b>Current</b> vintage census data to review the 2020 statistical area boundaries and attributes applicable to your county(s) to verify they align with expectations. As a reminder, the statistical areas boundaries to review, include census tracts, block groups, census designated places (CDPs), and census county divisions (CCDs).</p> <p><b>IMPORTANT:</b> While the census tract coding can be reviewed using TIGERweb WMS, the Census Bureau also created Online PDF maps for each county for the sole purpose of reviewing the 2020 census tract coding. The Census Bureau encourages the use of both TIGERweb and the Online PDF maps to conduct a thorough verification review for each county. Refer to <a href="#">Chapter 3</a> for details on that map product.</p>

Step	Action and Result
Step 6	<p>If you are responsible for one county in PSAP, review the 2020 statistical areas and attributes in that county to determine if corrections are necessary. Using guidance in <a href="#">Chapter 4</a> of this respondent guide, send an email to the Census Bureau indicating whether you approve of the 2020 statistical areas or whether corrections are forthcoming. If no corrections are identified, your participation concludes after sending an email of approval to the Census Bureau. If corrections are identified, make note of which statistical areas and/or attributes need modification. A list of statistical areas in need of correction is useful when making the corrections in GUPS. Proceed to <a href="#">Part 2</a> of this respondent guide for guidance on correcting the 2020 statistical areas.</p> <p>If you are responsible for more than one county in PSAP, perform a quick review of the 2020 statistical areas and attributes in each county to identify whether or not corrections are necessary. As soon as one correction is identified, move to reviewing the next county until all counties under your responsibility for PSAP are reviewed. Using guidance in <a href="#">Chapter 4</a> of this respondent guide, send one email that gives a status (approved as-is or corrections forthcoming) for all of the counties in your verification universe. If no corrections are identified, your participation concludes after sending an email of approval to the Census Bureau. If corrections are needed, continue to identify corrections in each county, making note of which statistical areas and/or attributes need modification. A list of statistical areas in need of correction is useful when making the corrections in GUPS. Proceed to <a href="#">Part 2</a> of this respondent guide for guidance on correcting the 2020 statistical areas.</p>

**Table 4: Using the TIGERweb REST Services**

Step	Action and Result
Step 1	<p>Open a new internet browser window and navigate to the TIGERweb website <a href="https://tigerweb.geo.census.gov/tigerwebmain/TIGERweb_main.html">https://tigerweb.geo.census.gov/tigerwebmain/TIGERweb_main.html</a>. The TIGERweb main page appears.</p>  <p><b>TIGERweb Overview</b></p> <p>TIGERweb is a web-based system that allows users to visualize our TIGER (Topologically Integrated Geographic Encoding and Referencing database) data in several ways:</p> <ul style="list-style-type: none"> <li>• TIGERweb Applications</li> <li>• TIGERweb WMS</li> <li>• TIGERweb REST Services</li> </ul>

Step	Action and Result
Step 2	<p>Click the <b>REST Services</b> tab which is three tabs to the right of the <b>Home</b> button. <i>The <b>REST Services</b> page opens.</i> Visit &lt;<a href="https://www.esri.com/arcgis/services">https://www.esri.com/arcgis/services</a>&gt; to download and review the GeoServices REST specification.</p> 
Step 3	<p>Incorporate the appropriate <b>Map Service Links</b> into your local server/system (e.g., <b>Census Tracts and Blocks</b> and <b>Places and County Subdivisions</b>, plus other valuable reference links like <b>Transportation</b>, <b>States and Counties</b>, and <b>Hydrography</b>) from the <b>TIGERweb REST Services</b> section on the REST Services main page OR select the <b>TIGERweb</b> link along the left side of the REST Services main page beneath the <b>REST Services</b> section to uncover additional REST Services options. Do not select any other service than <b>TIGERweb</b>.</p> 
Step 4	<p>Both methods provide the ability to load URLs for the <b>Current</b> vintage and <b>Census 2010</b> vintage data into your local service/system for comparison. Follow the information on screen to complete loading the data. Compare the 2020 statistical areas to the 2010 statistical areas by turning the Census 2010 layer on/off in your local service/system.</p> <p><b>Note:</b> While having the Census 2010 layer for comparison is nice, a participant's focus should remain on whether the existing 2020 statistical areas work for the tabulation and distribution of statistical data and whether any attribute errors exist.</p>

Step	Action and Result
Step 5	<p>Zoom and pan, or perform queries within your service/system, after incorporating the <b>Current</b> vintage census data to review the 2020 statistical area boundaries and attributes applicable to your county(s) to verify they align with expectations. As a reminder, the statistical areas boundaries to review, include census tracts, block groups, census designated places (CDPs), and census county divisions (CCDs).</p> <p><b>IMPORTANT:</b> While the census tract coding can be reviewed using TIGERweb REST Services, the Census Bureau also created Online PDF maps for each county for the sole purpose of reviewing the 2020 census tract coding. The Census Bureau encourages the use of both TIGERweb and the Online PDF maps to conduct a thorough verification review for each county. Refer to <a href="#">Chapter 3</a> for details on that map product.</p>
Step 6	<p>If you are responsible for one county in PSAP, review the 2020 statistical areas and attributes in that county to determine if corrections are necessary. Using guidance in <a href="#">Chapter 4</a> of this respondent guide, send an email to the Census Bureau indicating whether you approve of the 2020 statistical areas or whether corrections are forthcoming. If no corrections are identified, your participation concludes after sending an email of approval to the Census Bureau. If corrections are identified, make note of which statistical areas and/or attributes need modification. A list of statistical areas in need of correction is useful when making the corrections in GUPS. Proceed to <a href="#">Part 2</a> of this respondent guide for guidance on correcting the 2020 statistical areas.</p> <p>If you are responsible for more than one county in PSAP, perform a quick review of the 2020 statistical areas and attributes in each county to identify whether or not corrections are necessary. As soon as one correction is identified, move to reviewing the next county until all counties under your responsibility for PSAP are reviewed. Using guidance in <a href="#">Chapter 4</a> of this respondent guide, send one email that gives a status (approved as-is or corrections forthcoming) for all of the counties in your verification universe. If no corrections are identified, your participation concludes after sending an email of approval to the Census Bureau. If corrections are needed, continue to identify corrections in each county, making note of which statistical areas and/or attributes need modification. A list of statistical areas in need of correction is useful when making the corrections in GUPS. Proceed to <a href="#">Part 2</a> of this respondent guide for guidance on correcting the 2020 statistical areas.</p>

## CHAPTER 3 USING ONLINE PDF MAPS TO REVIEW 2020 CENSUS TRACT CODING

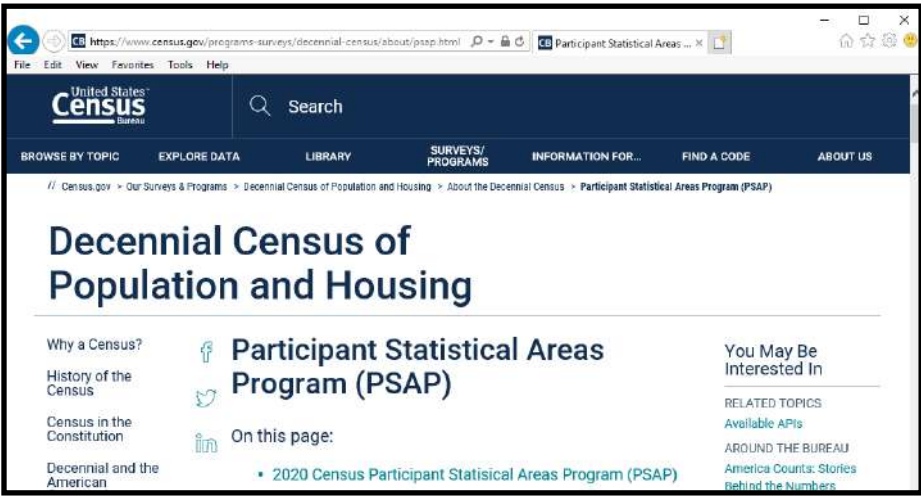
The Census Bureau created county-based, Online PDF maps that show the census tract boundaries, census tract coding (labels), and other common map features to assist with the review of the 2020 census tract coding. These maps are not available in printed form and are not for use for any reason other than reviewing the 2020 census tract codes.

While the 2020 census tract codes can be viewed in TIGERweb, the Census Bureau believes this product allows participants to more easily scan and review the coding scheme to ensure any long-standing or existing coding patterns are maintained throughout the 2020 Census PSAP process. The verification phase is the last opportunity to correct errors or inconsistencies with census tract coding before the final 2020 tabulation geography is created. This review is very important for participants with long established census tract plans and coding schemes.

The file naming convention for these map files is as follows: **PSAPV20CT<ssccc>.pdf**, where <ssccc> corresponds to the five-digit, state county FIPS code described in [Section A](#) and listed on the verification announcement for your responsible county(s). For example, the file name for Ramsey County, Minnesota would be **PSAPV20CT27123.pdf** and the file name for Arroyo Municipio, Puerto Rico would be **PSAPV20CT72015.pdf**. The maps include **Census Tract Code Review Map** in their title to reinforce their purpose during PSAP verification.

Refer to [Table 5](#) for the steps to locate and use the Online PDF maps to conduct a review of the 2020 census tract coding within a county.

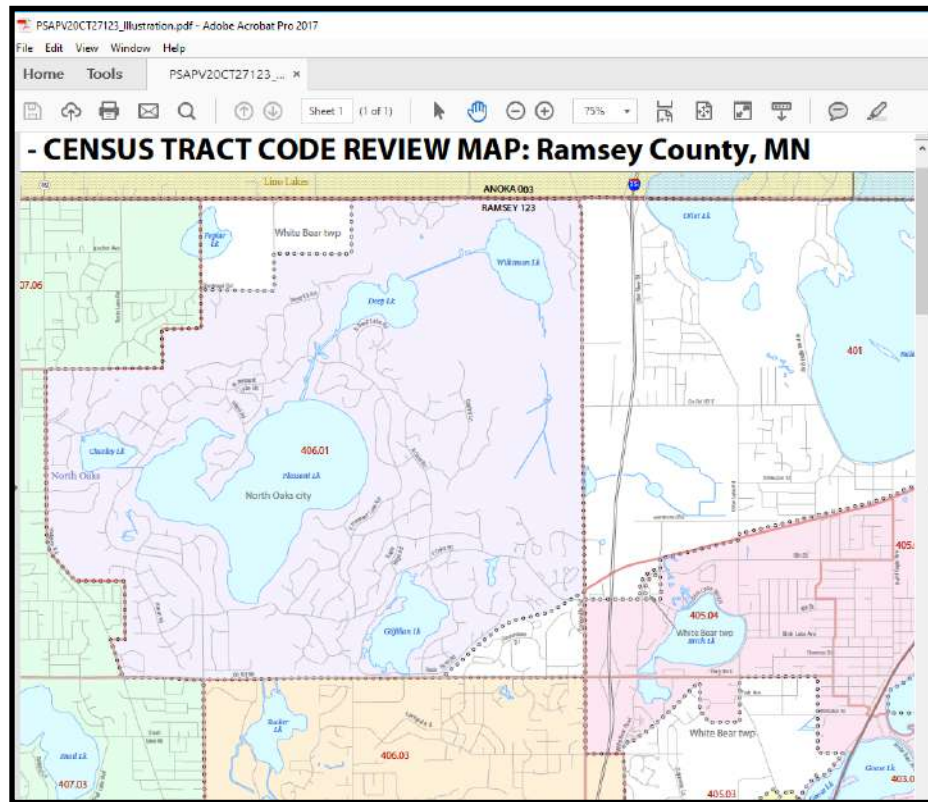
**Table 5: Locating and Using the Online PDF Maps to Review 2020 Census Tract Coding**

Step	Action and Result
Step 1	<p>Open a new internet browser window and navigate to the PSAP website <a href="https://www.census.gov/programs-surveys/decennial-census/about/psap.html">https://www.census.gov/programs-surveys/decennial-census/about/psap.html</a>. The PSAP main page appears.</p> 
Step 2	<p>Scroll down the page to locate the <b>Online PDF Maps – Census Tract</b> sub-section within the <b>2020 Census PSAP Verification Materials</b> section.</p>
Step 3	<p>From the drop-down menu within the <b>Choose a State to View</b> section, select the name of the state in which the county to review is located. The system routes participants to a file transfer protocol (FTP) directory for that state. <i>The individual PDF files for each county within the state appear.</i></p>
Step 4	<p>Using the naming convention described in the introductory paragraph to this table, click the PDF file name to open the map directly on-screen or to save the file locally for later use. Follow the on-screen instructions for downloading and saving the file.</p> <p><b>Note:</b> If using the file locally, ensure use of Adobe Reader® or Adobe Acrobat® to preserve the map symbology and readability.</p>

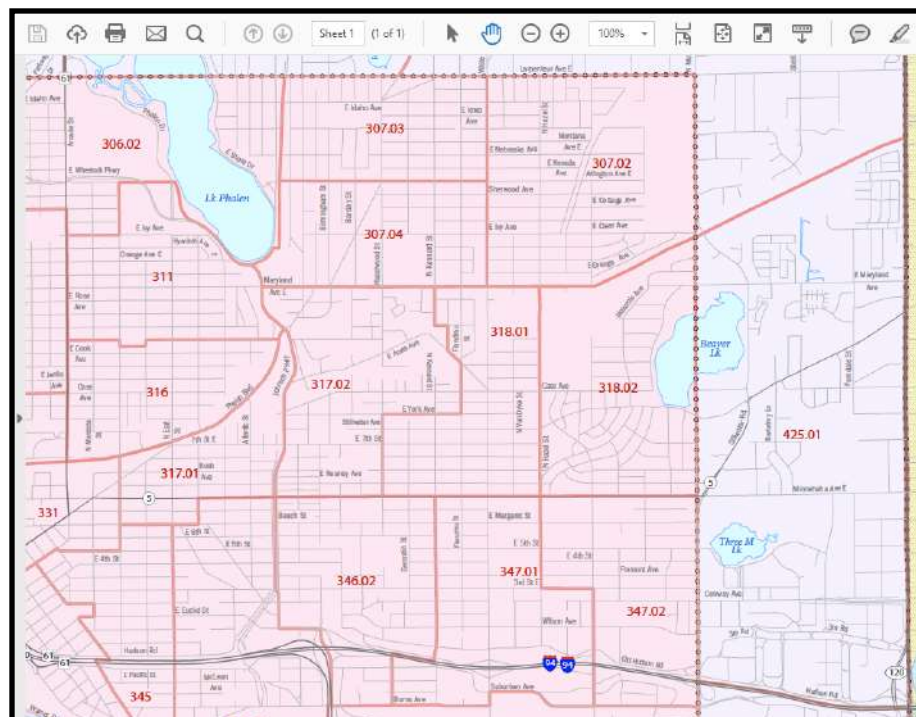
With the county-based PDF file open, zoom and pan around the county checking the 2020 census tract coding to confirm it aligns with expectations. *The first image below shows the map at a 75% zoom level in Adobe Acrobat and includes a portion of the map title.*

**Note:** These images are for illustrative purposes only and do not reflect the 2020 census tracts for Ramsey County, MN.

Step 5



*The second image shows the map at 100% zoom level with several census tracts displayed.*

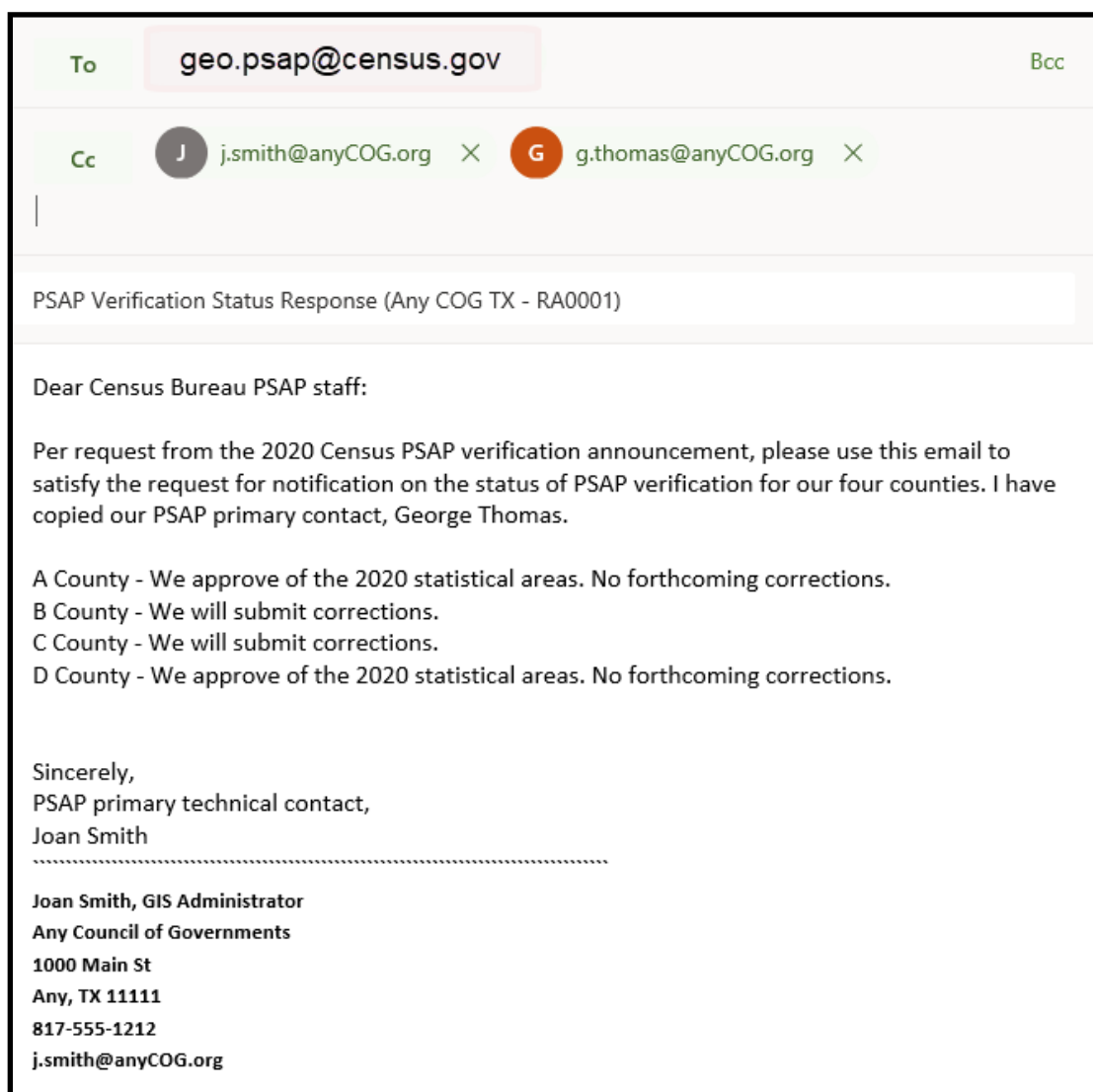


Step	Action and <i>Result</i>
Step 6	<p>Make note of the 2020 census tract coding errors as they are discovered and continue to review the county until all of the census tract codes have been reviewed. Conducting a complete review of the county allows participants to prepare a complete list of census tracts that need correction to their coding.</p> <p>If no corrections to the statistical area boundaries were discovered during the TIGERweb review, but census tract coding errors were discovered during a review of the Online PDF maps, please notify the Census Bureau of forthcoming corrections by following the instructions in <a href="#">Chapter 4</a>.</p> <p><b>Note:</b> If you have already notified the Census Bureau of forthcoming corrections for your county(s) once boundaries issues were discovered using TIGERweb, there is no need to provide additional notification if census tract coding errors are discovered.</p>
Step 7	Refer to <a href="#">Appendix D</a> for instruction on using GUPS to correct the errant census tract coding.

## CHAPTER 4 EMAIL NOTIFICATION OF CORRECTIONS TO OR APPROVAL OF THE 2020 STATISTICAL AREAS

Within 30 calendar days of receipt of the verification announcement, the Census Bureau requests either the PSAP primary official contact or the PSAP primary technical contact email <[geo.psap@census.gov](mailto:geo.psap@census.gov)> to indicate whether or not corrections to the 2020 statistical areas for their county(s) are forthcoming. See [Figure 1](#) for a sample email that contains information that ensures proper accounting for your county(s) and their verification status.

**Note:** The information included in the sample email is fictitious.



**Figure 1: Sample Verification Email Notification from Participant**

A complete review of a county is not required to notify the Census Bureau of forthcoming corrections. Identification of any correction to a 2020 statistical area boundary or to a 2020 census tract code allows for an email to be sent notifying the Census Bureau of forthcoming corrections to the specific county. Conversely, if the review concludes that no corrections are

required, an email notification of approval allows the Census Bureau to proceed with the 2020 statistical areas as they exist in the verification phase materials. If corrections are identified after having notified the Census Bureau that no corrections were necessary, please send an email alerting the Census Bureau to a change in the verification status for the specific county(s).

For participants with more than one county to review, the Census Bureau suggests a quick review of each county so that notification can be sent for all counties at once within the requested 30 calendar days of receipt of the verification announcement. If the Census Bureau does not receive email notification of approval or has not received a verification phase submission containing corrections for your county(s) halfway through the review period (i.e., approximately 45 calendar days from receipt of the verification announcement), a follow-up notification regarding the status of your county(s) will be distributed by email or letter. This follow-up notification includes a reminder to email the Census Bureau of your approval or of your intention to make a submission and reinforces the importance of an on-time verification submission. Participants are encouraged to use the time remaining in the review period to complete their verification phase corrections. Late submissions will not be accepted.

Prior to making **major or significant corrections** to the statistical area boundaries or attributes, contact the Census Bureau by email at <[geo.psap@census.gov](mailto:geo.psap@census.gov)> or by phone at 1-844-788-4921 to receive guidance on how, or if, to proceed. There may be situations where boundary changes suggested during the delineation phase were not applied and communication with the participant about those changes was not initiated. Contacting the Census Bureau to learn more about why the verification materials do not reflect delineation phase updates will inform a participant whether resubmitting the same changes are acceptable for the verification phase.

However, if **minor or a few corrections** to the statistical area boundaries or attributes are necessary, proceed with the instructions in **Part 2** of this material and the *2020 Census PSAP Standard Respondent Guide (G-730)* to complete the statistical area corrections.

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**IMPORTANT:** Participants that agree with the 2020 statistical areas for their county(s) only need to submit an email stating their approval. No submission or additional correspondence is required. Proceed to **Chapter 7** to close-out 2020 Census PSAP.

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## PART 2 CORRECTING 2020 STATISTICAL AREAS

Participants that determine corrections to the 2020 statistical areas are necessary must use GUPS to perform the corrections. Because the process for using GUPS to update statistical areas during the verification phase is identical to the process used during the delineation phase, the detailed content for Part 2 and Part 3 of the delineation phase respondent guide is not repeated within this verification phase material. Participants must refer to both the *2020 Census PSAP Standard Respondent Guide (G-730)* from the delineation phase and to the instructions provided in this part of the verification phase respondent guide to make corrections. They should also review the training materials from both delineation and verification phases.

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**IMPORTANT:** If no corrections were identified during the review of the 2020 statistical areas described in Part 1, skip to [Chapter 7](#). Participation in 2020 Census PSAP concludes after sending an email to the Census Bureau indicating approval of the 2020 statistical areas as they exist in TIGERweb.

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As a reminder for participants with corrections, the statistical areas modified during the verification phase must still meet the criteria and guidelines set forth during the delineation phase. Refer to the individual statistical geography chapters (e.g., Chapters 2 – 4), shown in [Figure 2](#), and *Appendix B* within the *2020 Census PSAP Standard Respondent Guide (G-730)* or to the *Federal Register* notice section on the PSAP website to ensure corrections made to the 2020 statistical areas follow the established criteria, guidelines and requirements.

<b>Part 1. Overview of the 2020 Census PSAP Materials and the Standard Statistical Geographies .....</b>	<b>1</b>
<b>Chapter 1 Delineation Phase Materials for 2020 Census PSAP .....</b>	<b>1</b>
1.1 Informational and Instructional Materials .....	1
1.2 DVD Materials.....	2
1.3 Delineation Phase Postcard.....	2
<b>Chapter 2 Census Tracts .....</b>	<b>1</b>
2.1 Census Tract Threshold Requirements.....	2
2.2 Census Tract Codes and Numeric Identification.....	3
2.3 Census Tract Boundary Requirements .....	3
<b>Chapter 3 Block Groups.....</b>	<b>1</b>
3.1 Block Group Threshold Requirements.....	2
3.2 Block Group Codes and Numeric Identification .....	2
3.3 Block Group Boundary Requirements .....	3
<b>Chapter 4 Census Designated Places (CDPs) .....</b>	<b>1</b>
<b>Chapter 5 Census County Divisions (CCDs) .....</b>	<b>1</b>
5.1 Census County Division Name Identification.....	2

**Figure 2: Individual Statistical Geography Chapters in the G-730 Table of Contents**

## CHAPTER 5 USING GUPS TO CORRECT 2020 STATISTICAL AREAS

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This chapter provides instructions for updating GUPS in support of the verification phase and provides a refresher on getting started with GUPS by opening a new project for PSAP Verification. It introduces modifications to GUPS created to support the verification phase and reinforces the importance of using the proper, existing GUPS tools for making corrections to the 2020 statistical areas. It concludes with a section that includes the instructions for creating the verification phase .zip file for submission.

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**IMPORTANT:** Numerous details exist in the delineation phase materials, both the *2020 Census PSAP Standard Respondent Guide (G-730)* and the training webinar recording, that do not repeat in the verification phase material. For this reason, the delineation phase materials are the primary source of information to implement verification phase corrections.

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### 5.1 Updating GUPS

Participants with corrections to the 2020 statistical areas must update their version of GUPS from the delineation phase. In addition to new tools and functionality within GUPS, the newer version is programmed to run on the QGIS 3 Madeira platform rather than on QGIS 2 Las Palmas platform. The Census Bureau bundled the update for GUPS and QGIS into a single .zip file available for download from the PSAP website. No software installation DVDs are distributed for the verification phase.

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**IMPORTANT:** Participants must download and install the newer version of software to make corrections to the 2020 statistical areas during the verification phase.

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The local computer to install the newer version of GUPS and to use for the submission of corrections (by using the Secure Web Incoming Module (SWIM)) needs the minimum requirements listed below in [Table 6](#). The Census Bureau recommends installing the newer version of GUPS on the same local computer(s) used for the delineation phase.

**Table 6: Requirements for Hardware, Operating Systems, and Internet Browsers**

Hardware	Operating System	Supported Browsers
<p><b>Disk Space Needed to Run GUPS:</b></p> <p>4 GB</p> <p><b>Disk Space Needed to Store Shapefiles:</b></p> <p>Shapefile sizes vary. To view the size of your shapefiles, select a file/ folder, right-click, and choose <b>Properties</b> in the drop-down menu. The <b>Files Properties</b> box opens and displays the file/folder sizes. Select multiple files/folders in the list to view their properties via the same method.</p> <p><b>RAM:</b></p> <ul style="list-style-type: none"> <li>4 GB minimum; 8 GB or more recommended for optimal performance.</li> </ul>	<p><b>Windows®:</b></p> <p>To run GUPS, Windows users need one of the following Windows operating systems:</p> <ul style="list-style-type: none"> <li>Windows 7®</li> <li>Windows 8®</li> <li>Windows 10®</li> </ul> <p><b>Apple®:</b></p> <p>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. Find instructions for using Boot Camp at: <a href="https://www.apple.com/support/bootcamp/getstarted/">https://www.apple.com/support/bootcamp/getstarted/</a>. Some Apple iOS® users may want to use Red Hat software. Locate instructions at: <a href="https://www.redhat.com/download">https://www.redhat.com/download</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>	<p><b>Minimum Browser Versions to Use the Secure Web Incoming Module (SWIM):</b></p> <p>SWIM supports the two most recent versions of each of the major internet browsers:</p> <ul style="list-style-type: none"> <li>Internet Explorer®</li> <li>Google Chrome®</li> <li>Mozilla Firefox®</li> <li>Apple Safari®</li> </ul>

Depending on the version of Windows or Operating System on the local computer used for PSAP, the GUPS dialog boxes shown throughout this document may have a different appearance than the screenshots contained in the respondent guide, although the content is essentially the same.

### 5.1.1 Downloading and Installing GUPS and QGIS

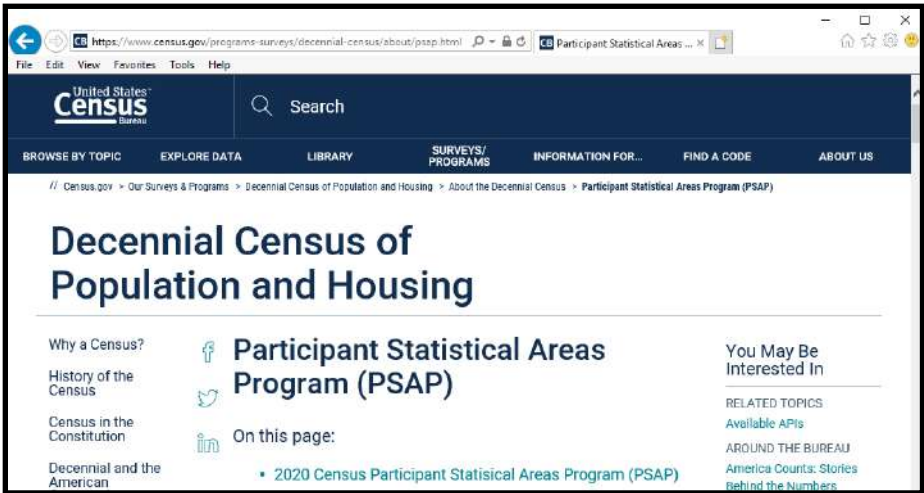
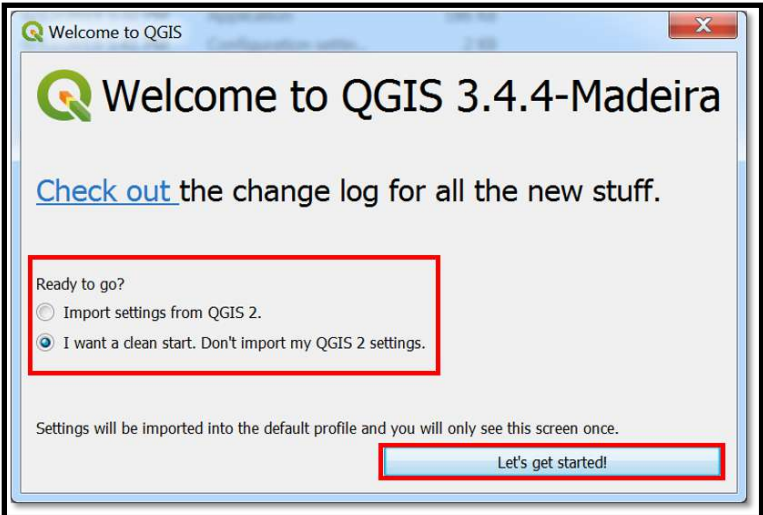
**Table 7** provides the steps to download and install the newer version of GUPS and QGIS necessary to support verification phase corrections.

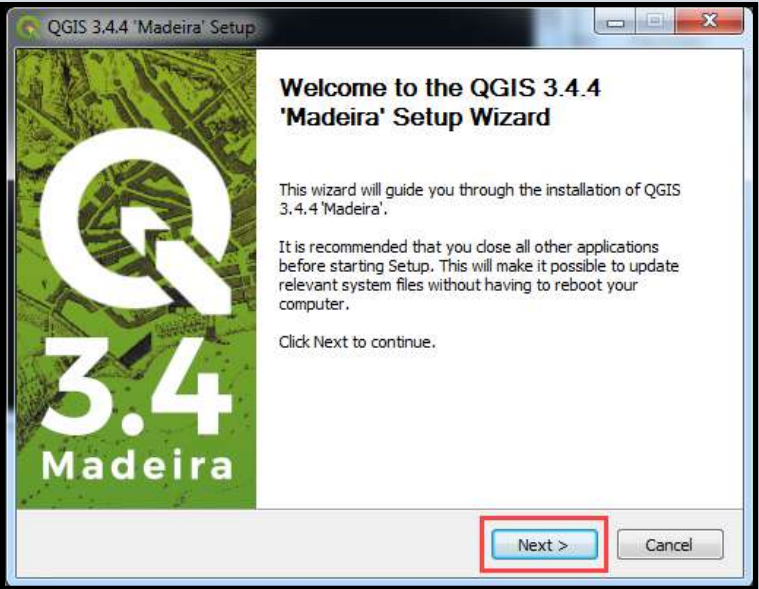
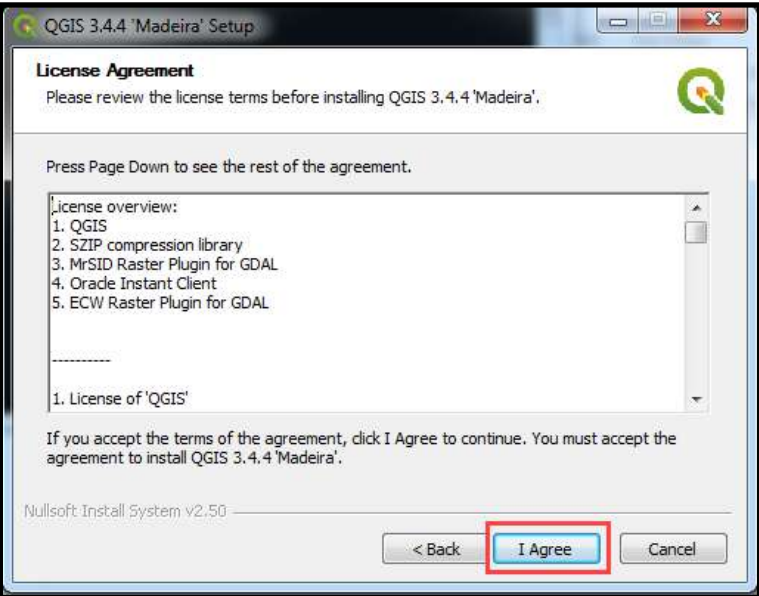
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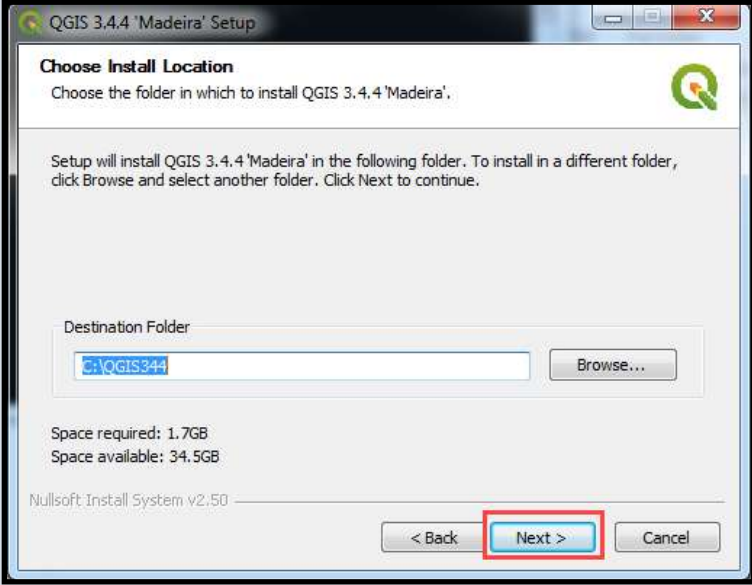
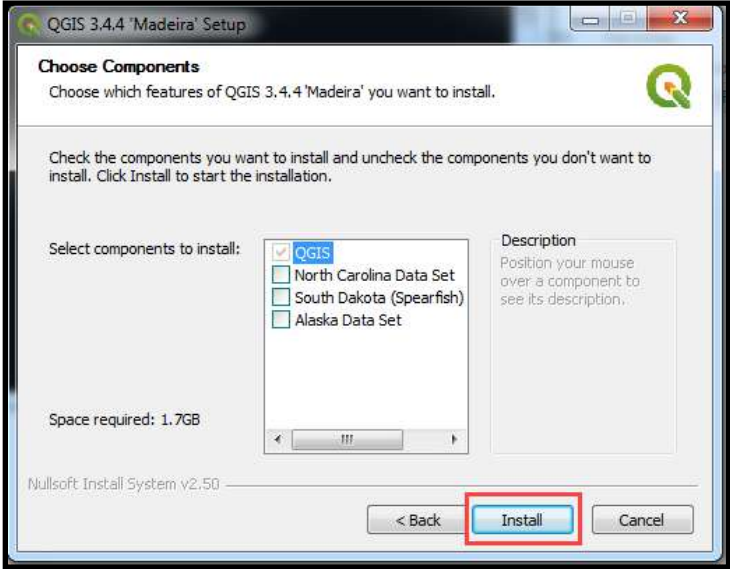

**Note:** Administrator privileges are likely necessary to install GUPS. Check with the local system administrator for instructions on installing an external software to the local computer prior to contacting the Census Bureau for assistance.

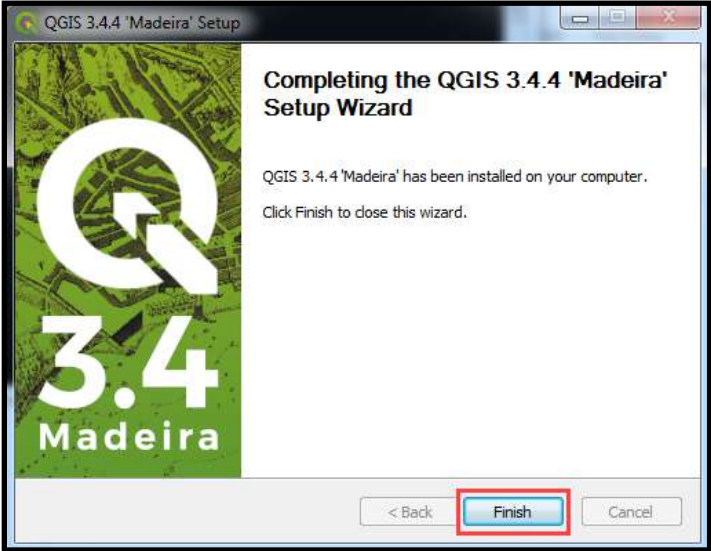
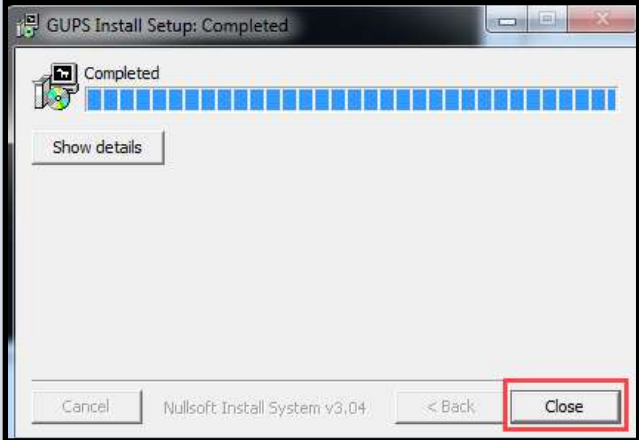
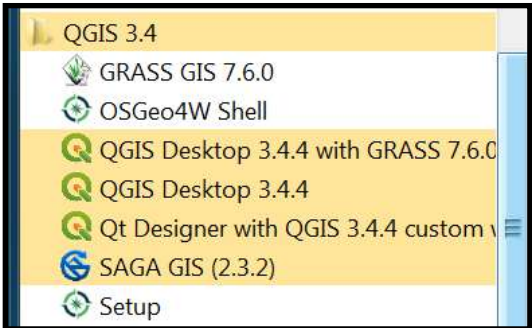
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**Table 7: Downloading and Installing the Newer Version of GUPS and QGIS**

Step	Action and Result
Step 1	<p>Open a new internet browser window and navigate to the PSAP website &lt;<a href="https://www.census.gov/programs-surveys/decennial-census/about/psap.html">https://www.census.gov/programs-surveys/decennial-census/about/psap.html</a>&gt;. The PSAP main page appears.</p>  <p>The screenshot shows the 'Participant Statistical Areas Program (PSAP)' page on the U.S. Census Bureau website. The page title is 'Decennial Census of Population and Housing'. It features a search bar, navigation links like 'BROWSE BY TOPIC', 'EXPLORE DATA', 'LIBRARY', 'SURVEYS/PROGRAMS', 'INFORMATION FOR...', 'FIND A CODE', and 'ABOUT US'. The main content area includes a section for 'Participant Statistical Areas Program (PSAP)' with sub-sections like 'Why a Census?', 'History of the Census', 'Census in the Constitution', and 'Decennial and the American'. There are also links for 'On this page:' and 'You May Be Interested In'.</p>
Step 2	<p>Scroll down the page to the <b>2020 Census PSAP Verification Materials</b> section to locate the <b>Download the GUPS</b> link. Click the link to download the file. Use <b>Save As</b> rather than <b>Save</b> to choose a specific folder on the local computer to download the file.</p>
Step 3	<p>Navigate to the folder on the local computer where the downloaded .zip file resides. Double-click the .zip file to unzip and extract its contents.</p>
Step 4	<p>From the folder where the .zip file was extracted, double-click the <b>SETUP-&lt;version&gt;.bat</b> file to start installation. Regardless of the version number of the file, there will be only one SETUP .bat file to choose.</p>
Step 5	<p>The <b>Welcome to QGIS</b> screen appears that allows a participant to import their previous settings from QGIS 2 or starting clean. Choose <b>Start Clean</b> and click <b>Let's get started</b> to proceed. Note, if a new version of GUPS that uses QGIS 3 is already installed from your work with other census programs, this window may not appear.</p>  <p>The screenshot shows the 'Welcome to QGIS' dialog box for version 3.4.4-Madeira. It includes a link to 'Check out the change log for all the new stuff.' Below this, there are two radio button options: 'Import settings from QGIS 2.' and 'I want a clean start. Don't import my QGIS 2 settings.' The second option is selected. At the bottom, there is a 'Let's get started!' button. A red box highlights the radio button options, and another red box highlights the 'Let's get started!' button.</p>

Step	Action and Result
Step 6	<p>When the installer opens, <i>the <b>Welcome to the QGIS 3.4.4 'Madeira' Setup Wizard</b> screen appears.</i></p>  <p><b>Note:</b> The version needed for the verification phase is QGIS 3.4.4 Madeira. If the exact same version of QGIS exists on the computer, an instruction to uninstall and reinstall may appear. Participants may retain other versions of QGIS that may be in use for other programs (e.g., QGIS 2 Las Palmas version used for the delineation phase), but we suggest to reinstall if the same version exists on the computer to ensure installation of the latest update.</p> <p>Before proceeding with installation, close all other programs or applications. Once other programs and applications are closed, click the <b>Next</b> button.</p>
Step 7	<p><i>The <b>License Agreement</b> screen appears. Read the License Agreement and click the <b>I Agree</b> button to continue.</i></p> 

Step	Action and Result
Step 8	<p>The <b>Choose Install Location</b> screen opens. For performance and stability, the Census Bureau recommends installation to the default directory even though the <b>Browse</b> button allows for changing of the installation directory. Click <b>Next</b> to continue with installation.</p> 
Step 9	<p>The <b>Choose Components</b> screen opens.</p>  <p>'<input checked="" type="checkbox"/> QGIS' in the <b>Select components to install</b> field is checked and grayed out since it is the default. Simply click <b>Install</b> to continue.</p>
	<p>To review a previous screen or reread the license agreement, click the <b>Back</b> button (each screen contains this button). <i>This returns the screen to the previous page.</i></p>

Step	Action and Result
Step 10	<p>The software takes between five and 10 minutes to install. <i>When it finishes installation, the <b>Completing the QGIS 3.4.4 'Madeira' Setup Wizard</b> screen opens.</i> Click the <b>Finish</b> button to finish the QGIS update and launch the GUPS update.</p> 
Step 11	<p>The <b>GUPS Install Setup: Completed</b> screen opens showing the status of the installation of GUPS. To complete the installation, click the <b>Close</b> button.</p> 
Step 12	<p>Use <b>QGIS Desktop 3.4.4</b> for the verification phase work. Disregard the other software installed as part of the process. <i>Once the application installs, QGIS 3.4 is added to the Start Menu, All Programs list and a QGIS 3.4 icon is created on the desktop.</i></p> 

After successfully updating GUPS and QGIS for use in the verification phase, participants are ready to begin their work to correct the 2020 statistical areas. Proceed to the next section for more instructions on opening GUPS and starting a new project.

## 5.2 Opening GUPS and Starting a New Project

Because no DVDs are distributed for the verification phase, participants with corrections must use the **Census Web** option in GUPS to download the shapefiles directly into GUPS. To open the GUPS using Census Web follow the steps in **Table 8** below.

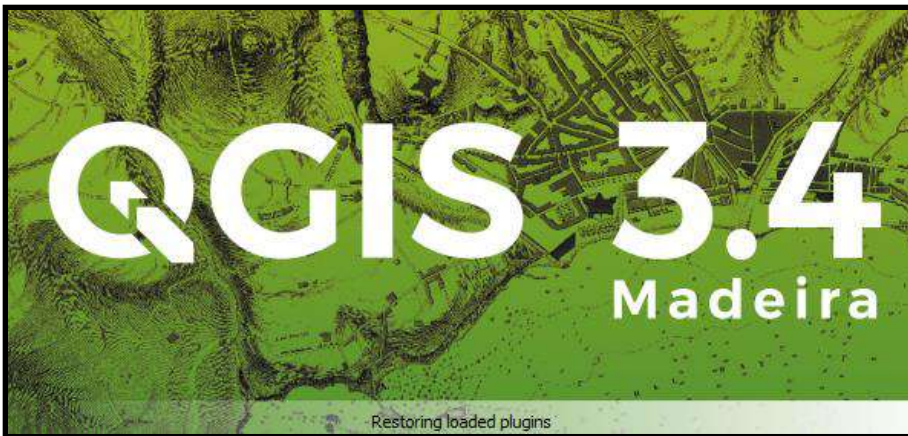
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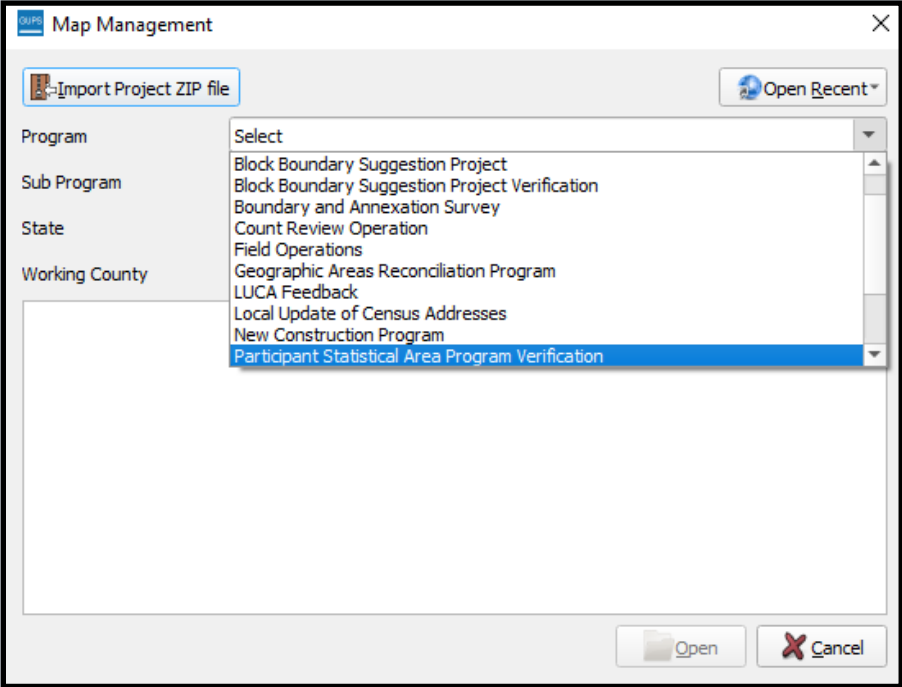
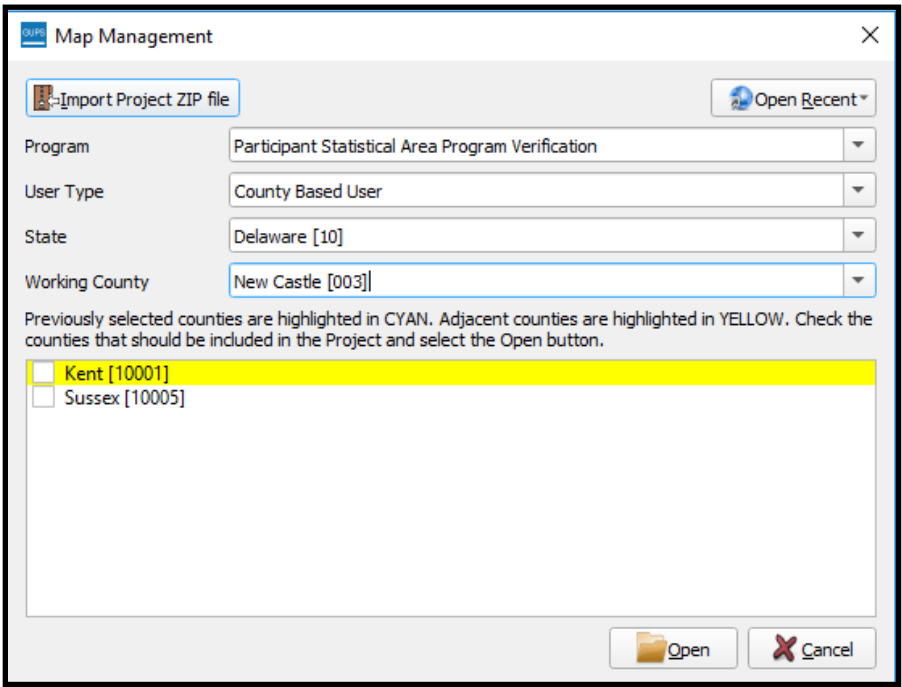
**IMPORTANT:** GUPS needs at least 4 gigabytes of free space on the hard drive to begin.


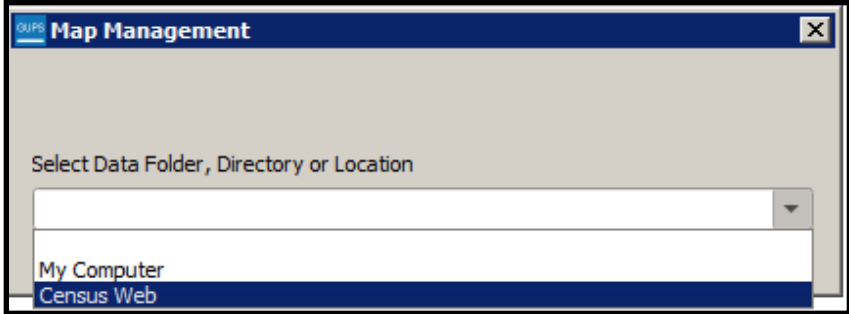
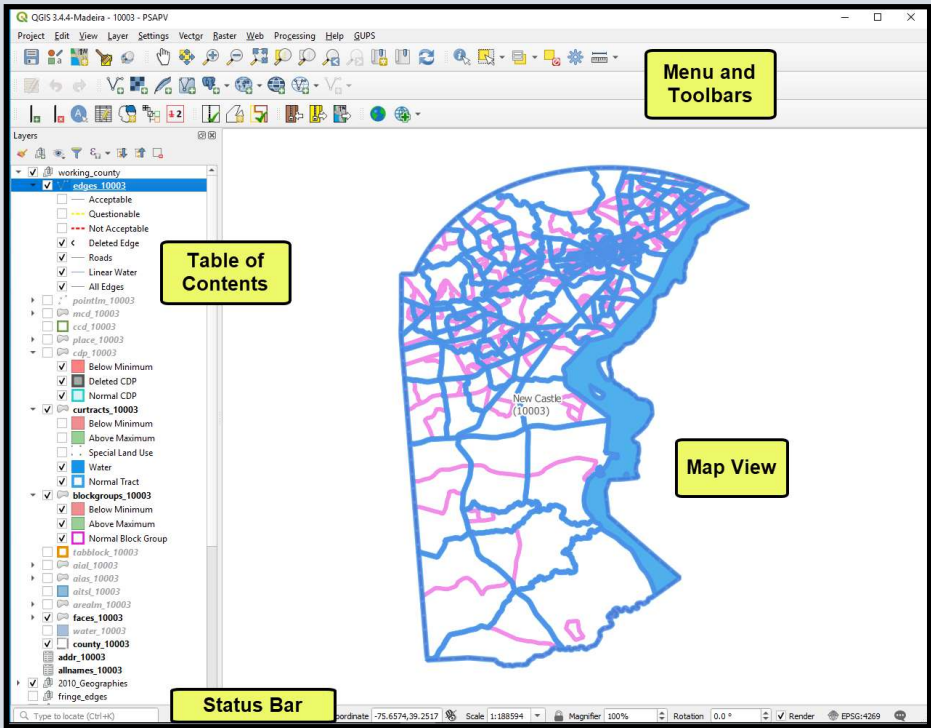
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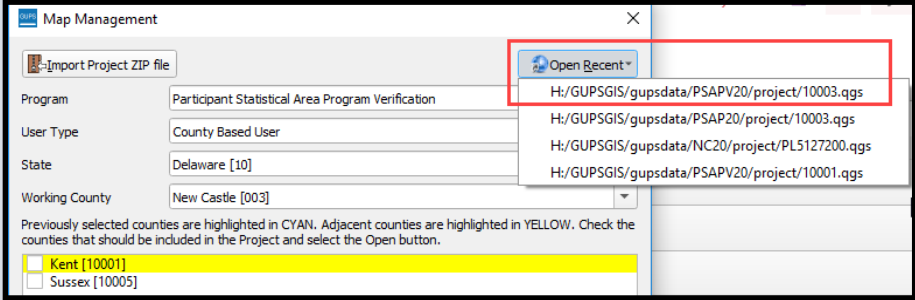

To practice using GUPS without committing the corrections, simply exit GUPS without saving. Before GUPS closes, it will give the option to save or discard the changes. Participants can reopen saved projects and continue working later.

**Table 8: Getting Started with GUPS using Census Web**

Step	Action and Result
Step 1	<p>Select <b>QGIS Desktop 3.4.4</b> from the All Programs list in the Start Menu, shown in Step 12 of the previous table or from the QGIS 3.4 desktop icon. <i>The QGIS splash screen appears.</i></p>  <p><b>Note:</b> Depending on the age of the computer and amount of RAM, the application may require a few moments to load and open.</p>

Step	Action and Result
Step 2	<p>The <b>Map Management</b> window appears.</p>  <p>Use the drop-down menu next to the <b>Program</b> field to select <b>Participant Statistical Areas Program Verification</b>.</p>
Step 3	<p>Select <b>County Based User</b> for the <b>User Type</b>, the state of the county for the <b>State</b>, and the county in which to make the corrections for the <b>Working County</b>. Notice the use of the FIPS codes in the <b>State</b> and <b>Working County</b> field.</p>  <p>Previously selected counties are highlighted in CYAN. Adjacent counties are highlighted in YELLOW. Check the counties that should be included in the Project and select the Open button.</p>

Step	Action and Result
	<p>Do not select adjacent counties, shown in the window beneath the Working County, unless they assist with providing a reference for corrections. As with the delineation phase, participants complete their verification corrections county-by-county.</p>
Step 4	<p>Choose <b>Census Web</b> from the <b>Select Data Folder, Directory or Location</b> window to download the data directly into GUPS.</p> 
Step 5	<p>When the data loads, the <b>Table of Contents</b> populates and symbolizes according to preset styles. The <b>Map View</b> fills with the working county. The <b>Menu and Toolbars</b> appear along the top and the <b>Status Bar</b> appears at the bottom of the screen. <i>The QGIS 3.4.4 Madeira and PSAPV are displayed at the very top of the GUPS screen, confirming use of the newer QGIS and selection of the verification phase (e.g., PSAPV).</i></p> 
Step 6	<p>To save a project, use the <b>Save</b> button on the <b>Standard toolbar</b> or locate the <b>Save</b> option beneath the <b>Project</b> tab along the <b>Menu bar</b>.</p>

Step	Action and Result
Step 7	<p>To open a previously saved project, in the <b>Map Management</b> window, click the drop-down arrow next to the <b>Open Recent</b> button. <i>The drop-down menu opens with a list of current projects.</i></p> 
	<p>Multiple project files, for multiple programs, may appear, as shown above. In the example above, three separate projects exist on the same computer (PSAPV20, PSAP20, and NC20). To identify which of the entries in the list represents a particular project, look at folder name that follows “/gupsdata” to identify the project (e.g., PSAPV20, PSAP20, or NC20). Notice the PSAP GUPS projects use the entity identification coding mentioned in <a href="#">Section A</a>.</p>
Step 8	<p>To add the delineation phase submission layers into the verification phase project for reference in making corrections, refer to <a href="#">Appendix C</a>.</p>

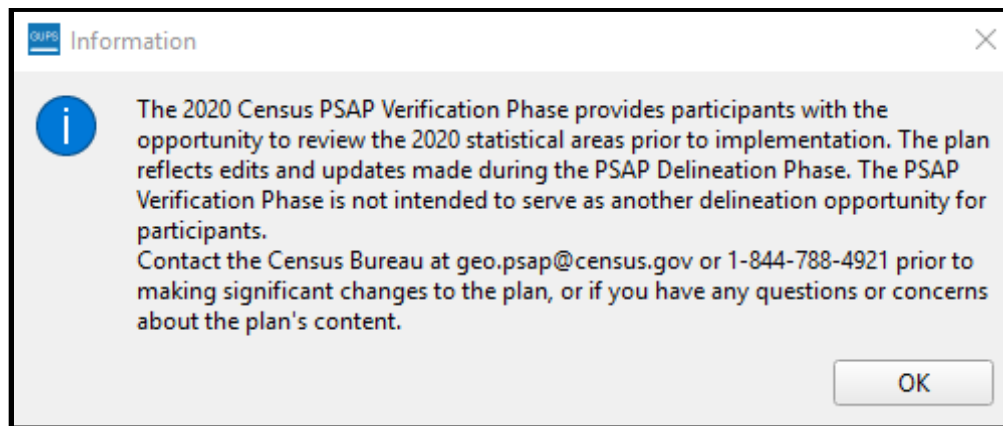
With the project loaded, participants are ready to begin making corrections. Continue to refer to the delineation phase respondent guide for detailed instructions. To begin making updates, use the **Modify Area Feature** tool within GUPS to select the geography to correct. Use the information gained from the TIGERweb review of statistical areas, or from the review of the Online PDF maps, to select the corresponding geography from the list that appears in the **Modify Area Feature** window. Because some corrections cascade to underlying geographies, perform the updates in the same order as conducted during the delineation phase: census tract, block group, CDP, and then CCD.

Refer to *Chapter 9* of the *2020 Census PSAP Standard Respondent Guide (G-730)* for instructions on updating each of the four statistical area types. Refer specifically to *Table 66* to confirm a linear feature is an acceptable statistical area boundary prior to making the boundary correction.

### 5.3 Introducing GUPS Modifications for the Verification Phase

Recall from the delineation phase, as participants selected the **Modify Area Feature** button to start editing, they were given the choice, through the **Select Editable Layer** window, to begin their edits from the 2020 proposed plan or from the 2010 geographies. For the verification phase this choice is no longer in scope because the 2020 statistical areas are incorporated into the version of shapefiles that will load directly from the Census Bureau’s website into GUPS and the 2010 geography is preloaded for reference purposes only. The **Select Editable Layer** window will not appear when using the **Modify Area Feature** button.

New for the verification phase is a pop-up window, shown in [Figure 3](#), which appears after a county downloads when a participant selects any of the tools to start reviewing the statistical areas. It contains a message about the purpose of the verification phase, verification of statistical areas, not another delineation opportunity.



**Figure 3: GUPS Information Window**

All previously programmed tools and functionality remain in this version of GUPS for the verification phase.

## 5.4 Reinforcing GUPS Tools for the Verification Phase

Use the *List of Tables* and *List of Figures* within the *Table of Contents* of the *2020 Census PSAP Standard Respondent Guide (G-730)* to help locate the specific table or figure that may assist with completing the corrective action during the verification phase. Most instructions exist in *Chapter 8*. At a minimum, review of the following tables within the *G-730*:

- *Table 12* for a refresher of the **Menu bar** tabs and functions.
- *Table 14* for a refresher of the **Standard toolbar** buttons, names and their function (or description).
- *Table 17* for a refresher of the **PSAP toolbar** buttons, names and their function (or description).

The Table of Contents within GUPS for the verification phase includes the same type of layers as provided during delineation. The edges layer is mapped to display the types of features (roads, linear water, and all others) as well as whether or not those features are acceptable, questionable, or not acceptable for use as a statistical area boundary. Other layers included for reference are the point landmark, minor civil division, incorporated place, various American Indian layers, water, and the county boundary. Layers that are not applicable are grayed-out. The 2010 statistical geographies are also included as a grouping. The layers where corrections may occur include the curtracts, blockgroups, cdp, and ccd. Those layers have preset symbology to assist with visualizing whether they are valid geographies that meet established thresholds. See [Figure 4](#) for a visual of the Table of Contents for a GUPS verification phase project.

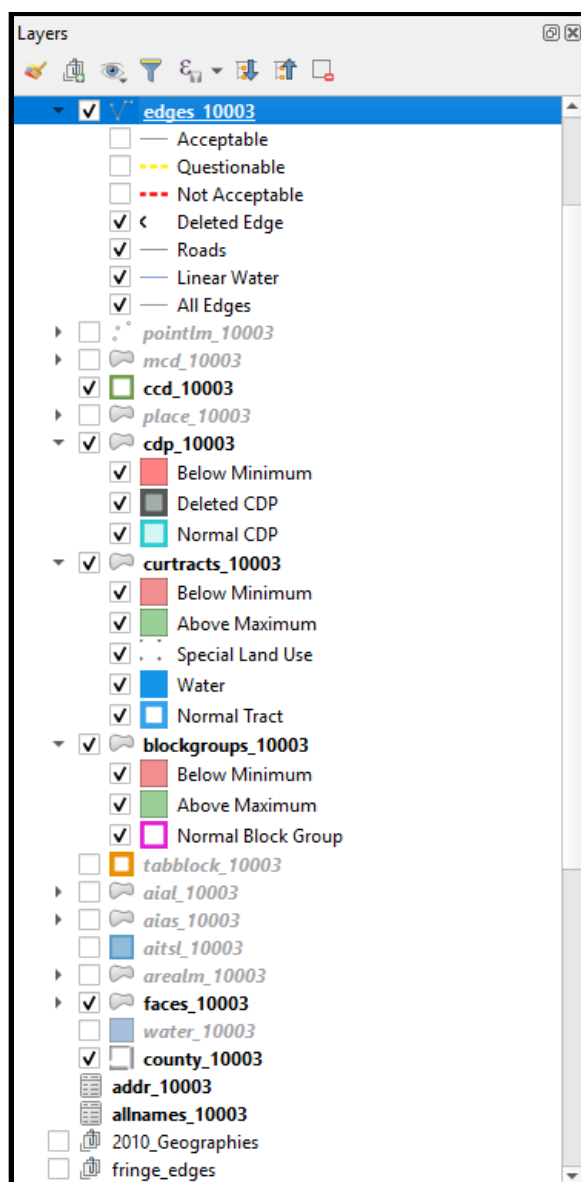


Figure 4: Example of GUPS Table of Contents with Layers

#### 5.4.1 Clarifying Use of the Boundary Change Tools

During processing of delineation phase submissions, the Census Bureau uncovered situations where participants misused GUPS tools and functionality. The most common misuse involved boundary modifications. Instead of using the instructions for performing boundary changes, participants used the merge and split instructions to modify boundaries. Though the boundary modification was seemingly successful, the means by which a participant generated the modification introduced numerous issues with coding, recoding, and suffixing that complicated the processing of participant submissions.

Since the focus of the verification phase is on correcting the 2020 statistical areas that do not align with participant expectations or that may have been misprocessed, participants should use the boundary change tools to correct the 2020 statistical areas, and not the merge or split tools within GUPS. While the merge and split tools remain available for use, please consider the

type of correction that needs to occur and choose the tool that best fits that task. If you have any questions regarding which GUPS tool should be used to make your corrections, contact the Census Bureau by phone at 1-844-788-4921. A member of our technical support group can assist you with your GUPS functionality questions.

**Figure 5** highlights the specific boundary change sections for census tracts and block groups in the *2020 Census PSAP Standard Respondent Guide (G-730)*.

9.2.1 Modify Area Feature Tool .....	79
9.3 Census Tract Update Instructions.....	80
9.3.1 Select Census Tracts.....	80
9.3.2 Split Census Tracts by Block Group .....	83
9.3.3 Split Census Tract by Face.....	88
9.3.4 Creating a Special Use Census Tract .....	92
9.3.5 Merge Census Tracts.....	95
9.3.6 Change Census Tract Boundaries.....	101
9.3.6.1 Add Linear Feature.....	105
9.3.6.2 Modify Linear Feature Attributes .....	109
9.3.6.3 Delete/Restore Linear Feature .....	110
9.4 Block Group Update Instructions.....	112
9.4.1 Select Block Group .....	113
9.4.2 Split a Block Group.....	113
9.4.3 Merge Block Groups.....	118
9.4.4 Change Block Group Boundaries.....	122

**Figure 5: Census Tract and Block Group Boundary Change Sections in the G-730 Table of Contents**

**Figure 6** highlights the corresponding boundary change sections in the *2020 Census PSAP Standard Respondent Guide (G-730)* that apply for CDPs and CCDs.

9.5 Census Designated Places (CDPs) Update Instructions .....	127
9.5.1 Select Census Designated Place (CDP).....	127
9.5.2 Boundary Change – Add Area (CDP) .....	128
9.5.3 Boundary Change – Remove Area (CDP).....	131
9.5.4 New District – Add Entity (Add a New CDP).....	135
9.5.5 Boundary Change – Delete Area Feature (Delete an Existing CDP).....	139
9.5.6 Boundary Change – Change Attributes (CDP) .....	142
9.6 Census County Division Update Instructions .....	144
9.6.1 Select Census County Division (CCD) .....	145
9.6.2 Merge Census County Divisions (CCDs) .....	145
9.6.3 Boundary Change – Add Area (CCD) .....	149
9.6.4 New District – Add Entity (Add a New CCD).....	154
9.6.5 Boundary Change – Change Attributes (CCD).....	157

**Figure 6: CDP and CCD Boundary Change Sections in the G-730 Table of Contents**

## 5.4.2 Clarifying Use of the Undo Button

Another action to reinforce and clarify from the delineation phase involves the use of the **Undo** button. The description of the **Undo** button is included within *Table 17* of the *2020 Census PSAP Standard Respondent Guide (G-730)*. For an example, a participant split a census tract that was over threshold, but one of the resulting census tracts ended up below threshold. Instead of

using the **Undo** button to cancel the split action and restore the census tract's original boundary or instead of supplying a justification that supports the split, the participant proceeded to merge the newly suffixed tract with another nearby statistical area, producing an errant census tract coding sequence and redrawing the outer census tract boundary. Neither of which is permissible during 2020 Census PSAP. Please use the **Undo** button rather than merging or splitting a statistical area back to its original boundary.

### 5.4.3 Reinforcing the Use of Imagery

Should corrections be necessary, use of imagery is strongly recommended. To make spatially accurate boundary corrections, enable imagery from the PSAP toolbar by selecting the **Add Imagery** button. Adding imagery allows participants to visualize the features and alignment of boundaries prior to making corrections. The description of the **Add Imagery** button is included within *Table 17* of the *2020 Census PSAP Standard Respondent Guide (G-730)*.

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**Note:** Uncheck (i.e., turn-off) the imagery layer from the Table of Contents to prevent GUPS issues that may occur when re-opening the PSAP verification phase project.

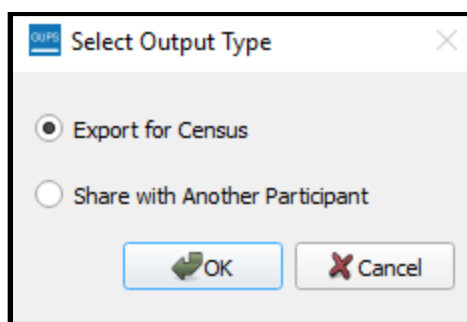
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## 5.5 Exporting a File for Submission

Upon completion of all statistical area corrections, execute the three validation tools to help review and validate the corrections made to the 2020 statistical areas. Run the **PSAP Criteria Review** tool first, then the **Review Change Polygons** tool, and finish with the **Geography Review** tool. Refer to *Chapter 10* of the *2020 Census PSAP Standard Respondent Guide (G-730)* for instructions on the use of the three validation tools. The **Export to Zip** tool executes these tools if a participant overlooks them.

Upon clicking the **Export to Zip** button, two options for exporting within GUPS remain in the verification phase: **Export for Census** or **Share with Another Participant**. To export the corrected statistical areas for submission to the Census Bureau, select the first choice, **Export for Census** as shown below in [Figure 7](#).



**Figure 7: Select Output Type Window - Export for Census**

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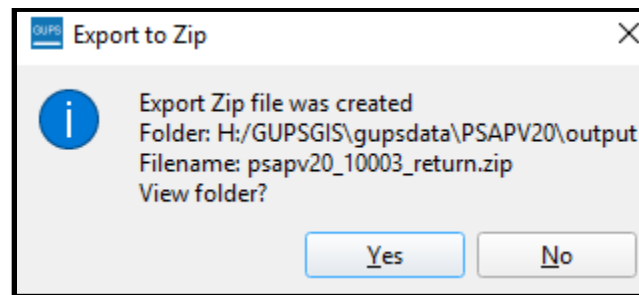
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**IMPORTANT:** Do not submit a partial submission (i.e., just census tracts if corrections are still underway for block groups or CDPs or CCDs). Ensure all of the work is complete prior to executing this tool.

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Table 60 in the 2020 Census PSAP Standard Respondent Guide (G-730) describes the export process. The only difference for the verification phase is the directory path and file name. See [Figure 8](#) for an example of the **Export to Zip** window that includes the verification phase directory and file information. Be sure to make note of the directory path and file name.



**Figure 8: Export to Zip Window for Verification Phase**

With the file exported, proceed to the next part of this verification guide for instructions on submitting the .zip file to the Census Bureau.

## PART 3 SUBMITTING CORRECTIONS TO THE 2020 STATISTICAL AREAS

This part of the respondent guide provides a refresher for using the Secure Web Incoming Module (SWIM) to submit the corrected 2020 statistical areas. The *2020 Census PSAP Standard Respondent Guide (G-730)* devoted an entire chapter, *Chapter 11*, to the SWIM topic providing background, requirements, and an example of using SWIM to submit the PSAP delineation phase materials. The instructions in [Table 9](#) update the *Chapter 11* example to show the pertinent information for the verification phase.


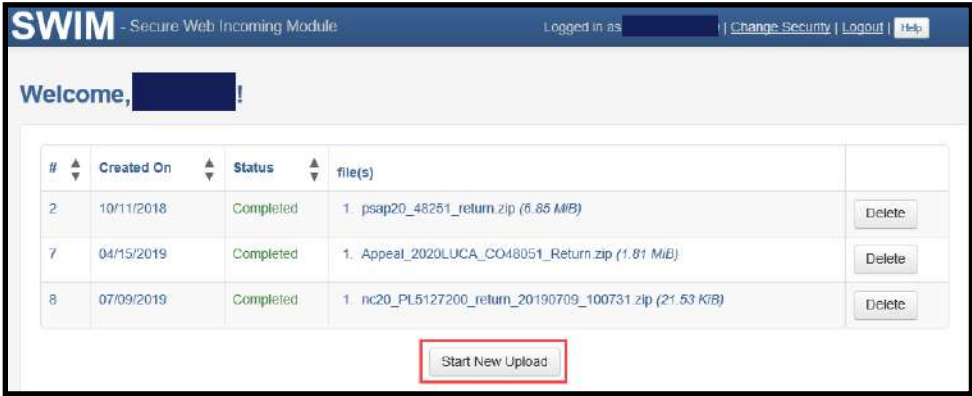

Please submit all corrections to the 2020 statistical areas, by county, within 90 calendar days of receiving the verification announcement. The Census Bureau cannot provide extensions to this 90 calendar day review period. The Census Bureau will review all submissions to ensure they meet the established 2020 Census PSAP criteria and will contact participants if there are questions regarding the submission(s).

### CHAPTER 6 USING THE SECURE WEB INCOMING MODULE (SWIM) FOR PSAP VERIFICATION

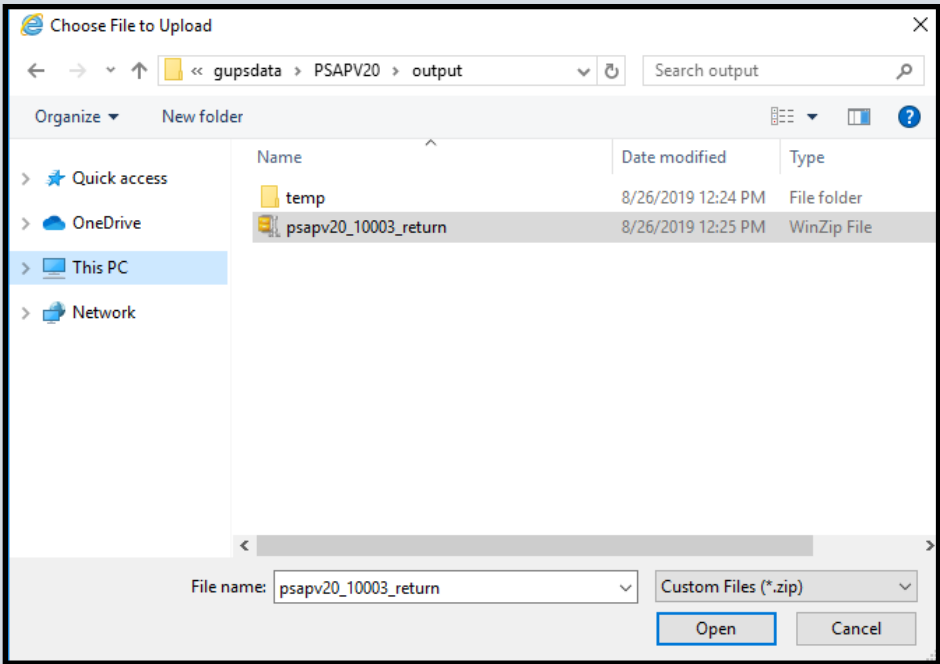
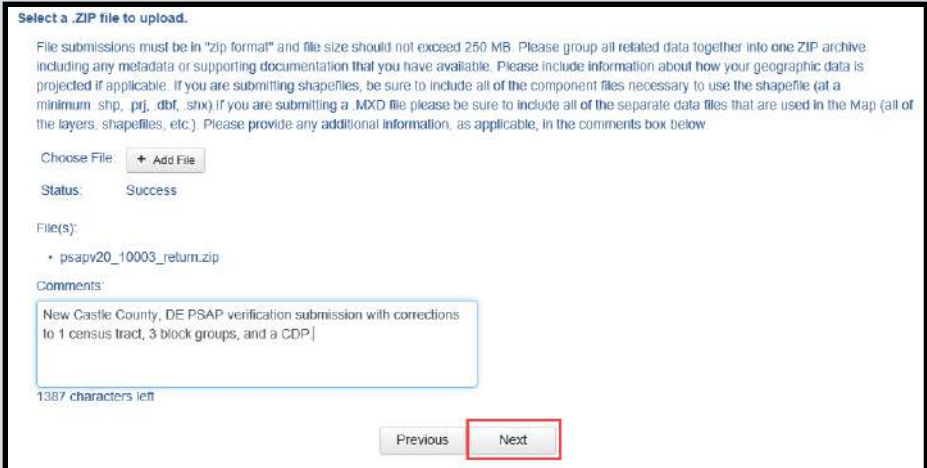
See [Table 9](#) for an example of using SWIM to submit corrections to a county-based 2020 statistical area corrections.

Table 9: SWIM Example

Step	Action and Result
Step 1	<p>Open a new internet browser window and enter the SWIM URL <a href="https://respond.census.gov/swim">https://respond.census.gov/swim</a>. The <b>Secure Web Incoming Module Please Login</b> screen opens.</p>

Step	Action and Result
	<p>Refer to <i>Section 11.1 the 2020 Census PSAP Standard Respondent Guide (G-730)</i> for details on how to determine if an account exists and the SWIM requirements for accounts, passwords, and files submitted using SWIM.</p> <p><b>Note:</b> We suspect that most participants will have an existing SWIM account since delineation phase materials were submitted through SWIM. For participants without an existing SWIM account, please contact the Census Bureau to receive a 12-digit registration token for account registration.</p>
Step 2	<p>Enter the email address and password, then click the <b>Login</b> button. <i>The <b>Welcome</b> screen opens and previously posted files appear along with the date and status of the upload.</i></p>  <p>Click the <b>Start New Upload</b> button.</p>
Step 3	<p><i>The “What Census program are you reporting data for?” screen appears.</i></p>  <p>Choose <b>Participant Statistical Areas Program (PSAP)</b> and then click the <b>Next</b> button.</p> <p><b>Note:</b> Unlike with GUPS, there is not a specific program choice for PSAP Verification. The verification phase is part of PSAP, so there was no need to add another program choice in SWIM for the submission of verification phase corrections.</p>

Step	Action and Result
Step 4	<p>The <b>“What type of geography are you reporting statistical areas for?”</b> screen appears with two choices: <b>County</b> and <b>Tribal Area</b>.</p> <div> <p><b>What type of geography are you reporting statistical areas for??</b></p> <p><input type="radio"/> County</p> <p><input type="radio"/> Tribal Area</p> <p>Previous Next</p> </div> <p>Choose <b>County</b> and then click the <b>Next</b> button.</p>
Step 5	<p>The <b>Select a State and County</b> screen appears.</p> <div> <p><b>Select a State and County</b></p> <p>State:  <input type="text" value="Select"/></p> <p>County:  <input type="text"/></p> <p>Previous Next</p> </div> <p>Choose the appropriate state and county name and then click the <b>Next</b> button.</p>
Step 6	<p>The <b>Select a .ZIP file to upload</b> screen appears. Click the <b>+Add File</b> button.</p> <div> <p><b>Select a .ZIP file to upload.</b></p> <p>File submissions must be in "zip format" and file size should not exceed 250 MB. Please group all related data together into one ZIP archive including any metadata or supporting documentation that you have available. Please include information about how your geographic data is projected if applicable. If you are submitting shapefiles, be sure to include all of the component files necessary to use the shapefile (at a minimum .shp, .prj, .dot, .shx) If you are submitting a .MXD file please be sure to include all of the separate data files that are used in the Map (all of the layers, shapefiles, etc.). Please provide any additional information, as applicable, in the comments box below.</p> <p>Choose File: <input type="button" value="+ Add File"/></p> <p>Status:</p> <p>File(s):</p> <p>Comments:  <input type="text"/></p> <p>1500 characters left</p> <p>Previous Next</p> </div>

Step	Action and Result
Step 7	<p>The <b>Choose File to Upload</b> window opens for use in navigating to the location of the exported .zip file generated by using the <b>Export to Zip</b> button in GUPS. Click the <b>Open</b> button.</p>  <p>Notice the <b>Status</b> is set to <b>Success</b> and the file name appears beneath the <b>File(s)</b> section. Add optional comments that may assist the Census Bureau with processing of the submission and click <b>Next</b>.</p> 

Step	Action and Result
Step 8	<p>The <b>Thank You</b> screen appears. It thanks the participant and indicates a forthcoming email once the transfer completes.</p> <div> <p><b>Thank You</b></p> <p>Thank you for using SWIM. You will receive an email when your file successfully transfers to the Census Bureau.</p> <p>File: psapv20_10003_return.zip</p> <p>You may <a href="#">Log Out</a> or return to the <a href="#">upload form</a>, to submit more files.</p> </div> <p>In the last sentence on the Thank You screen, choose <b>upload form</b> to return to the <b>Welcome</b> screen and begin the upload process for another county or choose <b>Log Out</b>.</p>

## CHAPTER 7 NEXT STEPS FOR THE 2020 CENSUS PSAP

Congratulations on the completion of your review of the 2020 statistical areas and of your corrections, if applicable. Your participation in the 2020 Census PSAP concluded with either the email stating no changes were forthcoming or with the submission of verification phase corrections in the county based .zip file(s) from GUPS. Thank you for participating in this program to prepare useful statistical areas for the 2020 Census. Knowledge provided by PSAP participants is invaluable.

The Census Bureau will process the corrections and finalize the 2020 statistical areas for use in tabulating census data for the next decade. The final data will be made available to the public on the Census Bureau website beginning in November 2020 through February 2021.

## APPENDICES

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## APPENDIX A      USING TIGERWEB TO COMPARE 2020 STATISTICAL AREAS TO 2010 STATISTICAL AREAS

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For participants that completed their delineation phase work from the 2010 statistical areas instead of from the 2020 proposed plan, using the TIGERweb **Compare** tool to visualize the changes between the 2020 statistical areas and the 2010 statistical areas may help with locating statistical areas that have changed significantly. **Table 10** presents the steps for comparing the two vintages.


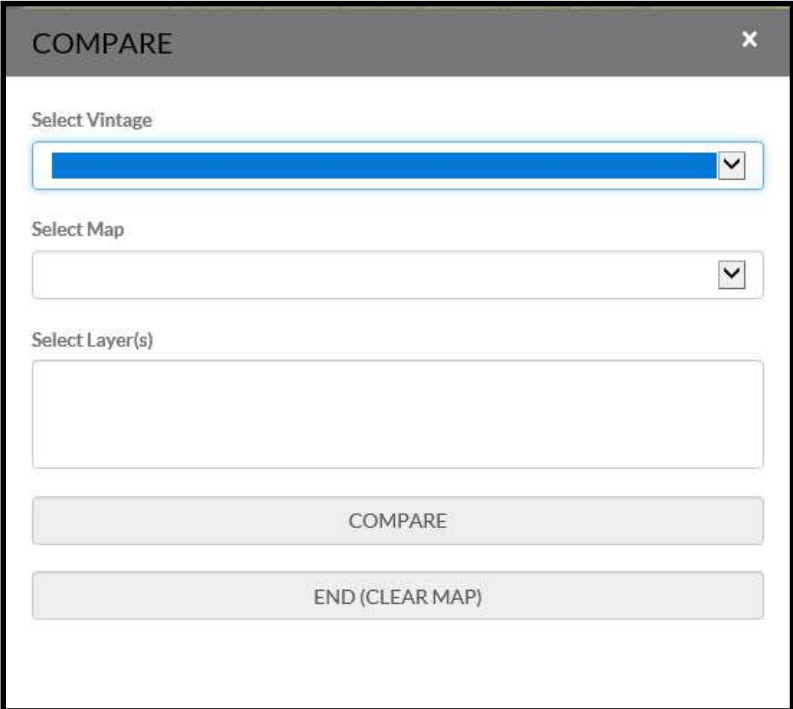

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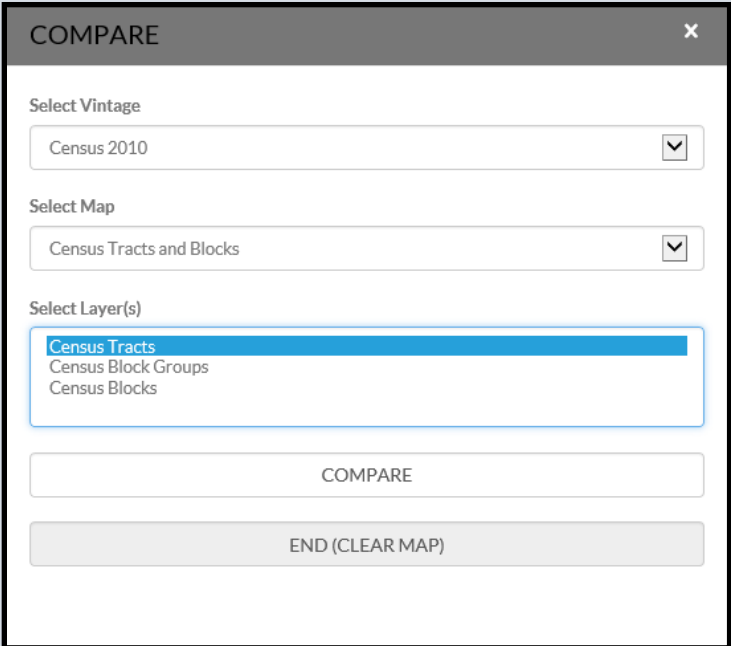
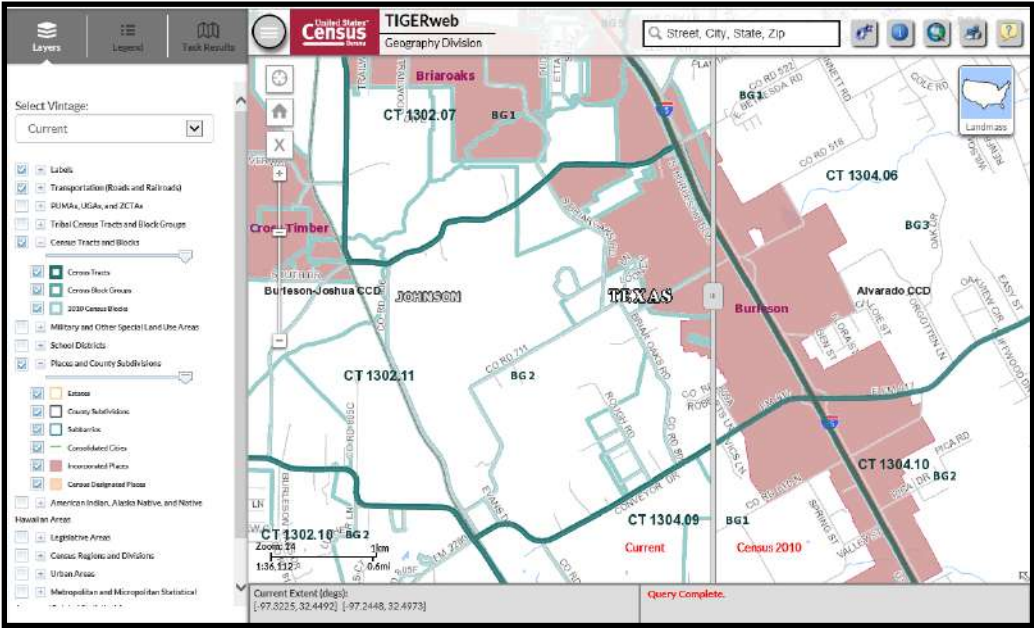
**IMPORTANT:** While conducting a comparison between 2020 and 2010 statistical areas is possible using this tool, a participant's focus should remain on whether the existing 2020 statistical areas work for the tabulation and distribution of statistical data and whether any attribute errors exist.

---

**Table 10: Comparing 2020 and 2010 Statistical Areas in TIGERweb**

Step	Action and Result
Step 1	<p>To compare the <b>Current</b> vintage to the <b>2010 Census</b> vintage, launch the TIGERweb online application from the TIGERweb website: &lt;<a href="https://tigerweb.geo.census.gov/tigerwebmain/TIGERweb_main.html">https://tigerweb.geo.census.gov/tigerwebmain/TIGERweb_main.html</a>&gt;.</p> <p>Using the instructions presented in <b>Section 2.1</b>, zoom manually or through a query to the area of interest for comparison.</p>

Step	Action and Result
Step 2	<p>Click the <b>Compare</b> button along the upper right of the TIGERweb window.</p>  <p>The <b>Compare</b> window appears.</p> 
	<p>While this comparison does not compare what was submitted during the delineation phase, it does allow for visual comparison between the current 2020 statistical areas and the 2010 statistical areas which may help identify statistical areas splits or merges that occurred as a result of delineation phase processing.</p>

Step	Action and Result
Step 3	<p>Select the <b>Vintage</b> to compare (e.g., <b>Census 2010</b>), Select the <b>Map</b> to compare with the current (e.g., <b>Census Tracts and Blocks</b>), and Select the <b>Layer</b> (e.g., <b>Census Tracts</b>) and click <b>COMPARE</b>.</p> 
Step 4	<p>A light gray, vertical slide bar appears on-screen with the <b>Current</b> vintage displayed on the left and the <b>Census 2010</b> vintage on the right. Click the bar to move it left or right and reveal the change of boundaries between the vintages. Large changes are easily viewed on-screen, but smaller modifications to the boundaries are more difficult to see.</p>  <p><b>Note:</b> This example does not depict any boundary differences, but does show the light-gray, vertical slide bar mid-screen and the red label for “Current” and “Census 2010” at the bottom of the screen.</p>

Step	Action and <i>Result</i>
Step 5	Changing the <b>Select Map...</b> choice to <b>Places and County Subdivisions</b> and then selecting either the <b>County Subdivisions</b> or <b>Census Designated Places</b> as the <b>Layer</b> allows for a vintage comparison of the CCDs and CDPs, respectively. Repeat the same steps listed above to compare the CCDs and CDPs.

## APPENDIX B CHANGING THE MAP BACKGROUND WITHIN THE TIGERWEB ONLINE MAP VIEWER

The TIGERweb online map viewer has three choices for the map background it displays: Landmass, Satellite, and Terrain. These three choices are housed within the Topography button which is in the upper right corner of the map display, beneath the five tool buttons. The Topography button is also known as the Base Map Selector in the TIGERweb User Guide. See [Figure 9](#) for a visual of the button and its location within the TIGERweb online map viewer.



**Figure 9: TIGERweb Topography Button**

The default selection is Landmass. To switch displays, continue to click the Topography button, observing the instruction while hovering the mouse over the button. The hover message informs the user of the current display and what the display will be upon switching to the next choice. See [Figure 10](#) for a visual that illustrates changing between base map background choices and how the hover messages compare to what is on-screen. In the example below, though the image on the left shows the Topography button indicating the graphic for the Satellite selection, the hover message indicates the current selection is Landmass. The satellite imagery does not display until clicking the button again to change the display to Terrain. Terrain would not display until clicking the button back to Landmass.



**Figure 10: Topography Button with All Base Map Choices**

Use of satellite imagery and terrain base map backgrounds help to identify and visualize the features that the 2020 statistical area boundaries follow and may provide valuable insight to understanding if corrections need to be made.

## APPENDIX C      ADDING A DELINEATION PHASE SUBMISSION TO A VERIFICATION PHASE PROJECT

Participants may add their delineation phase submission files into their verification phase GUPS project. Doing so provides a visible reference for use during interactive GUPS work to correct the discrepant statistical area boundaries.

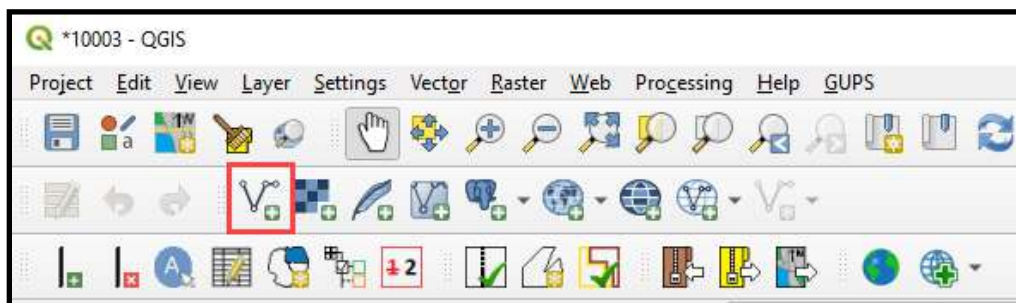
---

**IMPORTANT:** While having the delineation files available for reference during verification is nice, the Census Bureau strongly encourages participants to focus on the current 2020 statistical areas and whether they work for the tabulation and distribution of statistical data.

---

Refer to *Section 8.3* and *Table 28* within the *2020 Census PSAP Standard Respondent Guide (G-730)* for detailed instructions on the proper use of the **Add Vector Layer** button and for changing layer symbolization or call the Census Bureau at 1-844-788-4921 for assistance. As a high level summary for adding the delineation submission shapefiles into the verification phase project, follow these steps:

- Navigate to the directory location of the delineation phase .zip file (i.e., **PSAP20\_<ssccc>\_return.zip**). As noted previously in the document, the <ssccc> corresponds to the five-digit, state county FIPS code for your county(s). The default directory was likely **C:\GUPSGIS\gupsgisdata\PSAP20\output**, but you may have copied the file to another directory for storage reasons or to archive it for safe-keeping.
- Unzip the delineation phase submission .zip file.
- Utilize the **Add Vector Layer** button within the **Manage Layers** toolbar, as highlighted below in **Figure 11**, to add in the “complete” shapefiles for the statistical areas (e.g., blockgroups, ccd, cdp, and curtracts). Participants may wish to add in the “changes” shapefiles that show only the polygons for the statistical area layers that were changed during delineation. Adding in the “changes” shapefiles do not provide a complete visual of the delineation phase submission, but they may be useful as a reference to identify the specific areas changed during delineation.  
**Note:** Ensure layers being added use the NAD83 coordinate system. Do not add layers into GUPS in coordinate systems other than NAD83.



**Figure 11: GUPS - Manage Layers toolbar - Add Vector Layer button**

- Change the symbolization of the added shapefiles to view them properly within the verification phase project. Depending on where the added shapefiles appear in the Table of Contents, symbolization changes can occur to the outline, pattern, transparency, color, layer order, etc.

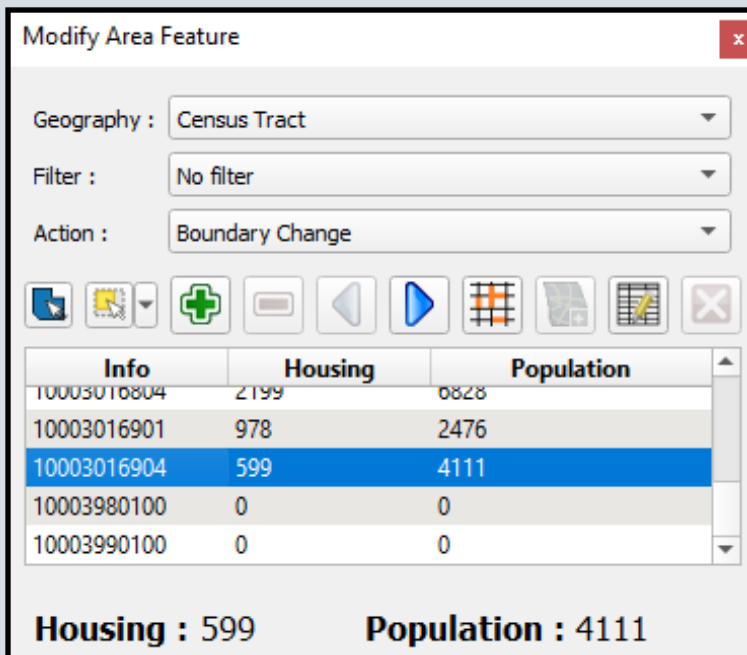
With updated symbology and the ability to turn on/off layers, participants can visualize the differences between the delineation and verification phase statistical area boundaries to assist

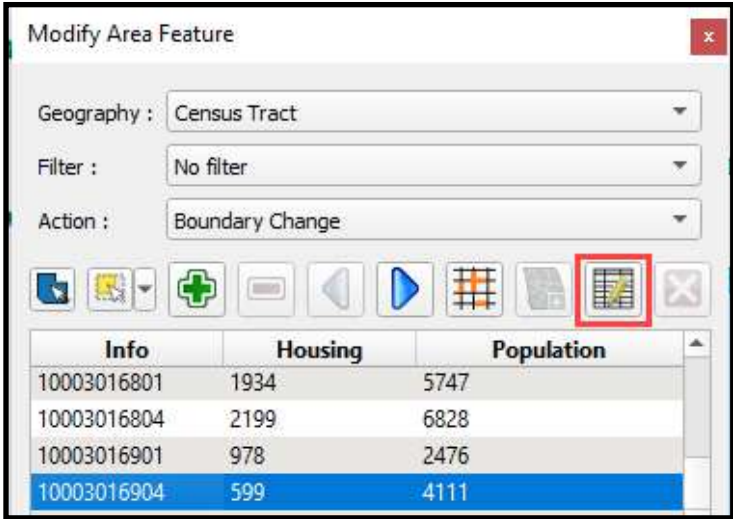
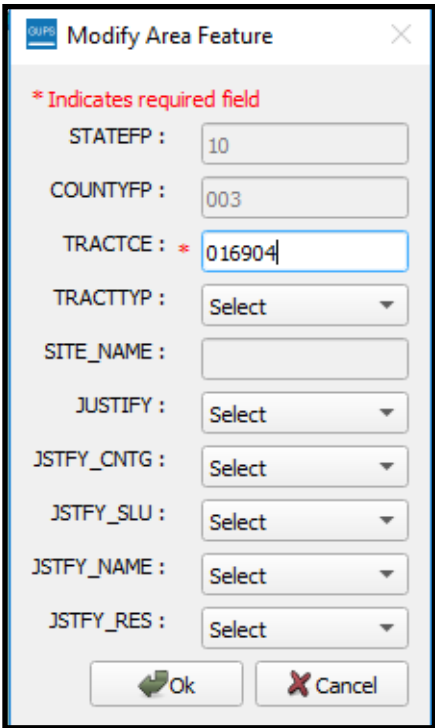
with making corrections during the verification phase. Refer to *Sections 9.3, 9.4, 9.5, and 9.6* of the *2020 Census PSAP Standard Respondent Guide (G-730)* for instructions on making census tract, block group, CDP, and CCD boundary corrections, respectively.

## APPENDIX D CORRECTING CENSUS TRACT CODING

Whether an errant census tract code is discovered using TIGERweb or using the Online PDF maps use the instructions below in [Table 11](#) to correct the census tract coding using GUPS.

**Table 11: Using GUPS to Correct Census Tract Coding**

Step	Action and Result
Step 1	With the verification project opened within GUPS, open the <b>Modify Area Feature</b> tool and set the <b>Geography</b> to <b>Census Tract</b> .
Step 2	<p>Scroll through the list of census tracts, shown in the <b>Info</b> section of the <b>Modify Area Feature</b> tool and select the census tract to correct. In the example below, census tract 169.04 is selected.</p>  <p><b>Note:</b> This example is for illustrative purposes only.</p>

Step	Action and Result
Step 3	<p>With the census tract selected, click the <b>Change Attributes</b> button to open a secondary <b>Modify Area Feature</b> window that allows participants to edit the census tract code field, <b>TRACTCE</b>.</p>  
Step 4	<p>Using local knowledge, correct the census tract code. Refer to <i>Section 2.2</i> in the <i>2020 Census PSAP Standard Respondent Guide (G-730)</i> for details on proper census tract coding.</p>
Step 5	<p>Save the project after performing a census tract coding change.</p>

## Appendix J

## PSAP Verification Phase Summary

“The verification phase provides an opportunity to ensure the 2020 statistical areas are acceptable and reflect the edits made by participants and the Census Bureau during the delineation phase. It serves as the final review of the statistical areas used to tabulate the results of the 2020 Census, the American Community Survey (and Puerto Rico Community Survey), the Economic Census, and potentially other census surveys. (Standard Respondent Guide page iv)”

### B. 2020 Census PSAP Schedule

Below is the 2020 Census PSAP schedule that includes past, ongoing, and upcoming activities.

**Table 1: 2020 Census PSAP Schedule**

Dates	Event
March-May 2018	Census Bureau contacted 2010 Census PSAP participants to inquire about 2020 Census PSAP participation. ✓
July 2018	Census Bureau distributed 2020 Census PSAP invitation materials to 2020 Census PSAP participants. ✓
January 2019	2020 Census PSAP delineation phase began. Participants had 120 calendar days to submit updates. ✓
January-February 2019	Census Bureau conducted 2020 Census PSAP delineation phase webinar trainings. ✓
July 2019	Census Bureau conducted closeout of the 2020 Census PSAP delineation phase. ✓
January 2020	2020 Census PSAP verification phase begins. Participants have 90 calendar days upon receipt of verification announcement to review the 2020 statistical areas and submit corrections. ✓
April 2020	2020 Census PSAP verification phase ends.
September 2020	Census Bureau plans to conduct closeout of the 2020 Census PSAP verification phase.
November 2020 – February 2021	On a flow basis, beginning in November 2020 through February 2021, the 2020 statistical areas become available for public use.

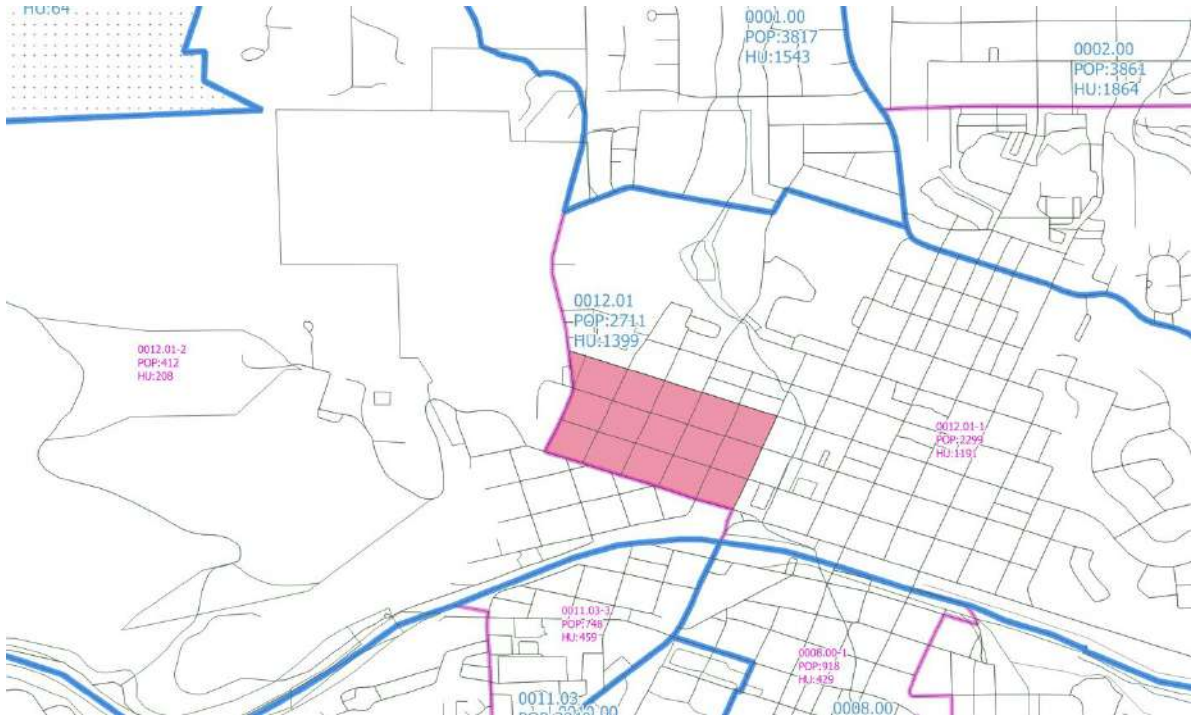
## Verification Process:

- A. Use TIGERweb to review Census Changes
  - a. “1. First, ensure a review of the census tract updates; 2. Then review the block group updates; 3. Then review new CDPs and any updates submitted for existing CDPs, if applicable. A list of new CDPs is available on the PSAP website beneath the 2020 Census PSAP Verification Materials section within the Additional Review Materials sub-section. 4. Conclude with a review of CCDs, if applicable in your state.”
- B. Review Changes with stakeholders
  - a. Make note of all discrepancies between submission and TIGERweb boundaries
  - b. Make note of what changes should be made during the verification phase or if census changes can be approved
- C. Email notification of corrections to or approval of the 2020 statistical areas
  - a. Email [geo.psasp@census.gov](mailto:geo.psasp@census.gov) to indicate whether or not corrections will be sent
- D. Contact the Census Bureau to discuss changes and intended review

Dorothy McKinney  
Denver Regional Office  
972-510-1550  
[dorothy.a.mckinney@2020census.gov](mailto:dorothy.a.mckinney@2020census.gov)

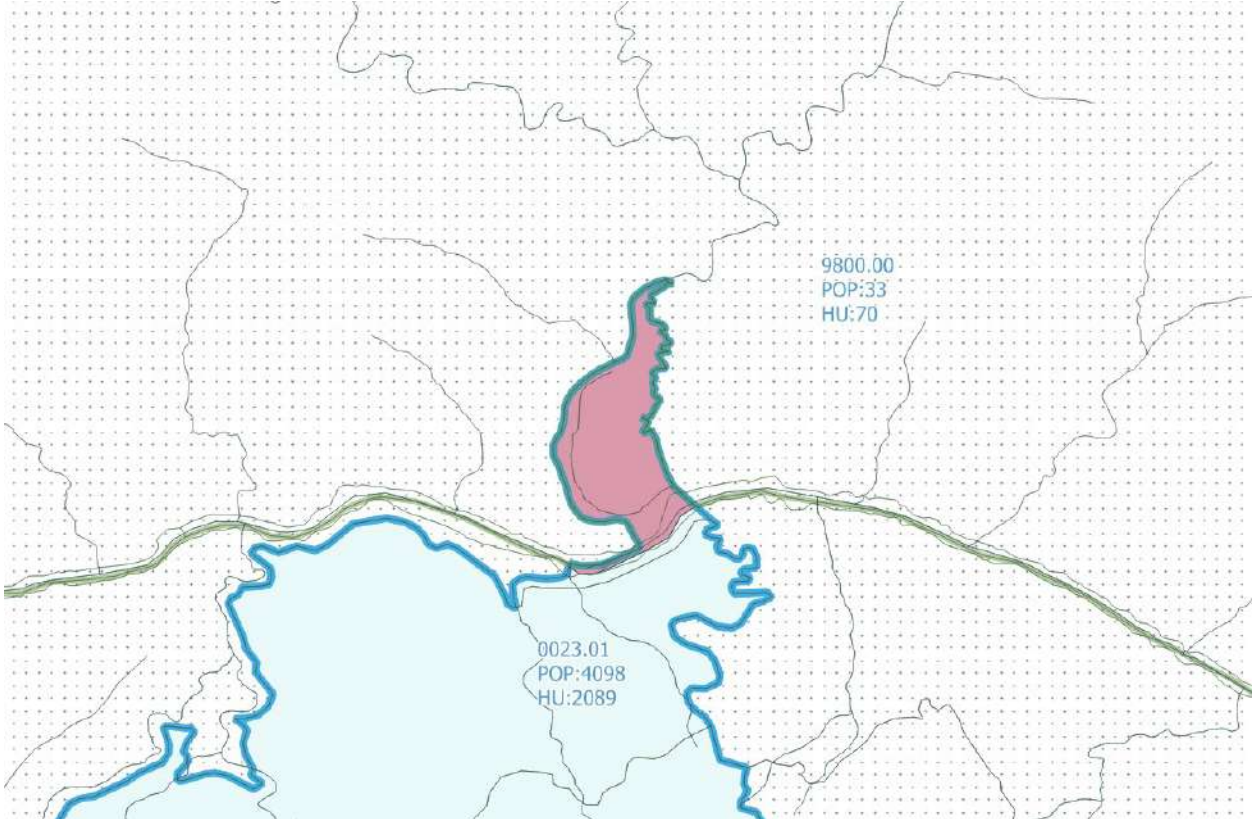
  - a.
- E. Make necessary changes in GUPS
  - a. Update GUPS to newest version before beginning
    - i. Must run GUPS as an administrator for new update to work
- F. Send new changes to Census Bureau (Dorothy) for approval
- G. Provide justification for each change

## Changes Submitted for the 2020 PSAP Verification Phase



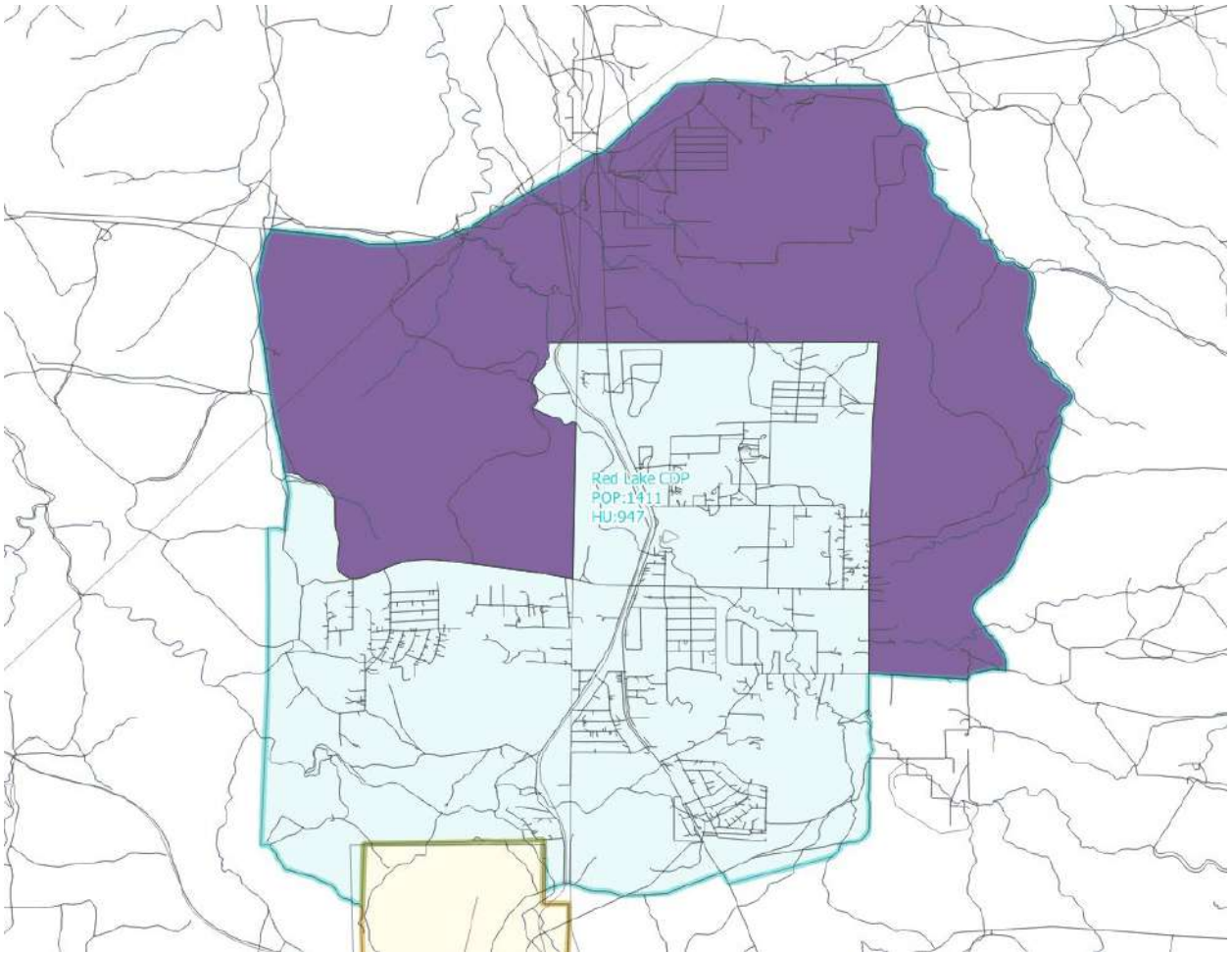
1.

- a. Coconino County originally submitted a boundary following Santa Fe Ave to Thorpe Rd. The Census suggested a boundary that followed Sitgreaves St to Cherry Ave. We have changed it to follow Santa Fe Ave to Thorpe Rd. The pink area will be moved from BG 2 to BG 1.
- b. Justification: *The character and income level north of Santa Fe Ave is more consistent with the neighborhood north of downtown than the area south of Santa Fe Ave. The residents in the area South of Santa Fe have much lower incomes and a higher percentage of minority residents. Grouping this with the area north of Santa Fe will reduce these resident's access to services and CBDG funds.*



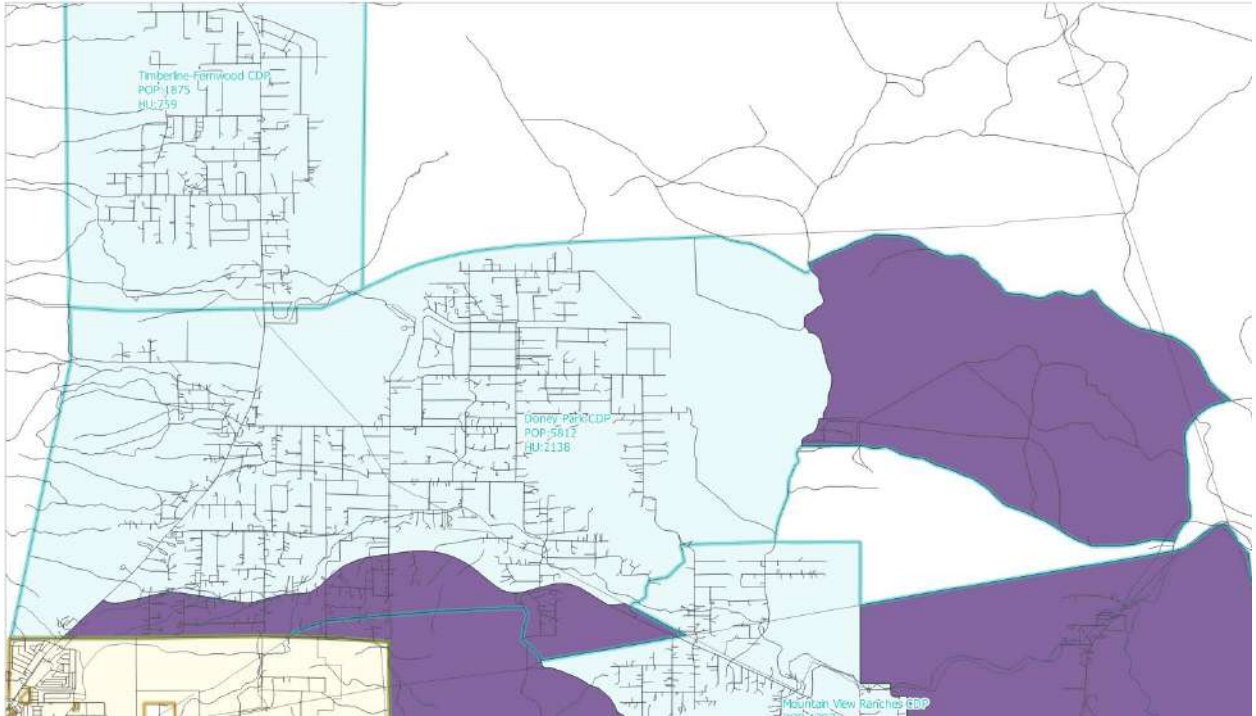
2.

- a. Tract 23.01 was expanded to follow Grand Canyon Village CDP line. BG 1 line adjusted accordingly. CCD line adjusted to encompass all Grand Canyon Village and Tract 23.01 on southern side, in Williams CCD.
- b. Justification: *This boundary change is requested to incorporate a small housing area for Grand Canyon National Park employees, located at the bottom of the canyon and which has a year-round resident population, into the same tract as the Park's primary housing and population center.*



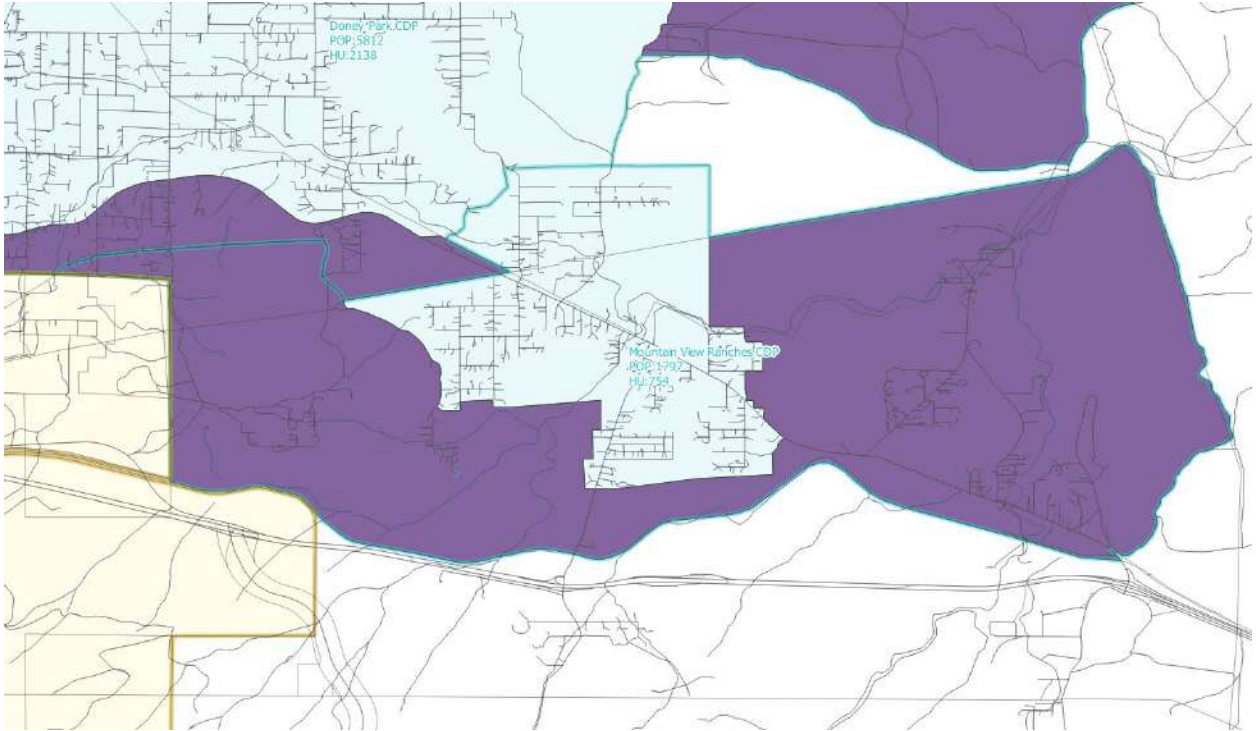
3.

- a. The Census Bureau suggested drastically reducing the size of the Red Lake CDP from our original submission (See Documents in G:\Projects\CountyDepartments\CountyManager\2019\PSAP) We chose to expand the CDP out from the Census Bureau's suggestion to include the entire Red Lake community.
- b. Justification: *This CDP boundary change is requested to better incorporate clusters of housing and population into the wide-spread yet recognized and self-identified community of Red Lake. The corresponding change will more closely match the County's planning boundary*



4.

- a. The Census Bureau suggested drastically reducing the size of the Doney Park CDP from our original submission (See Documents in G:\Projects\CountyDepartments\CountyManager\2019\PSAP) We chose to expand the CDP out to the east and south from the Census Bureau's suggestion to include the entire Doney Park community.
- b. Justification: *"This CDP boundary change is requested to better incorporate clusters of housing and population into the wide-spread yet recognized and self-identified community of Doney Park. The corresponding change will more closely match the County's planning boundary for this area."*



5.

- a. The Census Bureau suggested drastically reducing the size of the Mountain View Ranches CDP from our original submission (See Documents in G:\Projects\CountyDepartments\CountyManager\2019\PSAP) We chose to expand the CDP out to the east and south from the Census Bureau's suggestion to include the entire Mountain View Ranches community.
- b. Justification: *This CDP boundary change is requested to better incorporate clusters of housing and population into the wide-spread yet recognized and self-identified community of Mountain View Ranches. The corresponding change will more closely match the County's planning boundary for this area.*

## Appendix K

# Census PSAP Data Reviewer

Web URL:

<http://webmaps.coconino.az.gov/portal/apps/View/index.html?appid=c3484fbe2f8d4d58918fbb7e59e299ae>

## 1. Page Navigation:

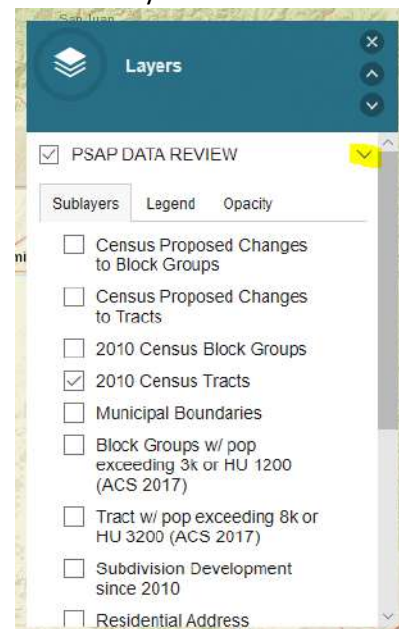
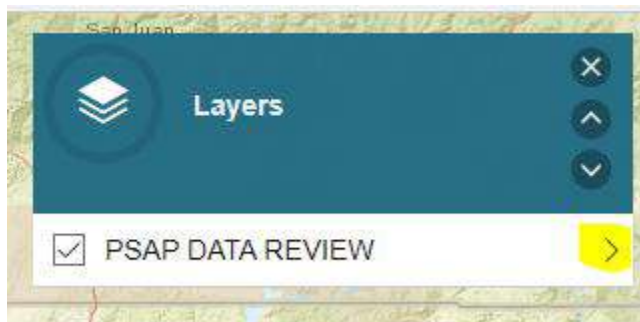
- a. There are several options to navigate within the map.
  1. Use the Mouse Wheel to zoom in/out of an area.
  2. Press 'Shift' and draw a box with the left-hand mouse button around an area of interest.
  3. Use the +/- tools located on the top toolbar within the application.

## 2. Access Data Layers

- a. Click on the 'Layers' Icon in the application toolbar:

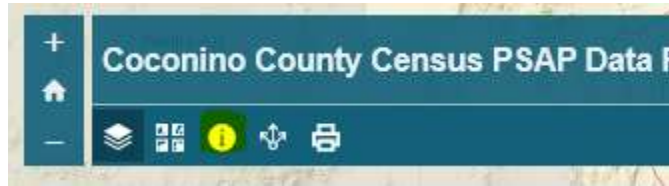


- b. The 'Layers' Window will open on the right side of the screen.
- c. Click on the arrow next to the name: **PSAP DATA REVIEW** to see a list of interactive layers that can be turned on and off by placing a checkmark next to the layer name:

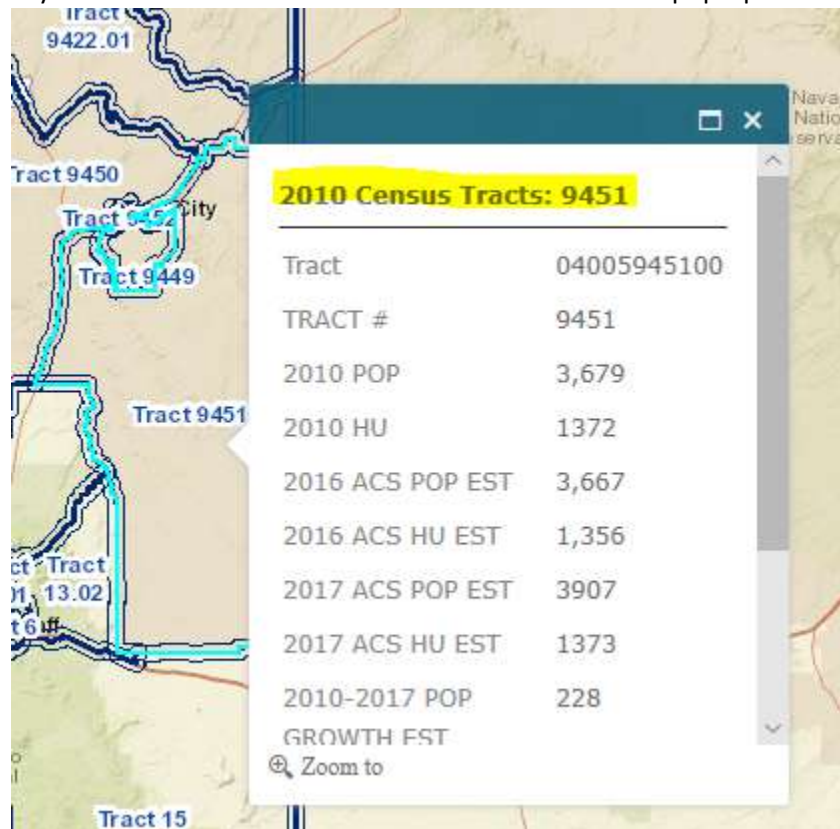


### 3. Feature Identification:

- a. Ensure feature in question is turned on in the map application (see above).
- b. Click on the 'Identify' Button in the top toolbar:



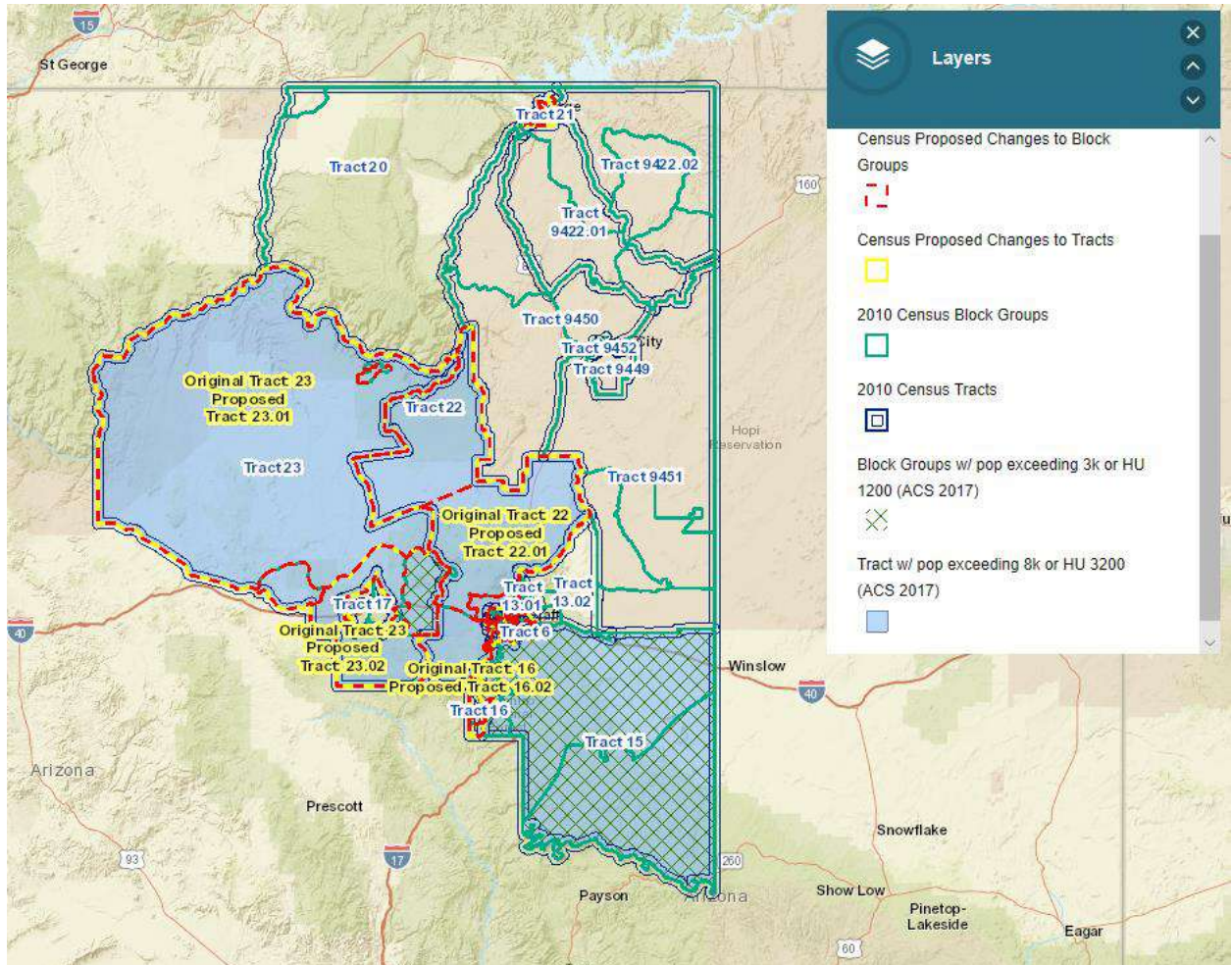
- c. The feature identified will be highlighted in blue
- d. Identify Results Pop-Up Window will open
  - i. Layer name identified will show in the title block of the pop-up



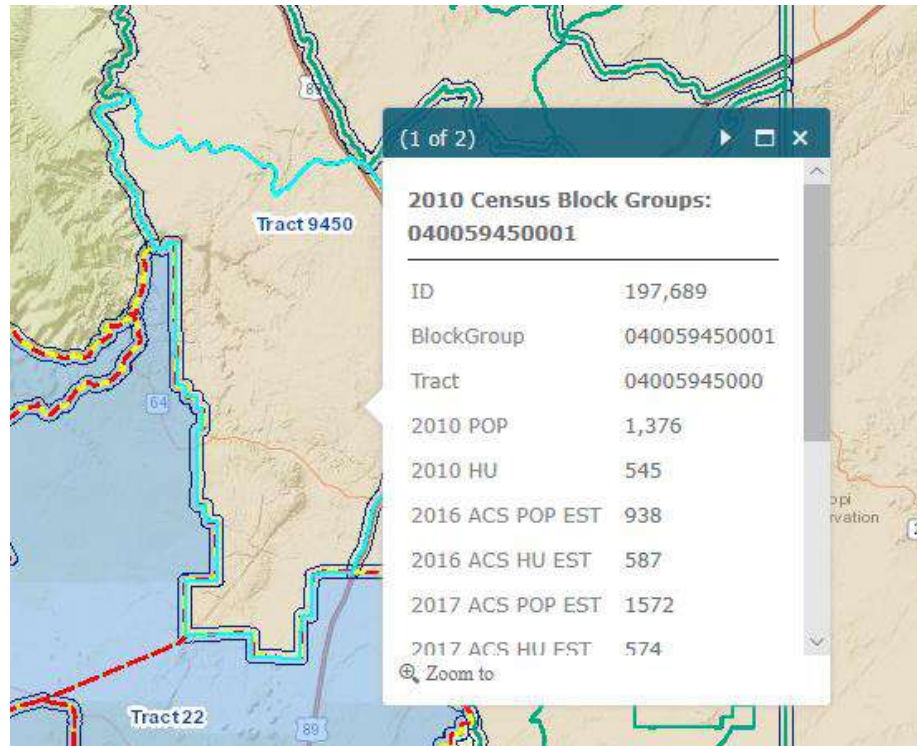
### 4. Legend / Feature Labeling

- a. 2010 Tracts are identified in **Dark Blue with a Dark Blue Label** indicating the 2010 Tract number, 2017 population and housing unit estimates, and the percent population growth since 2010.
- b. 2010 Block Groups are identified in **Forest Green with a Green Label** indicating the 2010 Block Group number, 2017 population and housing unit estimates, and the percent population growth since 2010.
- c. Census Proposed Changes to Tract Boundaries are in **Yellow with a Yellow highlighted label** indicating the proposed Tract number.

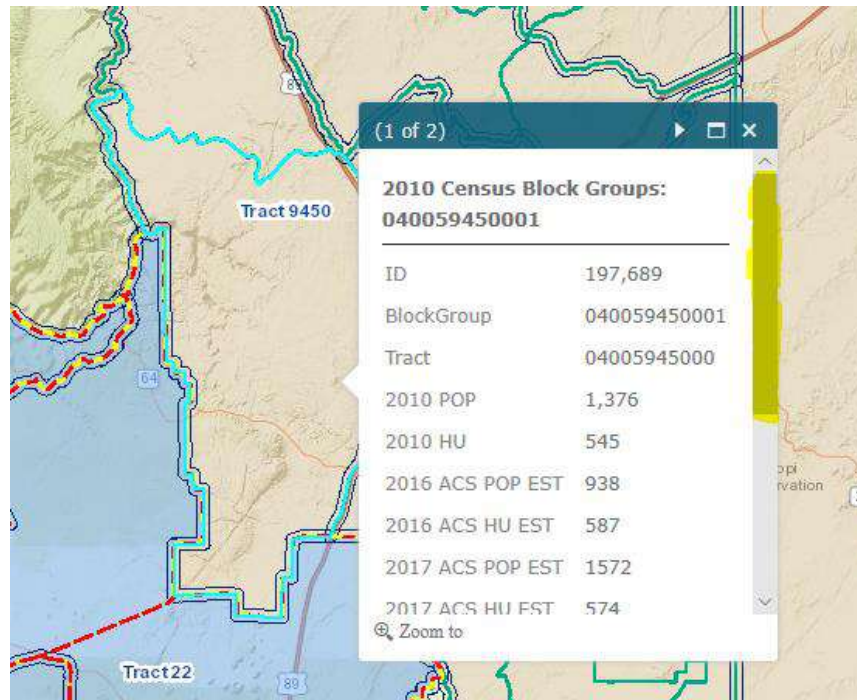
- d. Census Proposed Changes to Block Group Boundaries are in **Red Dashed line with Red highlighted labels** indicating the proposed Block Group number.
- e. 2010 Tracts with population over 8000 or HU over 3200 in the 2017 ACS Estimates are indicated in **Light Blue**.
- f. 2010 Block Groups with population over 3000 or HU over 1200 in the 2017 ACS Estimates are indicated with a **Green cross-hatching**.
- g. 2010 Minor Civil Divisions are outlined in **Purple** and overlap tract boundaries.



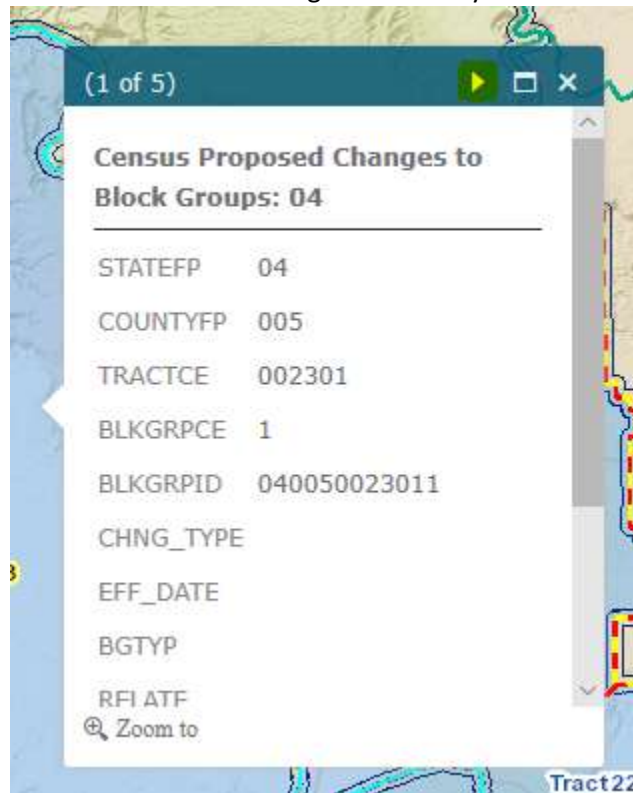
## 5. Pop-Up



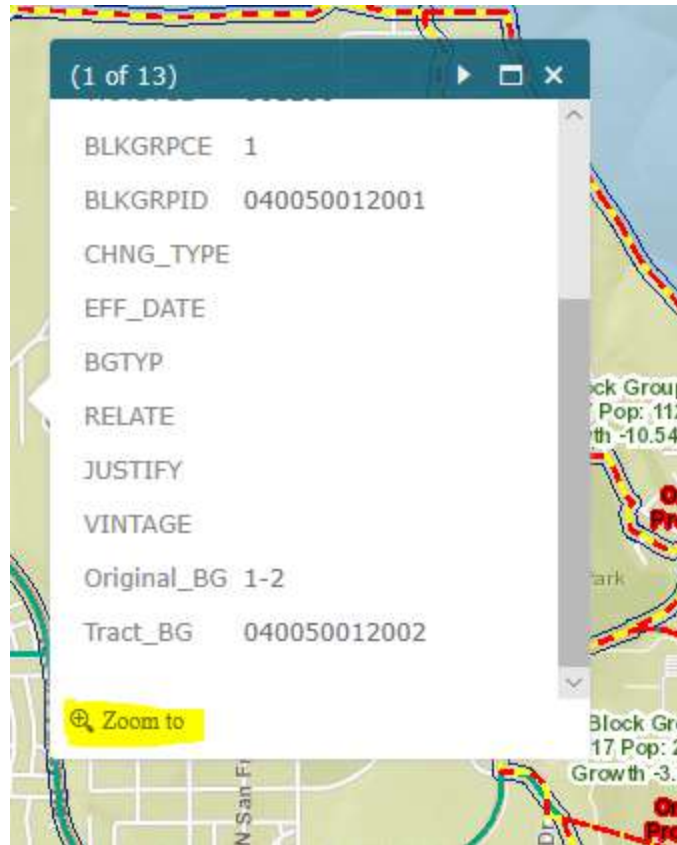
- Use the scroll bar to scroll through a list of available feature attributes:



- b. Use arrow to scroll through selected layers



- c. Use "Zoom To" to zoom in or out to the selected feature



**6. Share the map:**

- Create a weblink:



**7. Print the map:**



## **Layers:**

### *Census Proposed Changes to Block Groups*

Data Source: Participant and Statistical Areas Program website  
<https://www.census.gov/programs-surveys/decennial-census/about/psap.html>

Purpose: To show changes to Block Groups recommended by the Census Bureau. Pop-up includes all fields to be edited before return of change files to Census Bureau.

Label: Includes 2010 Block Group Number and Census Proposed Block Group Number.

### *Census Proposed Changes to Tracts*

Data Source: Participant and Statistical Areas Program website  
<https://www.census.gov/programs-surveys/decennial-census/about/psap.html>

Purpose: To show changes to Tracts recommended by the Census Bureau. Pop-up includes all fields to be edited before return of change files to Census Bureau.

Label: Includes 2010 Tract Number and Census Proposed Tract Number.

### *2010 Census Block Groups*

Data Source: 2010 Decennial Census. Can be found here <https://www.census.gov/geo/maps-data/maps/reference.html>

Purpose: To show boundaries of 2010 Census Block Groups. Pop-up includes 2010 population and housing data, 2016 population and housing estimates (ACS 2016), 2017 population and housing estimates (ACS 2017), estimated population growth between 2010 and 2017 (ACS), estimated housing unit growth between 2010-2017 (ACS), and the percent population growth and percent housing unit growth (analysis of ACS data) between 2010-2017.

Label: Includes Block Group ID, 2017 Population Estimates per ACS, 2017 HU Estimates per ACS, percent population growth between 2010-2017, and percent HU growth between 2010-2017.

### *2010 Census Tracts*

Data Source: 2010 Decennial Census. Can be found here <https://www.census.gov/geo/maps-data/maps/reference.html>

Purpose: To show boundaries of 2010 Census Tracts. Pop-up includes 2010 population and housing data, 2016 population and housing estimates (ACS 2016), 2017 population and housing estimates (ACS 2017), estimated population growth between 2010 and 2017 (ACS), estimated housing unit growth between 2010-2017 (ACS), and the percent population growth and percent housing unit growth (analysis of ACS data) between 2010-2017.

Label: Includes Tract Number, 2017 Population Estimate per ACS, 2017 HU Estimate per ACS, percent population growth between 2010-2017, and percent HU growth between 2010-2017.

### *Municipal Boundaries*

Data Source: Coconino County Open Data

Purpose: To show boundaries of municipalities within Coconino County.

*Block Groups w/ pop exceeding 3k or HU 1200 (ACS 2017)*

Data Source: American Community Survey (ACS) 2017, American Fact Finder  
<https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>

Purpose: To show Block Groups that exceed the threshold of either population, 3,000, or housing units, 1,200, per “2020 Census Participant and Statistical Areas Program (PSAP) Quick Reference Guide: Census Block Groups”.

*Tract w/ pop exceeding 8k or HU 3200 (ACS 2017)*

Data Source: American Community Survey (ACS) 2017, American Fact Finder  
<https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>

Purpose: To show Tracts that exceed the threshold of either population, 8,000, or housing units, 3,200, per “2020 Census Participant and Statistical Areas Program (PSAP) Quick Reference Guide: Census Tracts”.

*MCD (Minor Civil Divisions:*

Data Source: 2010 Decennial Census. Can be found here <https://www.census.gov/geo/maps-data/maps/reference.html>

Purpose: To show MCDs to which tract and block group boundaries may be aligned.

*Subdivision Development since 2010*

Data Source: Coconino County Data

Purpose: To show areas of growth since the 2010 Decennial Census.

*Residential Address*

Data Source: Coconino County Data

Purpose: To show where residential addresses are in Coconino County.

*Permitted Parcels*

Data Source: Coconino County Data

Purpose: Parcels that have active permits.

*Residential Parcels*

Data Source: Coconino County Data

Purpose: To show where residential parcels are located

*Area Plan Boundary*

Data Source: Coconino County Data

Purpose: To show the boundaries of the Coconino County Planning and Zoning Area Plan

#### *Census Designated Places*

Data Source: 2010 Decennial Census. Can be found here <https://www.census.gov/geo/maps-data/maps/reference.html>

Purpose: To show Census Designated Places (See “2020 Census Participant and Statistical Areas Program (PSAP) Quick Reference Guide: Census Designated Places”) to be reviewed for PSAP

#### *Opportunity Zones*

Data Source: Coconino County Data, <https://www.irs.gov/newsroom/opportunity-zones-frequently-asked-questions>

Purpose: To show areas of economically-distressed communities where new investments, under certain conditions, may be eligible for preferential tax treatment.

#### *County Boundary*

Data Source: Coconino County Data

Purpose: To show the boundary of Coconino County

#### **Metadata:**

1. American Community Survey (ACS) data for both block groups and tracts was obtained from American Fact Finder (<https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>) for 2017 and joined to 2010 Census tables for block groups and tracts, respectively.
2. Census block groups and tracts exceeding the threshold for either population or housing units were identified using a definition query.
3. Census Proposed Changes to block groups and tracts were obtained from Participant and Statistical Areas Program website: <https://www.census.gov/programs-surveys/decennial-census/about/psap.html>
4. Census Required Review: *Census Proposed Changes to Block Groups, Census Proposed Changes to Tracts, Census Designated Places*
5. Census Recommended Review: *Block Groups exceeding threshold, Tracts exceeding threshold*

6. Change types permitted:

**Table 31: Modify Area Feature Actions by Statistical Geography**

Geography	Action	Filter Options	Population and Housing Units Criteria	Change Types
<b>Census tract</b>	Merge, Boundary Change, Split by Block Group, Split by Face, and Change Attributes.	No filter, Below Minimum, Above Maximum, Water, Special Land Use	Census tract is BELOW the minimum population (<1,200) OR housing unit (< 480) threshold. Census tract is ABOVE the maximum population (> 8,000) or housing unit (> 3,200) threshold.	<b>M</b> for Merge, <b>B</b> for Boundary Change, <b>E</b> for Split, and <b>G</b> for Attribute Change. These codes manifest most notably in the <b>Review Change Polygons</b> tool.
<b>Block group</b>	Merge, Boundary Change, Split, and Change Attributes.	No filter, Below Minimum, Above Maximum	Block group is BELOW the minimum population (<600) OR housing unit (< 240) threshold. Block group is ABOVE the maximum population (> 3,000) or housing unit (> 1,200) threshold.	<b>M</b> for Merge, <b>B</b> for Boundary Change, <b>E</b> for Split, and <b>G</b> for Attribute Change. These codes manifest most notably in the <b>Review Change Polygons</b> tool.

Geography	Action	Filter Options	Population and Housing Units Criteria	Change Types
<b>Census designated place (CDP)</b>	Boundary Change, New District, and Change Attributes.	No filter, Below Minimum	None, but must contain some population, housing units, or both.	<b>B</b> for Boundary Change, <b>E</b> for New District (CDP), <b>G</b> for Attribute Change, and <b>X</b> for Deleted CDP. These codes manifest most notably in the <b>Review Change Polygons</b> tool.
<b>Census county division (CCD)</b>	Merge, Boundary Change, New District, and Change Attributes.	The Filter option section does not exist for CCDs	None, but since comprised of census tracts the housing and population totals mimic those of that geography.	<b>M</b> for Merge, <b>B</b> for Boundary Change, <b>E</b> for New District (CCD), and <b>G</b> for Attribute Change. These codes manifest most notably in the <b>Review Change Polygons</b> tool.

\*Special Use Block Groups and Tracts are permitted in areas “encompassing an employment center, large airport, public park, public forest, or large water body with no (or very little) population or housing units.” (Standard Respondent Guide pg 2 Table 5)

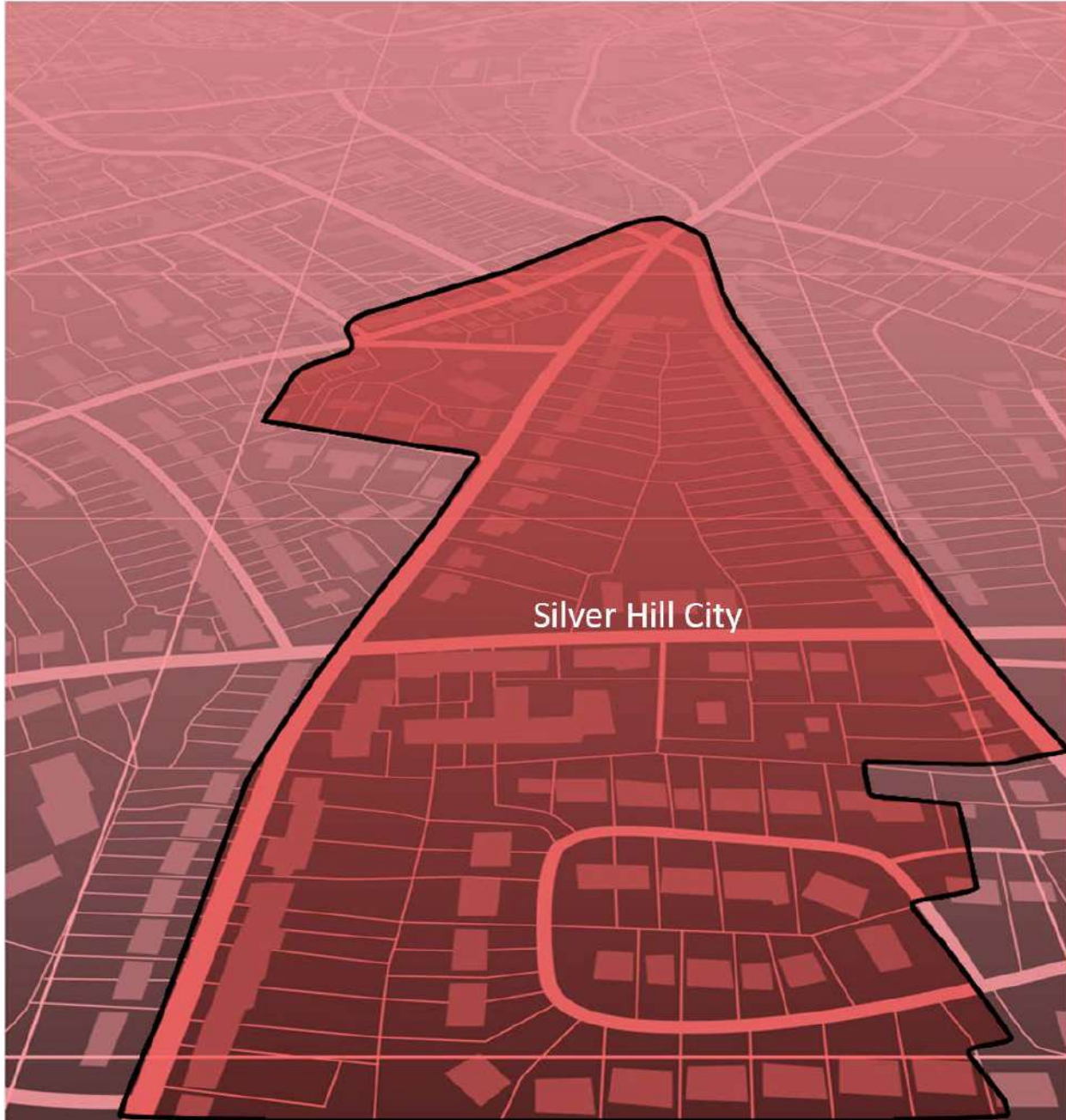
## Appendix L

# Boundary and Annexation Survey (BAS) Respondent Guide: Digital

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*Instructions for Participating Digitally in the 2021 Boundary and Annexation Survey*

Revised as of January 25, 2021



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# TABLE OF CONTENTS

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<b>Introduction .....</b>	<b>viii</b>
A. The Boundary and Annexation Survey .....	viii
B. Key Dates for BAS Respondents .....	viii
C. BAS State Agreements.....	ix
D. Legal Disputes .....	ix
<b>Chapter 1 Digital BAS Requirements.....</b>	<b>1</b>
1.1 Digital BAS Participation Requirements .....	1
1.2 BAS Informational and Tutorial Videos .....	1
<b>Chapter 2 Topological Relationships and Spatial Accuracy.....</b>	<b>2</b>
2.1 Topological Relationships in the MAF/TIGER System .....	2
2.2 GIS and Spatial Accuracy .....	3
2.3 Census Bureau Topology Training Video .....	5
<b>Chapter 3 Census Bureau Provided Shapefiles .....</b>	<b>6</b>
3.1 Federal Information Processing Standards (FIPS) Codes .....	6
<b>Chapter 4 Census Bureau Geocoding .....</b>	<b>7</b>
4.1 MAF Structure Point (MSP) Geocoding .....	7
4.2 Address Range Geocoding.....	8
<b>Chapter 5 Updating the Census Bureau Shapefiles.....</b>	<b>9</b>
5.1 General File Setup Guidelines .....	9
5.2 Changing the Map Projection.....	9
5.3 Boundary Changes .....	9
5.3.1 Annexations and Deannexations .....	10
5.3.2 Boundary Corrections .....	10
5.3.3 Boundary Changes to Legal Governments in Georgia and Indiana .....	11
5.3.4 New Incorporations .....	12
5.3.5 Disincorporations.....	12
5.3.6 Geographic Corridors.....	12
5.3.7 Geographic Offsets .....	13
5.4 Linear Feature Updates .....	14
5.4.1 Adding, Deleting, Renaming, and Recoding Linear Features.....	15
5.4.2 Address Range Updates .....	15

5.5	Area Landmarks, Hydrographic Areas, and Point Landmarks .....	15
5.5.2	Area Landmark/Hydrographic Area Updates .....	16
5.5.3	Point Landmark Updates .....	18
5.6	Reviewing Changes to the Census Bureau Shapefiles .....	20
5.6.1	Boundary-to-Feature Relationships .....	21
5.6.2	Large Boundary Corrections .....	23
5.6.3	Required Attribute Information .....	24
5.6.4	Appropriate Projection Information .....	24
5.6.5	Linear Feature Updates .....	24
5.7	Additional Information Review .....	25
5.7.1	Submitting Digital Data .....	25
5.7.2	Change Polygon Layer Naming Conventions.....	26
5.7.3	Whole Entity Polygon Layer Naming Conventions.....	26
5.7.5	Linear Feature, Area Landmark/Hydrographic Area, and Point Landmark Updates	27
5.7.6	Compressing the Digital Files .....	27
5.7.7	Submitting Digital Files through SWIM .....	29
<b>Appendices.....</b>		<b>34</b>
<b>Appendix A Data Dictionary.....</b>		<b>A-1</b>
<b>Appendix B 2021 BAS Example Process 1.....</b>		<b>B-1</b>
B1	How to Use the BAS Partnership Toolbox .....	B-1
B2	Toolbox Tools Setup .....	B-1
B3	Census Data Download Tool.....	B-2
B4	Create Changes Tool .....	B-4
B5	Sliver Blaster Tool (Optional).....	B-6
B6	Format Working MXD Tool (Optional).....	B-7
B7	Attribute Check Tool .....	B-8
B8	Export Submission Tool .....	B-9
B9	Submitting Files through the Secure Web Incoming Module (SWIM) .....	B-10
<b>Appendix C 2021 Digital BAS Example Process 2.....</b>		<b>C-1</b>
C1	Required Census Bureau Shapefiles .....	C-1
C2	Local Data.....	C-1
C3	Symbolizing Layers in ArcGIS.....	C-1
C4	Symbolizing Geographic Areas .....	C-3

C5	Extracting Incorporated Place or MCD Data from Census Shapefiles .....	C-3
C5.1	Filtering the Data .....	C-4
C5.2	Exporting the Data to a New Shapefile .....	C-4
C6	Merging Multipart Place Data .....	C-5
C7	Creating Change Polygons .....	C-6
C7.1	Creating Change Polygons Using Symmetrical Difference .....	C-6
C7.2	Creating Change Polygons Using Union .....	C-8
C8	Reviewing and Attributing Change Polygons.....	C-10
C8.1	Examples.....	C-10
C9	Attribute Information.....	C-10
C9.1	To Begin Updating Attributes for Annexation.....	C-11
C9.2	To Begin Updating Attributes for Deannexation.....	C-11
C9.3	To Begin Updating Attributes for Geographic Corridors .....	C-11
C9.4	To Begin Updating Attributes for Geographic Offsets.....	C-11
C9.5	To Finish Updating Attributes .....	C-11
C10	Renaming and Finalizing Change Polygons.....	C-12
C10.1	Renaming the Shapefile .....	C-12
C10.2	Submitting the shapefile.....	C-12
C10.3	To Begin Updating Attributes for Boundary Corrections .....	C-12
<b>Appendix D</b>	<b>MTFCC Descriptions .....</b>	<b>D-1</b>

## LIST OF TABLES

---

Table 1: BAS Shapefile Naming Conventions.....	6
Table 2: Annexations and Deannexations .....	10
Table 3: Boundary Corrections.....	10
Table 4: New Incorporations.....	12
Table 5: Disincorporations .....	12
Table 6: Geographic Corridors.....	13
Table 7: Geographic Offsets .....	14
Table 8: Linear Feature Updates .....	15
Table 9: Address Range Updates.....	15
Table 10: Landmarks and Hydrographic Areas .....	16
Table 11: Acceptable MTFCCs for New Area Landmarks/Hydrographic Areas .....	17
Table 12: Point Landmark Updates .....	18
Table 13: Restricted Point Landmark MTFCC Codes.....	20
Table 14: Change Polygons .....	26
Table 15: Whole Entity Polygon Layer Naming Conventions.....	26
Table 16: Optional Files.....	27
Table 17: County and Equivalent Areas Shapefile .....	A-1
Table 18: County Subdivisions Shapefile .....	A-1
Table 19: Incorporated Place Shapefile.....	A-2
Table 20: Consolidated City Shapefile .....	A-2
Table 21: Edges Shapefile.....	A-3
Table 22: Area Landmark Shapefile.....	A-4
Table 23: Hydrographic Area Shapefile .....	A-4
Table 24: Point Landmark Shapefile .....	A-4
Table 25: Geographic Offset Shapefile .....	A-5
Table 26: Suggested MTFCC Symbolization.....	C-3

## LIST OF FIGURES

---

Figure 1. Topological Integration of Four Classes .....	3
Figure 2. Overlay of Four Feature Classes .....	4
Figure 3. GIS Place Boundary Does Not Follow Road Feature .....	4
Figure 4. GPS Method of Geocoding .....	7
Figure 5. Address Range Method of Geocoding .....	8
Figure 6. Geographic Corridor Created .....	13
Figure 7. Geographic Corridor Not Created.....	13
Figure 8. Cadastral Data .....	14
Figure 9. Same Data Edited to Census Requirements .....	14
Figure 10. A Boundary Correction to Park A.....	16
Figure 11. Boundary Corrections Not Snapped to Existing Linear Features .....	21
Figure 12. Annexation Created without Snapping to Centerlines .....	22
Figure 13. Small Spatial Correction Not Incorporated.....	22
Figure 14. Small Spatial Correction Not Accepted.....	23
Figure 15. Large Boundary Corrections .....	23
Figure 16. New Road Features, Not Added to Existing Road.....	24
Figure 17. New Road Features, Correctly Added.....	24
Figure 18. Selecting and Zipping Return Files.....	28
Figure 19. Naming the ZIP File.....	29
Figure 20. SWIM Account Registration.....	30
Figure 21. SWIM Login Window .....	31
Figure 22. Welcome Screen with Upload History .....	31
Figure 23. Geographic Partnership Program Selection Window .....	31
Figure 24. Geographic Level Selection Window .....	32
Figure 25. Government Selection Window .....	32
Figure 26. File Upload Screen.....	32
Figure 27. File Browser Dialog Box .....	33
Figure 28. Entering Comments into the File Upload Window .....	33
Figure 29. Thank You Screen .....	33

Figure 30. Partnership BAS Tools Menu .....	B-2
Figure 31. Partnership BAS Tools Menu with Census Data Download Selected .....	B-2
Figure 32. The Census Data Download Window with ‘Yes’ in the Use Data Downloader Field ..	B-3
Figure 33. The Census Data Download Window with ‘No’ in the Use Data Downloader Field...	B-3
Figure 34. Partnership Tools Menu Showing a Folder for the BAS ID in the Projects Folder .....	B-3
Figure 35. NAME Field in Census Data vs Local Boundary Data.....	B-4
Figure 36. Appropriate Attribution for COUSUB or AIANNH Changes .....	B-4
Figure 37. Partnership Tools Menu with Create Changes Tool Selected .....	B-5
Figure 38. Create Changes Window .....	B-5
Figure 39. Partnership Tools Menu with Geodatabase .....	B-6
Figure 40. Partnership Tools Menu with Sliver Blaster Selected .....	B-6
Figure 41. Sliver Blaster Window .....	B-7
Figure 42. Partnership Tools Menu with Format Working MXD Selected .....	B-7
Figure 43. Format Working MXD Window .....	B-7
Figure 44. Projects Submenu with mxd file Selected .....	B-8
Figure 45. Partnership Tools Menu with Attribute Check Selected .....	B-8
Figure 46. Attribute Check Window .....	B-8
Figure 47. Projects Submenu Showing an attribute_check Text File .....	B-9
Figure 48. Partnership Tools Menu with Export Submission Files Selected .....	B-9
Figure 49. Export Submission Files Window.....	B-10

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# INTRODUCTION

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## A. The Boundary and Annexation Survey

The U.S. Census Bureau conducts the Boundary and Annexation Survey (BAS) annually to collect information about selected legally defined geographic areas, such as counties (and equivalent areas), incorporated places, minor civil divisions (MCDs), federally recognized American Indian Areas (AIAs) — including reservations, off-reservation trust lands and tribal subdivisions, and Hawaiian Homelands. BAS also provides an opportunity for participants to review the names and geographic relationships for these areas. Title 13, Section 6, United States Code authorizes this survey.

The Census Bureau uses the boundary information collected during BAS to tabulate data for the decennial and economic censuses, and to support the yearly delivery of the Population Estimates Program (PEP) and the American Community Survey (ACS) data. Maintaining correct boundaries and boundary-to-feature relationships through BAS helps ensure that the Census Bureau assigns the appropriate housing and population counts to each government.

In compliance with the Office of Management and Budget Circular A-16, BAS supports the Census Bureau's spatial data steward responsibilities for the Federal Geographic Data Committee (FGDC) and the Geospatial One-Stop by updating the inventory and boundaries of governments.

In addition, BAS is the source of up-to-date information on changes to the boundaries, codes and names of incorporated places, MCDs, counties (and equivalent areas), Hawaiian Homelands, and federally recognized AIAs, which include reservations and off-reservation trust lands used by the U.S. Geological Survey (USGS), the National Map, and the Geographic Names Information System (GNIS). Please visit the BAS program website at <https://www.census.gov/programs-surveys/bas.html>.

For more information on BAS, please view the BAS video series on the Census Bureau's BAS website at <https://www.census.gov/programs-surveys/bas/library/bas-videos.html>.

## B. Key Dates for BAS Respondents

**January 1**— Boundary updates must be legally in effect on or before this date to be reported in the current survey year.

**March 1**— Boundary updates returned by this date will be reflected in the ACS and PEP data and in next year's BAS materials.

**May 31**— Boundary updates returned by this date will be reflected in next year's BAS materials.

## C. BAS State Agreements

The Census Bureau has established agreements with states for reporting boundary changes. Please visit the BAS State Agreements webpage within the BAS program website at <https://www.census.gov/programs-surveys/bas/information/state-agreements.html> or call **1-800-972-5651** for information regarding state agreements.

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**Note:** The Census Bureau can only establish BAS state agreements for states that require local governments to report boundary changes to a state agency.

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## D. Legal Disputes

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 **1-301-763-9844**.

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 of time 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.

# CHAPTER 1 DIGITAL BAS REQUIREMENTS

---

## 1.1 Digital BAS Participation Requirements

1. All participants must create a new 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. All participants must provide legal documentation numbers and effective dates for all legal boundary changes (annexations and deannexations).
3. Each non-legal boundary correction must contain proper update documentation according to boundary corrections guidelines or the Census Bureau will not make the correction for this BAS cycle.
4. 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. For details on registering and using SWIM, please see [5.7.7, Submitting Digital Files through SWIM](#). To access SWIM, enter the following URL in a new browser window:  
<<https://respond.census.gov/swim/>>.
5. All participants must provide current information for the BAS point of contact, the person updating the shapefiles, and the Highest Elected Official (HEO) for the government.

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**Note:** For participants already familiar with Geographic Information Systems (GIS) and BAS updating procedures, [Appendix B](#) and [Appendix C](#) provide step-by-step guidelines for making updates.

---

## 1.2 BAS Informational and Tutorial 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: <<https://www.census.gov/programs-surveys/bas/library/bas-videos.html>>.

If there are any questions or concerns about the participation requirements, contact the Census Bureau at **1-800-972-5651** or <[geo.bas@census.gov](mailto:geo.bas@census.gov)>.

## CHAPTER 2 TOPOLOGICAL RELATIONSHIPS AND SPATIAL ACCURACY

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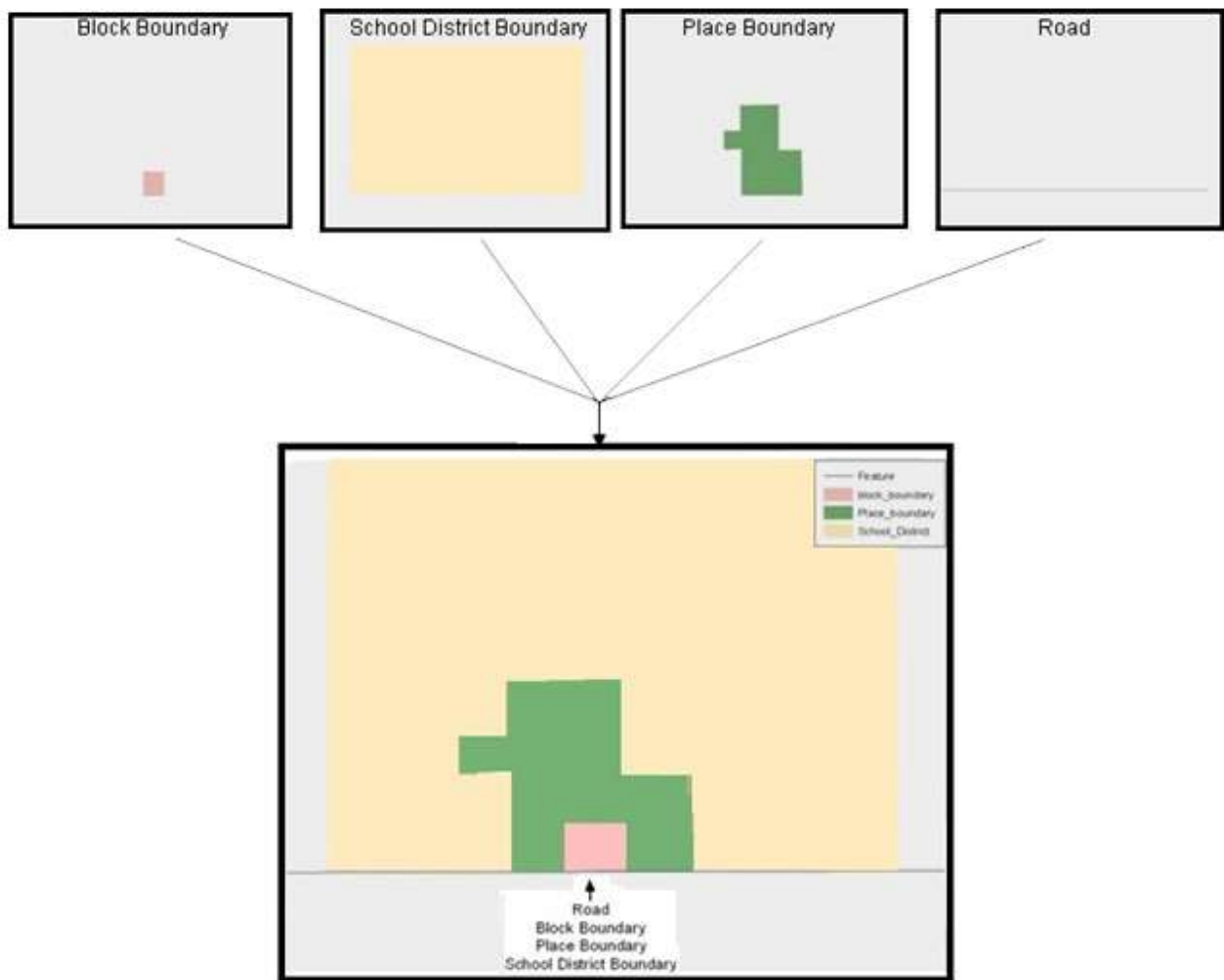
The Geography Division of the Census Bureau is responsible for developing geographic applications and executing related activities needed to support the Census Bureau in collecting and disseminating census data. For more than twenty years, the Census Bureau's Master Address File and Topologically Integrated Geographic Encoding and Reference (MAF/TIGER) system has been a critical resource for supporting the Census Bureau Geographic Partnership Programs.

The following section will describe how the Census Bureau uses a topologically integrated system and how this differs from traditional GIS, which use separate layers of data.

### 2.1 Topological Relationships in the MAF/TIGER System

At the Census Bureau, topology is described as the spatial relationship between different levels of geography. The MAF/TIGER system is a geographic database in which the topological structures define the location, connection, and relationships of streets, rivers, railroads, and other features. These topological structures help define the geographic areas for which the Census Bureau tabulates data.

Instead of having a separate layer for each feature class (roads, boundaries, etc.), all MAF/TIGER system information is stored in one layer or file. See [Figure 1](#) for a sample of a topologically integrated file in the MAF/TIGER system.

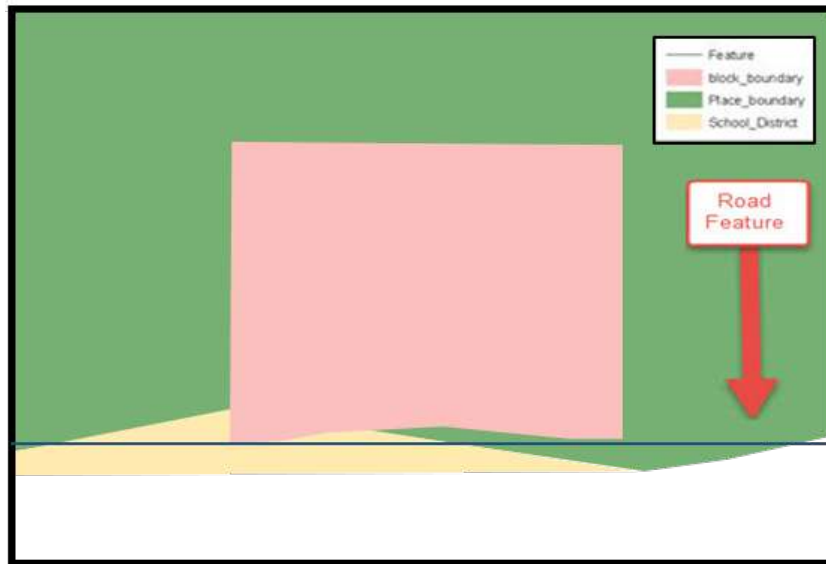


**Figure 1. Topological Integration of Four Classes**

This example shows the topological integration of four different feature classes into one layer. One road feature represents not only a road, but also a block boundary, place boundary and a school district boundary.

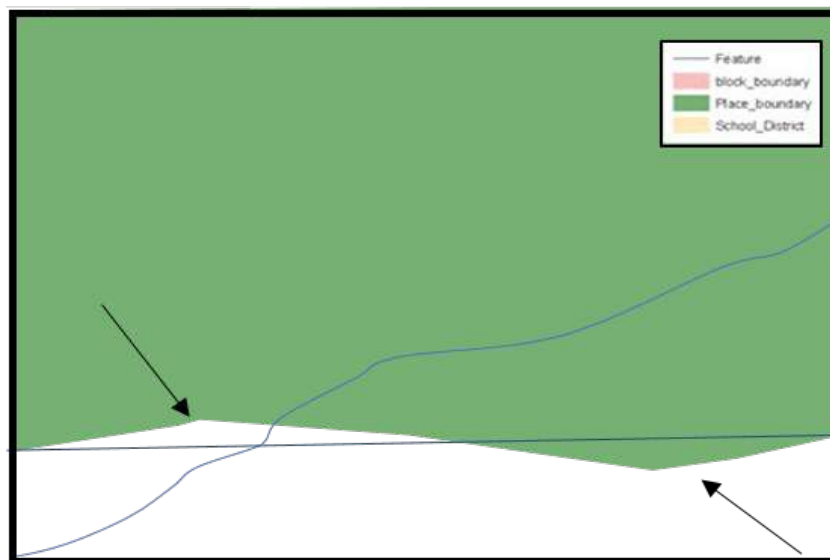
## 2.2 GIS and Spatial Accuracy

In a GIS, feature classes are often not topologically integrated; they are separated into individual layers. When these layers are overlaid in a GIS, there may be boundary misalignments due to the nature of the data. These non-topologically integrated layers could cause issues in the MAF/TIGER system. [Figure 2](#) and [Figure 3](#) show how files that are not topologically integrated might appear in a GIS when overlaid.



**Figure 2. Overlay of Four Feature Classes**

This example shows an overlay of four different feature classes. Notice how the topological relationship is compromised. The block, place and school district boundaries, which are supposed to follow the road feature, are no longer aligned with the road in several locations.



**Figure 3. GIS Place Boundary Does Not Follow Road Feature**

This example shows a situation where a local GIS place boundary does not follow a road feature. Assuming that the boundary follows the road feature in the MAF/TIGER system, changing the Census Bureau place boundary to match the local file exactly and become misaligned (see arrows) would dissolve the topological relationship in the MAF/TIGER system.

The spatial differences between local GIS data and the Census Bureau’s topologically integrated file are often very small (less than ten feet) and can create boundary-to-feature relationship issues for the Census Bureau. Instructions on how to review digital submissions for small spatial boundary corrections are given in [5.6: Reviewing Changes to the Census Bureau Shapefiles](#). It also lists some of the potential consequences of making spatial boundary corrections that dissolve the topological relationships present in the MAF/TIGER system.

To find step-by-step instructions of suggested methods for correctly making boundary changes, please see [Appendix B](#) and [Appendix C](#).

## **2.3 Census Bureau Topology Training Video**

The Census Bureau created a video on the subject of topology and why topology is important to BAS. For more information, please go to <<https://www.census.gov/programs-surveys/bas/library/bas-videos.html>> to watch the video.

## CHAPTER 3 CENSUS BUREAU PROVIDED SHAPEFILES

The Census Bureau provides data layers in Esri shapefile format for download on the BAS website. Regardless of the number of geographic polygon-based shapefiles each participant downloads and edits, there is only one shapefile for the linear feature network for each county. See [Table 1](#) for the names of the shapefiles.

**Table 1: BAS Shapefile Naming Conventions**

Government Type	Shapefile Naming Convention
County	PVS_20_v2_county_<ssccc>.shp
Minor Civil Division	PVS_20_v2_mcd_<ssccc>.shp
Incorporated Place	PVS_20_v2_place_<ssccc>.shp
Consolidated City	PVS_20_v2_concity_<ssccc>.shp
Edges (Roads, Rail, Hydro, etc.)	PVS_20_v2_edges_<ssccc>.shp
Area Landmarks	PVS_20_v2_arealm_<ssccc>.shp
Point Landmarks	PVS_20_v2_pointlm_<ssccc>.shp
Hydrographic Area	PVS_20_v2_water_<ssccc>.shp
Geographic Offsets / Corridors	PVS_20_v2_offset_<ssccc>.shp

Please download shapefiles from the BAS website at <https://www.census.gov/geographies/mapping-files/2021/geo/bas/2021-bas-shapefiles.html> in order to review the boundaries and submit changes.

---

**Note:** <ssccc> represents the two-digit state FIPS code and three-digit county FIPS code.

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

- Geographic Coordinate System – North American Datum 1983 (GCS NAD83).
- Angular Unit: Degree (0.017453292519943299).
- Prime Meridian: Greenwich (0.000000000000000000).
- Datum: D\_North\_American\_1983.
- Spheroid: GRS\_1980.
- Semi-major Axis: 6378137.0000000000000000.
- Semi-minor Axis: 6356752.314140356100000000.
- Inverse Flattening: 298.257222101000020000.

### 3.1 Federal Information Processing Standards (FIPS) Codes

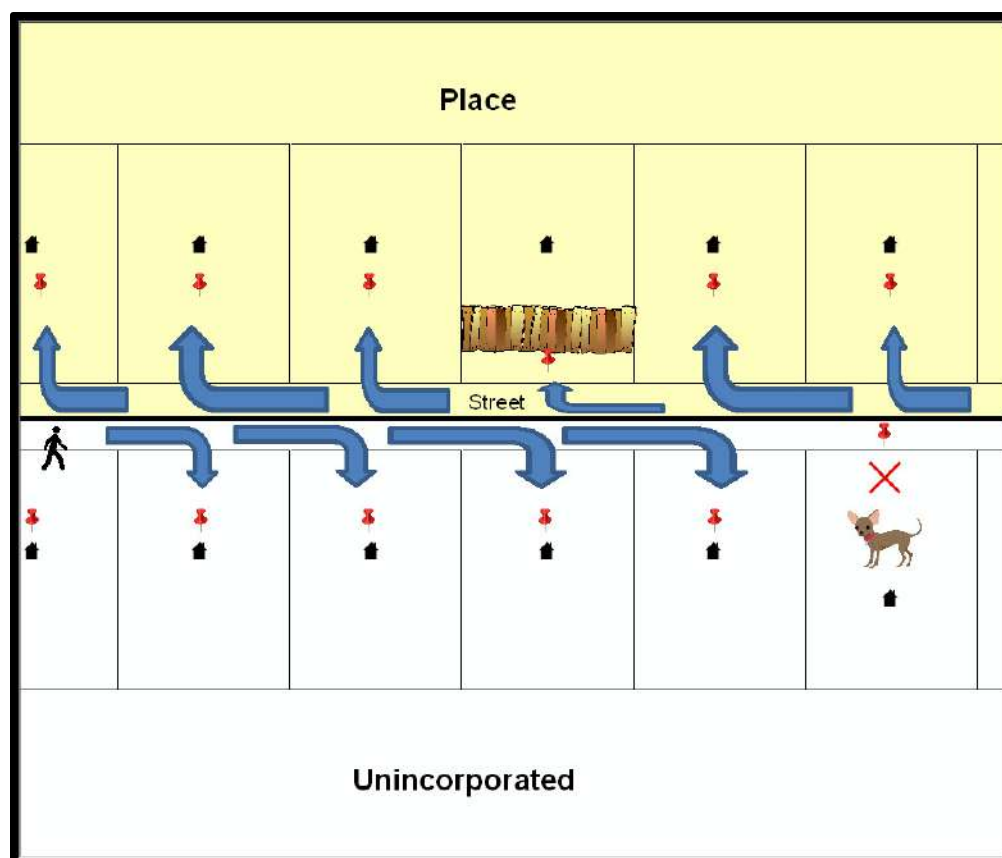
The Census Bureau recommends using FIPS codes to identify governments such as counties, MCDs, and incorporated places. Using a standard coding scheme facilitates the digital exchange of data. The Census Bureau includes these codes in the BAS shapefiles in the fields that end in 'FP'. The codes can be found online at <https://www.census.gov/programs-surveys/bas/technical-documentation/code-lists.html>. If there are any questions, contact the Census Bureau at **1-800-972-5651** or [geo.bas@census.gov](mailto:geo.bas@census.gov).

## CHAPTER 4 CENSUS BUREAU GEOCODING

Geocoding is how the Census Bureau codes the location of the population within the legal boundaries of a geographic area. There are two primary methods of geocoding used by the Census Bureau, and both involve coding an address to a spatial polygon. One uses Global Positioning System (GPS) technology to create a Master Address File (MAF) structure point (MSP) and the other uses address ranges for geocoding.

### 4.1 MAF Structure Point (MSP) Geocoding

A field worker stands in front of a house or living quarters, and records the physical location with a GPS device ([Figure 4](#)). Usually, the GPS point should fall very close to the front door of the house. However, since GPS points were collected in the field, real-world obstacles like locked fences, poor satellite reception, or even aggressive dogs might sometimes prevent the worker from gaining access to the front door. In these circumstances, the worker may have to take the GPS coordinate from the sidewalk or side of the road.

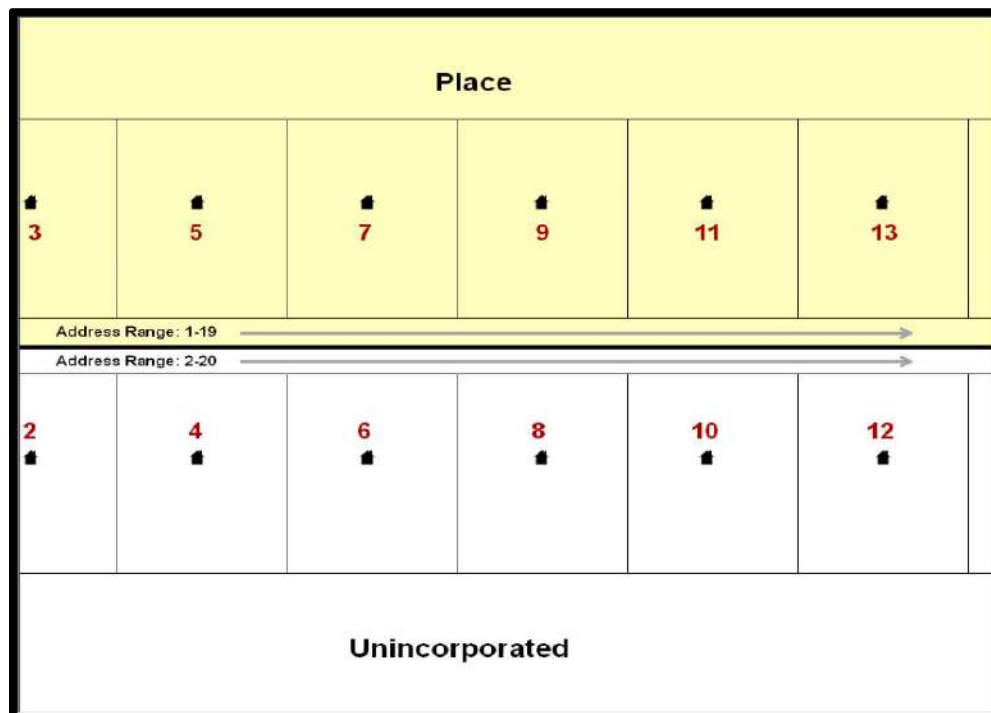


**Figure 4. GPS Method of Geocoding**

Notice that it is occasionally not possible for the field worker to go all the way to the front door due to unforeseen circumstances, like the fence or the dog shown above. Thus, the MSP (represented here by the red pins) can sometimes fall within the road or the road right-of-way.

## 4.2 Address Range Geocoding

When no MSP is available, the Census Bureau codes houses and living quarters according to a potential range of addresses associated with the adjacent stretch of road ([Figure 5](#)).



**Figure 5. Address Range Method of Geocoding**

When it is not possible to collect an MSP, houses are geocoded according to their placement along a range of potential addresses along that road. Since the address has a relationship with the road, boundaries placed on front-lot-lines will lead to mis-geocoding unless an offset flag is used.

While the two methods of geocoding differ greatly, both rely heavily on the integrated nature of the MAF/TIGER system. These geocoding methods are affected by the way streets and boundaries are represented in relation to one another. This interdependence between streets, boundaries, and geocoding means that Census Bureau representations of legal boundaries may sometimes differ from other representations (e.g., in local or state GIS). This is especially true regarding geographic corridors and offsets that follow road right of ways (or the front-lot-lines of parcels). In both examples above, delineating a boundary along the front-lot-line will tend to increase the risk of incorrect geocoding. As a result, using the road centerline as a boundary is the safer method.

---

**Important:** When completing a BAS submission in which a road or road right-of-way is owned or maintained by a place but the adjacent housing is not, the respondent should use the centerline of the road (not the front-lot-line) as the boundary whenever possible.

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If local or state law requires the use of the front-lot-line boundary, the respondent must explicitly designate the polygon(s) between the road centerline and the front-lot-boundary as a corridor or an offset (see [5.3.6, Geographic Corridors](#) and [5.3.7, Geographic Offsets](#) of this document for more details).

## CHAPTER 5 UPDATING THE CENSUS BUREAU SHAPEFILES

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Census Bureau shapefiles downloaded from the partnership verification shapefiles (PVS) download page can be used to create new shapefiles for boundary and/or linear feature changes that have occurred since the last BAS update. Step-by-step instructions for these procedures can be found in [Appendix B](#) and [Appendix C](#) and in the BAS video series at <https://www.census.gov/programs-surveys/bas/library/bas-videos.html>.

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**Note:** If there are problems with the processing of returned files, the Census Bureau will email a feedback document requesting clarification of any issues. If the problem cannot be resolved before the project deadline, the changes in question will not be made during the current BAS.

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### 5.1 General File Setup Guidelines

After downloading the shapefiles from the PVS download page, follow these procedures before beginning actual updates:

- Open the downloaded ZIP file to verify its contents.
- Copy the shapefiles into a directory on a server/hard drive.
- Open the shapefiles with GIS software.

### 5.2 Changing the Map Projection

Census Bureau files are in GCS NAD83 format and can be projected into any local coordinate system/projection. Most GIS software packages will allow users to transform file coordinate systems and projections. For example, if using ArcGIS, use its **‘Project tool’** in **ArcToolbox**. Shapefile extracts contain defined projection information in the \*.prj file. ArcGIS accesses the \*.prj file for projection information so there is no need to define these parameters before changing the file coordinate systems.

When updates are complete, participants may submit the boundary change shapefile using any local coordinate system/projection if the shapefile contains a \*.prj file or spatial reference materials such as metadata.

### 5.3 Boundary Changes

In order to update the MAF/TIGER system, participants must create a separate change polygon layer for each updated government type (county, MCD, place). Please create change polygons in relation to the current MAF/TIGER boundary.

[Appendix B](#) and [Appendix C](#) provide two examples for creating annexation and deannexation, boundary correction, new incorporation, geographic corridor, and geographic offset change polygons. See [Appendix C](#) for specific tools used to make changes to files.

Additionally, [Appendix B](#) covers the steps required to complete a submission using the BAS Partnership Toolbox. The toolbox includes tools to download Census Bureau data, use the Union geoprocessing tool to create a changes layer containing all the differences between Census Bureau and local boundaries, and create a ZIP file for submission through SWIM.

Please review any boundary change polygons before submitting them ([5.7, Additional Information Review](#)).

### 5.3.1 Annexations and Deannexations

The Census Bureau will accept annexations and deannexations from counties, MCDs, and incorporated places. For a boundary change to an existing legal government (or the new incorporation or disincorporation of a legal government) to be processed as a legal change, participants must provide the legal documentation number (e.g., law or ordinance number), effective date, and authorization type. They are not required to submit paperwork documenting the change.

Each annexation or deannexation change polygon must have the required attributes and corresponding change type populated, as seen in [Table 2](#). The Census Bureau will snap any annexation or deannexation to a MAF/TIGER feature when it exists within **thirty** feet of that feature.

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**Note:** Enter the name of the jurisdiction annexing or deannexing the area in the NAME field.

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**Table 2: Annexations and Deannexations**

	NAME	CHNG_TYPE	EFF_DATE	AUTHTYPE	DOCU (Not Required in GA)	AREA (Required in GA)	RELATE
Annexation	X	X ('A')	X	X	X	* See Note	
Deannexation	X	X ('D')	X	X	X	* See Note	

(**Note:** 'X' = Required Field)

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**Note:** Area in acres is required for Georgia and requested for all other areas.

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### 5.3.2 Boundary Corrections

The Census Bureau will also accept specific boundary corrections from counties, MCDs, and incorporated places. As with annexations and deannexations, the participant must create individual change polygons for each boundary correction. Each boundary correction must also have the required attributes and corresponding change type populated, as seen in [Table 3](#), or the Census Bureau will reject them.

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**Note:** Enter the name of the jurisdiction the boundary correction is for in the NAME field.

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**Table 3: Boundary Corrections**

	NAME	CHNG_TYPE	EFF_DATE	AUTHTYPE	DOCU	AREA	RELATE
Boundary Correction	X	X ('B')					X ('IN', 'OUT')

(**Note:** 'X' = Required Field)

The Census Bureau uses a topologically integrated database. As a result, the Census Bureau cannot process all types of boundary corrections for inclusion in the MAF/TIGER system. The Census Bureau **will** accept and process properly documented boundary corrections during the current BAS cycle that spatially interact with (abut) other BAS legal changes (annexation, deannexation, corridor, offset) and meet both of the following two conditions:

- In situations where the existing boundary has been digitized incorrectly or appears in the incorrect location due to Census Bureau activities.
- Where the overall shape of the geographic area is maintained, and no feature-to-boundary relationships are dissolved.

The Census Bureau **will reject** boundary corrections:

- Along county boundaries unless there is a written agreement between the two counties that documents the correct location of the boundary.
- Between adjacent incorporated places or adjacent MCDs unless the county submitting the changes is part of a Consolidated BAS (CBAS) agreement or there is a written agreement between the two incorporated places or MCDs.
- That dissolve boundary-to-feature relationships (roads, rivers, railroads, etc.) if the difference is less than thirty feet.
- Which are greater than one square mile, or not contiguous with the rest of the government boundary. These boundary corrections may be part of annexations that were never reported to the Census Bureau. If they are previously unreported boundary changes, please include effective dates and legal documentation numbers for these changes; or
- That have a width of less than thirty feet over the entire polygon.

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**Note:** Remember that the Census Bureau will snap any boundary correction to a MAF/TIGER feature when it exists within thirty feet of that feature.

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### 5.3.3 Boundary Changes to Legal Governments in Georgia and Indiana

For questions about required documentation for a particular jurisdiction, contact the Census Bureau by phone at **1-800 972-5651** or by email at [<geo.bas@census.gov>](mailto:geo.bas@census.gov).

**Georgia:** Any legal boundary change made to an incorporated place in the state of Georgia must include: (1) the effective date and (2) the acreage of the legal change. In addition, before entering the change, ensure that all annexation/deannexation information has been reported to the Department of Community Affairs (DCA). The DCA provides the Census Bureau a list of the governments that reported boundary changes each year. Any legal boundary changes to incorporated places not on this list will not be placed in the MAF/TIGER system. For additional information, see: [<https://www.census.gov/programs-surveys/bas/technical-documentation/methodology/state-agreements.html>](https://www.census.gov/programs-surveys/bas/technical-documentation/methodology/state-agreements.html).

**Indiana:** Per Indiana state law, counties must provide the legal boundary updates for townships. For more information, refer to Indiana Code 36-6 Government of Townships at [<http://iga.in.gov/legislative/laws/2020/ic/titles/036>](http://iga.in.gov/legislative/laws/2020/ic/titles/036).

### 5.3.4 New Incorporations

Participants may submit new incorporations for incorporated places and MCDs through Digital BAS. As with other change types, an individual change polygon must be created for each new incorporation and possess the required attributes and the corresponding change type field must be populated (see [Table 4](#)). Participants should also provide the new incorporation paperwork (which should include the date of incorporation) as well as information for the HEO and BAS contact of the newly incorporated government.

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**Note:** Enter the name of the new jurisdiction in the NAME field. For required documentation for new incorporations, contact the Census Bureau at **1-800-972-5651** or [<geo.bas@census.gov>](mailto:geo.bas@census.gov).

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**Table 4: New Incorporations**

	NAME	CHNG_TYPE	EFF_DATE	AUTHTYPE	DOCU	AREA	RELATE
New Incorporation	X	X ('E')	X	X	X		

(Note: 'X' = Required Field)

### 5.3.5 Disincorporations

Participants may submit disincorporations through Digital BAS. As with other change types, an individual change polygon must be created for each disincorporation and must possess the required attributes. The corresponding change type must be populated as shown in [Table 5](#). Participants should also provide the official disincorporation paperwork, which should include the official date of disincorporation.

**Table 5: Disincorporations**

	NAME	CHNG_TYPE	EFF_DATE	AUTHTYPE	DOCU	AREA	RELATE
Disincorporation	X	X ('X')	X	X	X		

(Note: 'X' = Required Field)

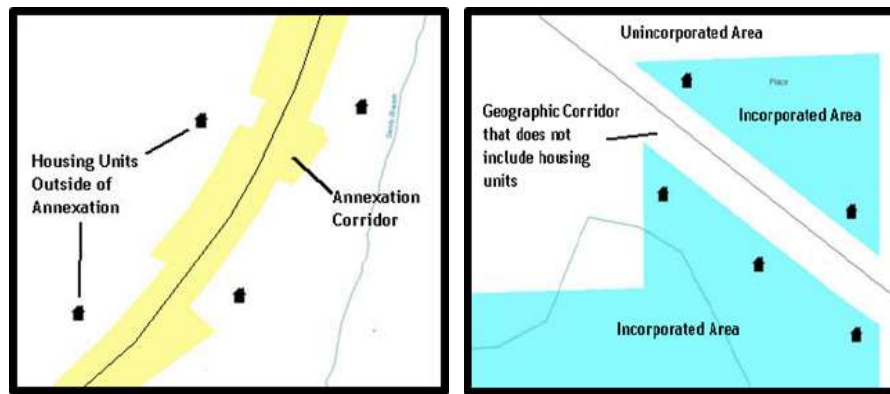
### 5.3.6 Geographic Corridors

The Census Bureau geocodes addresses based on the street centerline. If the geocoding of these addresses would result in the assignment of population to the incorrect government, participants should create a geographic corridor.

A **geographic corridor** is an area that includes only the road right-of-way and does not contain any structures addressed to either side of the street. [Figure 6](#) shows a corridor (shown in color) created where the incorporated place owns the right-of-way, but the housing units are not included in the incorporated place. These are often used to connect two disconnected parts of a geography when local law does not permit for discontinuous annexations.

[Figure 7](#) shows that the right-of-way belongs in the unincorporated area, while the housing units are included in the incorporated place (shown in color). This is important for some cities because they are portraying that the city is not responsible for road maintenance.

This is not relevant for Census Bureau tabulations and is not easy to depict in the MAF/TIGER system. This type of corridor should not be included in a BAS response.



**Figure 6. Geographic Corridor Created**

**Figure 7. Geographic Corridor Not Created**

The image on the left (Figure 6) shows that a geographic corridor should be created to allow for proper geocoding of homes. The image on the right (Figure 7) shows that the geographic corridor should not be created and features should be snapped to the street centerline.

The Census Bureau will accept new geographic corridors. Please create individual change polygons for each new geographic corridor. Each change polygon must have the required attributes and corresponding change type populated, as seen in [Table 6](#). In the **NAME** field, enter the name of the jurisdiction gaining or losing the area associated with the corridor. In the **RELATE** field, indicate whether the change is adding IN or taking OUT (removing) the corridor.

**Table 6: Geographic Corridors**

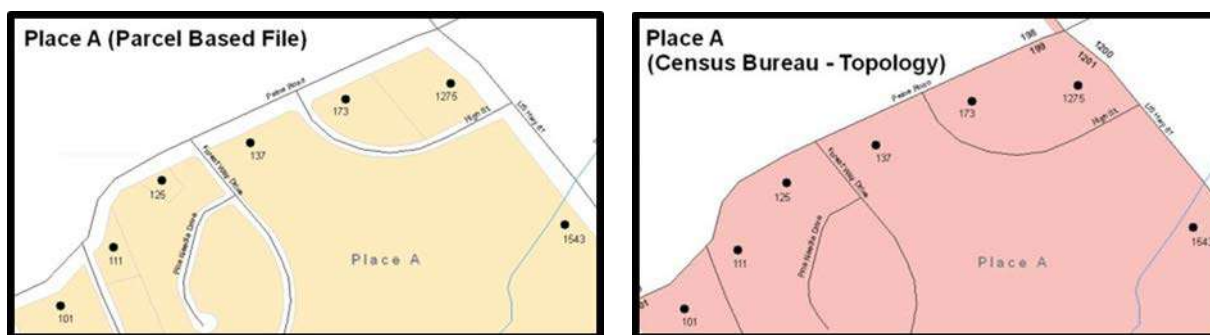
	NAME	CHNG_TYPE	EFF_DATE	AUTHTYPE	DOCU	AREA	RELATE
Geographic Corridor	X	X ('C')					X ('IN', 'OUT')

(Note: 'X' = Required Field)

### 5.3.7 Geographic Offsets

A **geographic offset** is an area claimed by a government that is only on one side of a road and does not include structures addressed to that side of the road.

The Census Bureau is aware that many governments base their legal boundaries on cadastral (parcel-based) right-of-way mapping. The Census Bureau bases their maps on spatial data that is topologically integrated. This makes the maintenance of geographic offsets inefficient. Snapping a government boundary to the centerline wherever applicable will help to establish more accurate population counts. If a boundary is the front-lot-line, the Census Bureau strongly prefers that the boundary be snapped to the road. If a boundary is at the rear of a lot, then please depict it as such. [Figure 8](#) depicts a cadastral (parcel-based) boundary map and [Figure 9](#) shows how the boundary should be reported when sent to the Census Bureau.



**Figure 8. Cadastral Data**

**Figure 9. Same Data Edited to Census Requirements**

On the left in Figure 8 is an example of cadastral data. Figure 9 on the right, is the same area shown edited to conform to census requirements.

The Census Bureau will accept new geographic offsets. Please create individual change polygons for each new geographic offset. Each change polygon must have the required attributes and corresponding change type populated, as seen in [Table 7](#). In the **NAME** field, enter the name of the jurisdiction gaining or losing the area. In the **RELATE** field, indicate whether the change is adding IN or taking OUT (removing) the area represented as an offset.

**Table 7: Geographic Offsets**

	NAME	CHNG_TYPE	EFF_DATE	AUTHTYPE	DOCU	AREA	RELATE
Geographic Offset	X	X ('F')					X ('IN', 'OUT')

(Note: 'X' = Required Field)

The Census Bureau has included an “offset” shapefile in the BAS materials (**PVS\_20\_v2\_offset\_<ssccc>.shp**), so that participants’ jurisdiction can be checked for any existing corridors or offsets. While the Census Bureau prefers that new offsets are not created, (see above), this information can be helpful in determining if current boundaries are correct.

## 5.4 Linear Feature Updates

The Census Bureau will accept linear feature modifications when needed. The easiest method of updating linear features is to edit the **PVS\_20\_v2\_edges\_<stcou>.shp** included in the partnership shapefiles and export the modified or added records to a new separate linear feature update layer. This will ensure all required fields are present and populated before submission. The general guidelines for updating linear features are:

- If a road, subdivision, etc. is missing from the Census Bureau’s feature network, add the feature(s), enter ‘AL’ in the CHNG\_TYPE field, and provide the name (FULLNAME) and MTFCC.
- 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.
- 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. Only do this if the feature is very far off or in the wrong position relative to boundaries or other features.

**Note:** A video on updating linear features is available in the BAS video series at <https://www.census.gov/programs-surveys/bas/library/bas-videos.html>.

### 5.4.1 Adding, Deleting, Renaming, and Recoding Linear Features

Each linear feature update must have the required attributes and corresponding change type populated, as seen in [Table 8](#). Preserve the TIGER/Line ID (TLID) in the TLID field when requesting to modify or delete features to ensure the correct features are affected. A TLID is not required for any features being added though an MTFCC is required for new features.

**Table 8: Linear Feature Updates**

	CHNG_TYPE	TLID	FULLNAME	MTFCC
Add Feature	X ('AL')		X	X
Delete Feature	X ('DL')	X		
Rename Feature	X ('CA')	X	X	
Recode Feature	X ('CA')	X		X

(Note: 'X' = Required Field)

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**Note:** A list of MAF/TIGER Feature Classification Codes (MTFCC) can be found in [Appendix D](#).

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### 5.4.2 Address Range Updates

The Census Bureau accepts address range data as part of the linear feature update layer. As with other linear feature updates, address ranges must have the required attributes and corresponding change type populated. As existing address ranges cannot be shown in the Census Bureau's outgoing shapefiles, it is recommended that participants only add address ranges to new features (see [Table 9](#)).

**Table 9. Address Range Updates**

	CHNG_TYPE	FULLNAME	MTFCC	LTOADD	RTOADD	LFROMADD	RFROMADD
Address Ranges	X ('AL')	X	X	X	X	X	X

(Note: 'X' = Required Field)

## 5.5 Area Landmarks, Hydrographic Areas, and Point Landmarks

Area Landmarks (e.g., lakes) and point landmarks (e.g., mountain peaks) can be updated through the 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 area landmarks or point landmarks.

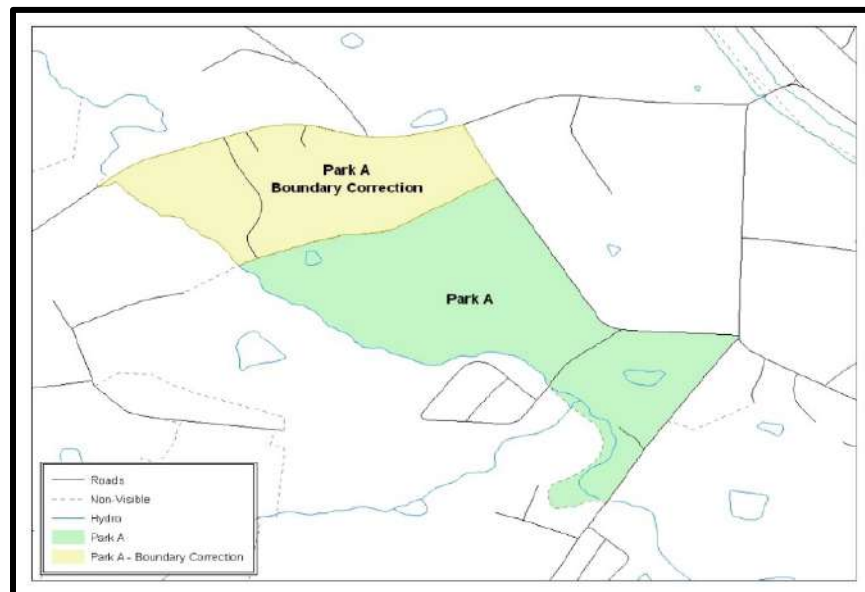
Acceptable point landmark feature updates include mountain peaks or summits, libraries, city halls, community centers and police stations. Airports, parks, schools, golf courses, museums, and cemeteries may be submitted as point landmarks or area landmarks.

## 5.5.2 Area Landmark/Hydrographic Area Updates

The Census Bureau accepts updates to area landmarks and hydrographic areas in a similar manner to legal boundary changes. However, area landmarks and hydrographic areas are not legal governments, so no documentation or effective dates are required.

In order to submit area landmark and hydrographic area updates, create a separate change polygon layer. Updates to area landmarks and hydrographic areas include:

- Boundary corrections (adding and removing area).
- Creating a new area landmark or hydrographic area.
- Removing an area landmark or hydrographic area.
- Name changes.



**Figure 10. A Boundary Correction to Park A**

Each area landmark or hydrographic area update must have the required attributes and corresponding change type populated. Preserve the Area ID in the AREAID field when requesting to modify or delete landmarks to ensure the correct areas are affected. An AREAID is not required for any areas being added though an MTFCC is required for new landmarks (refer to [Table 10](#)).

**Table 10: Landmarks and Hydrographic Areas**

	FULLNAME	CHNG_TYPE	RELATE	MTFCC	AREAID
Boundary Correction (Add Area)	X	X ('B')	X ('IN')		X
Boundary Correction (Remove Area)	X	X ('B')	X ('OUT')		X
Delete Landmark		X ('D')			X
Change Landmark Name	X	X ('G')			X
New Landmark	X	X ('E')		X	

(Note: 'X' = Required Field)

The steps in [Appendix C](#) provide information on how to create change polygons using ArcGIS. While the sample processes are written for legal boundary changes, the same methods apply for creating change polygons for area landmarks and hydrographic areas. When adding new area landmarks or hydrographic areas, 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). The acceptable MTFCC codes for new area landmarks or hydrographic areas are listed in [Table 11](#).

**Table 11: Acceptable MTFCCs for New Area Landmarks/Hydrographic Areas**

MTFCC	Description
H2030*	Lake/Pond
H2040*	Reservoir
H2041*	Treatment Pond
H2051*	Bay/Estuary/Gulf/Sound
H2081*	Glacier
C3023	Island
K1231	Hospital/Hospice/Urgent Care Facility
K1235	Juvenile Institution
K1236	Local Jail or Detention Center
K1237	Federal Penitentiary, State Prison, or Prison Farm
K2110	Military Installation
K2180*	Park
K2181	National Park Service Land
K2182	National Forest or Other Federal Land
K2183	Tribal Park, Forest, or Recreation Area
K2184	State Park, Forest, or Recreation Area
K2185	Regional Park, Forest, or Recreation Area
K2186	County Park, Forest, or Recreation Area
K2187	County Subdivision Park, Forest, or Recreation Area
K2188	Incorporated Place Park, Forest, or Recreation Area
K2189	Private Park, Forest, or Recreation Area
K2190	Other Park, Forest, or Recreation Area (quasi-public, independent park, commission, etc.)
K2424	Marina
K2540	University or College
K2457*	Airport – Area Representation
K2561	Golf Course
K2582*	Cemetery

**\*May not be edited.**

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**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.

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***Area Landmark/Hydrographic Area Changes May Be Delayed***

The Census Bureau prioritizes boundary changes to legal areas to meet ACS, PEP, and BAS deadlines. Therefore, there may be delays in incorporating area landmark and hydrographic area changes to the MAF/TIGER System. Please do not resubmit any changes that were sent during the previous year's BAS. The Census Bureau is working on incorporating those changes, and they will be reflected in the next year's BAS materials.

### 5.5.3 Point Landmark Updates

The Census Bureau accepts updates to point landmarks. Please submit point landmark updates as a separate point landmark update layer. Updates to point landmarks include:

- Adding a new point landmark.
- Deleting an existing point landmark.
- Renaming a point landmark.

The Census Bureau also cannot delete or modify any point landmarks imported from the USGS GNIS database. Changes submitted for the following types of landmarks may be left unchanged:

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

Each point landmark update must have the required attributes and corresponding change type populated. Preserve the POINTID in the POINTID field when requesting to modify or delete point landmarks to ensure the correct landmarks are affected. A POINTID is not required for any landmarks being added though an MTFCC is required for new landmarks.

**Table 12: Point Landmark Updates**

	FULLNAME	CHNG_TYPE	MTFCC	POINTID
New Point Landmark	X	X ('E')	X	
Delete Point Landmark		X ('D')		X
Change Name	X	X ('G')		X

(Note: 'X' = Required Field)

Due to Title 13 privacy concerns, any landmark with an MTFCC shown in

**Table** 13 below cannot be added to the MAF/TIGER System as a point landmark. The MAF/TIGER system no longer maintains any point landmarks with these MTFCCs. Landmarks with these codes could identify a residence or private business. Thus, it is also important *not* to add any of the point landmark types shown in the table using alternative MTFCCs.

**Table 13: Restricted Point Landmark MTFCC Codes**

MTFCC	Description
K1100	Housing Unit Location
K1121	Apartment Building or Complex
K1122	Rooming or Boarding House
K1223	Trailer Court or Mobile Home Park
K1226	Housing Facility/Dormitory for Workers
K1227	Hotel, Motel, Resort, Spa, Hostel, YMCA, or YWCA
K1228	Campground
K1229	Shelter or Mission
K1232	Halfway House/Group Home
K1233	Nursing Home, Retirement Home, or Home for the Aged
K1234	County Home or Poor Farm
K1235	Juvenile Institution
K1241	Sorority, Fraternity, or College Dormitory
K1251	Military Group Quarters
K1299	Other Group Quarters Location
K2100	Governmental
K2197	Mixed Use/Other Non-residential
K2300	Commercial Workplace
K2361	Shopping Center or Major Retail Center
K2362	Industrial Building or Industrial Park
K2363	Office Building or Office Park
K2364	Farm/Vineyard/Winery/Orchard
K2366	Other Employment Center
K2464	Marina
K2500	Other Workplace
K2564	Amusement Center

***Point Landmark Changes May Be Delayed***

The Census Bureau prioritizes boundary changes to legal areas to meet ACS, PEP, and BAS deadlines. Therefore, there may be delays in incorporating point landmark changes to the MAF/TIGER system. Please do not resubmit any changes that were sent during the previous year's BAS. The Census Bureau is working on incorporating those changes, and they will be reflected in the next year's BAS materials.

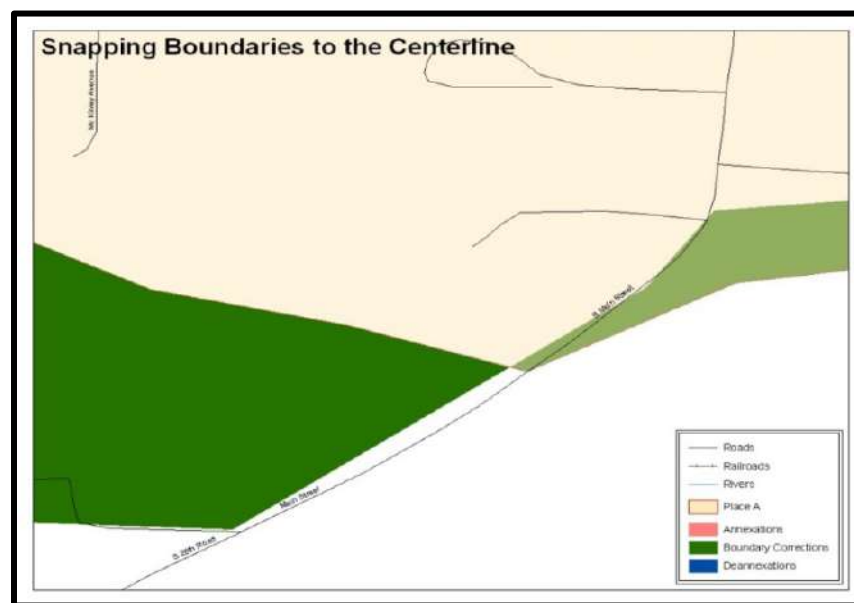
## 5.6 Reviewing Changes to the Census Bureau Shapefiles

Please review all changes to ensure that they are intentional and correct. The Census Bureau has created videos with information on many of the topics below. Videos can be found on the web at: <<https://www.census.gov/programs-surveys/bas/library/bas-videos.html>>.

### 5.6.1 Boundary-to-Feature Relationships

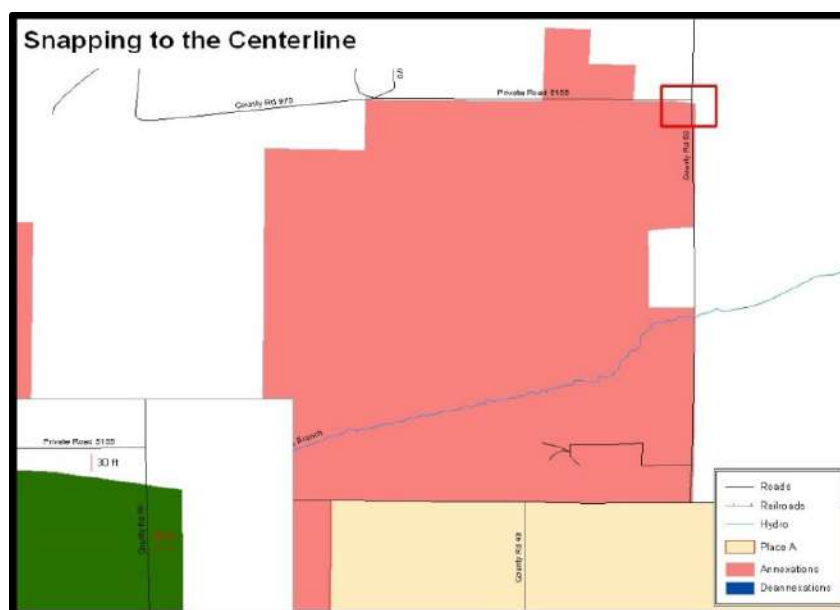
Please review all changes to ensure that the correct boundary-to-feature relationships are being created or maintained. The Census Bureau is aware that many governments base their legal boundaries on cadastral (parcel-based) right-of-way mapping; however, the Census Bureau bases maps on spatial data that is topologically integrated (see [2.1, Topological Relationships in the MAF/TIGER system](#)). Therefore, snap boundaries to street centerlines (or rivers, railroads, etc.) wherever applicable. This will help establish a more accurate population count for governments.

**Figure 11** and **Figure 12** show situations where boundary changes should be snapped to existing linear features. The Census Bureau will snap boundary changes to any linear feature that is correctly located within **thirty** feet of the change.



**Figure 11. Boundary Corrections Not Snapped to Existing Linear Features**

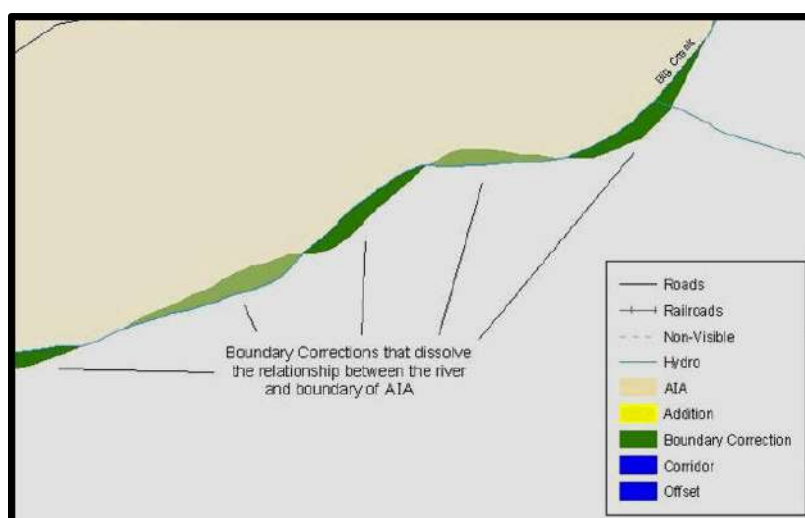
These boundary corrections are not snapped to existing linear features in the MAF/TIGER system. Both boundary corrections should be snapped to centerlines or population may be assigned to incorrect governments.



**Figure 12. Annexation Created without Snapping to Centerlines**

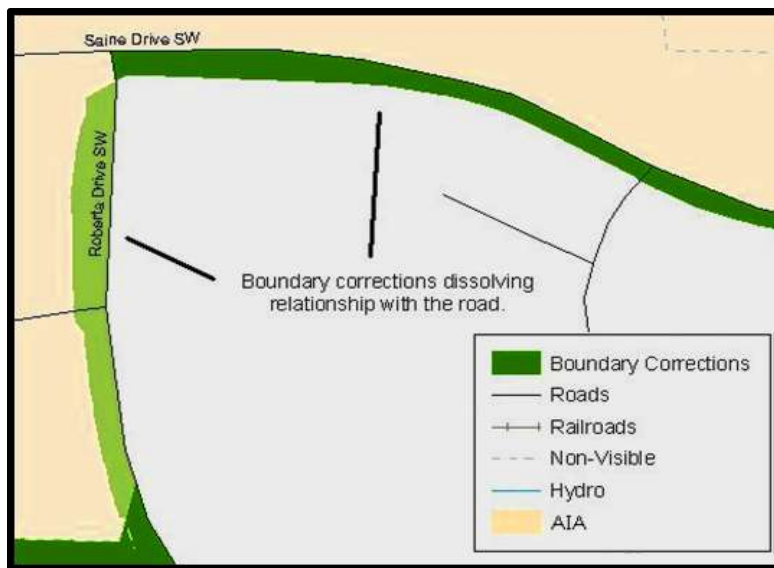
This is an example of an annexation created without snapping to existing centerlines in the MAF/TIGER system. Unless the boundary is snapped to centerlines, some of the population may be assigned to an incorrect government.

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 thirty feet or less of gap or overlap between the existing linear feature and boundary into the MAF/TIGER system. [Figure 13](#) and [Figure 14](#) show examples of changes that will not be accepted.



**Figure 13. Small Spatial Correction Not Incorporated**

Small spatial boundary corrections would dissolve the relationship with the river. These boundary corrections will not be incorporated into the MAF/TIGER system.

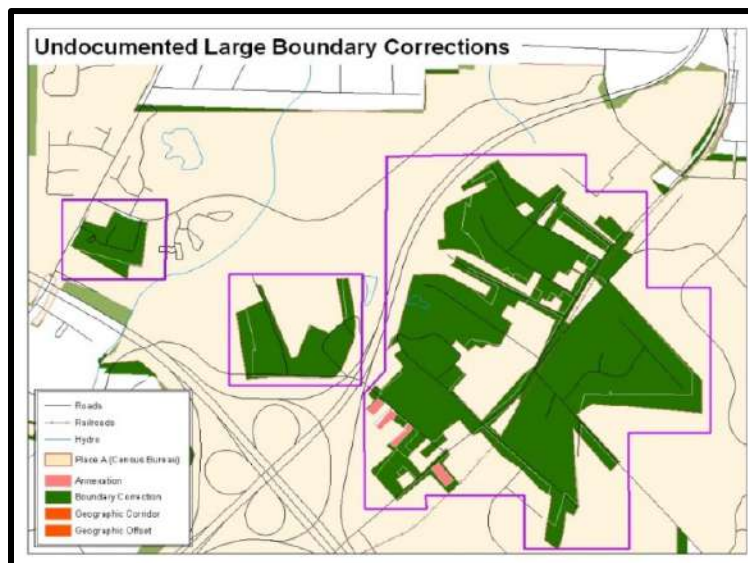


**Figure 14. Small Spatial Correction Not Accepted**

Small spatial boundary corrections 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.

## 5.6.2 Large Boundary Corrections

The Census Bureau will not accept large boundary corrections to a government without the appropriate legal documentation numbers and effective dates. These large boundary corrections ([Figure 15](#)) may be legal boundary changes that occurred in the past and were never reported to the Census Bureau. Please submit the appropriate legal documentation number and effective date so that the changes may be incorporated into the MAF/TIGER system.



**Figure 15. Large Boundary Corrections**

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

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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.

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### 5.6.3 Required Attribute Information

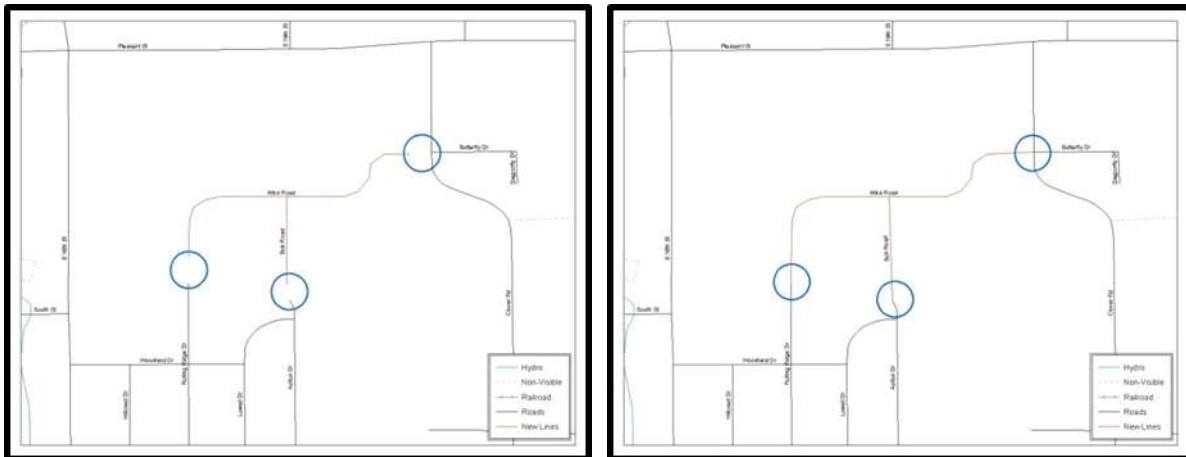
It is important to review each change polygon and confirm that the correct attribute information is included. Without the correct attribute information, the Census Bureau will be unable to process and incorporate the changes into the MAF/TIGER system. See [5.3, Boundary Changes](#) for the required attribute information and corresponding change type codes.

### 5.6.4 Appropriate Projection Information

It is important that the appropriate projection information is included. Each update layer submitted should contain a correct \*.prj file so that the Census Bureau can convert the projection back to GCS\_NAD83. If the GIS being used cannot create a \*.prj file, include the projection information in metadata. This is critical for the Census Bureau to be able to process the file and incorporate the updates into the MAF/TIGER system.

### 5.6.5 Linear Feature Updates

Please review linear feature changes to ensure that they align with the features currently in the MAF/TIGER system. If linear feature changes do not align with current MAF/TIGER linear features, the Census Bureau may not incorporate the submitted updates ([Figure 16](#) and [Figure 17](#)).



**Figure 16. New Road Features, Not Added to Existing Road**

**Figure 17. New Road Features, Correctly Added**

The image on the left (Figure 16) shows new road features added to the existing feature network, but not connected to existing road features. The image on the right (Figure 17) shows the correction connecting the new roads to the existing road features.

## 5.7 Additional Information Review

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

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**Note:** The Census Bureau will snap any annexation, deannexation, or boundary correction to a MAF/TIGER feature when it exists within thirty feet of that feature. This helps maintain the boundary-to-feature relationships in the MAF/TIGER system and will ensure correct housing tabulation counts for governments.

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### 5.7.1 Submitting Digital Data

Participants reporting changes to the BAS are required to submit at least the change polygon shapefile. The total number of shapefiles submitted depends on what types of changes are reported. The following is a list of change files *may* be needed:

1. **Change Polygon Layers** (county, MCD, incorporated place, and consolidated city)
  - These layers consist of the changes that the Census Bureau needs to make.
  - A layer of change polygons should be created for each level of geography (county, MCD, place, etc.) for which changes are being submitted.
2. **Whole Modified Entity Layer** (county, minor civil division, incorporated place, and consolidated city)
  - These layers should only contain the complete and current boundary for the government being updated.
  - A whole entity layer should be created for each level of geography for which change polygons are being created.
3. **Local Government Feature Network, Parcel, and Boundary Layers** (*optional*)
  - These layers will help the Census Bureau resolve any questionable change polygons and establish the correct boundary-to-feature relationships.
4. **Feature Update Layer** (only if there are feature (road, river, railroad, etc.) additions, deletions, name changes, recodes, or address range updates)
  - Include a linear feature update layer with only feature segments requiring a correction.
5. **Area Landmarks/Hydrographic Areas Update Layer**
  - An area landmark/hydrographic area update layer should be submitted only if there are area landmark and/or hydrographic area updates.
6. **Point Landmark Update Layer**
  - A point landmark update layer should be submitted only if there are point landmark updates.
7. **BAS Contact Text File** (if the BAS point of contact (the person that receives the BAS Annual Response Email) has changed).
  - This can be updated online at:  
<[http://www.census.gov/geo/partnerships/bas/bas\\_ar\\_form.html](http://www.census.gov/geo/partnerships/bas/bas_ar_form.html)>.
  - This update should include the following information:
    - First Name.
    - Last Name.
    - Department.
    - Position.
    - Shipping Address.

- o City.
- o State.
- o ZIP Code.
- o Phone: xxx-xxx-xxxx.
- o Fax: xxx-xxx-xxxx.
- o Email.
- o HEO Term Expires: mm/yyyy.
- o HEO Term Length: x years.

### 5.7.2 Change Polygon Layer Naming Conventions

The following table provides change polygon layer naming conventions for county submissions, MCDs, incorporated places, and consolidated cities. The <basID> in the change polygon layer naming conventions represents the participant's BAS ID, found on the BAS Annual Response email or online from this link: <<https://www.census.gov/programs-surveys/bas/technical-documentation/code-lists.html>>.

**Table 14: Change Polygons**

Participant	Submitting Changes For:	Shapefile Naming Conventions
<i>County</i>	County	bas21_<basID>_changes_county.shp
<i>County</i>	Minor Civil Division	bas21_<basID>_changes_cousub.shp
<i>County</i>	Incorporated Place	bas21_<basID>_changes_incplace.shp
<i>Minor Civil Division</i>	Minor Civil Division	bas21_<basID>_changes_cousub.shp
<i>Incorporated Place</i>	Incorporated Place	bas21_<basID>_changes_incplace.shp
<i>Consolidated City</i>	Consolidated City	bas21_<basID>_changes_concity.shp

### 5.7.3 Whole Entity Polygon Layer Naming Conventions

The following table provides the whole entity polygon layer naming conventions for county, minor civil divisions, incorporated places, and consolidated cities. The <basID> in the whole entity polygon layer naming conventions represents the participant's BAS ID, found on the BAS Annual Response email or online from this link: <<https://www.census.gov/programs-surveys/bas/technical-documentation/code-lists.html>>.

**Table 15: Whole Entity Polygon Layer Naming Conventions**

Participant	Changes Submitted For:	Shapefile Naming Conventions
<i>County</i>	County	bas21_<basID>_WholeEntity_county.shp
<i>County</i>	Minor Civil Division	bas21_<basID>_WholeEntity_cousub.shp
<i>County</i>	Incorporated Place	bas21_<basID>_WholeEntity_incplace.shp
<i>Minor Civil Division</i>	Minor Civil Division	bas21_<basID>_WholeEntity_cousub.shp
<i>Incorporated Place</i>	Incorporated Place	bas21_<basID>_WholeEntity_incplace.shp
<i>Consolidated City</i>	Consolidated City	bas21_<basID>_WholeEntity_concity.shp

### 5.7.5 Linear Feature, Area Landmark/Hydrographic Area, and Point Landmark Updates

The following table provides the update layer naming conventions for the edges, area landmark, and point landmark update layers (not required). The <basID> in the naming conventions for the edges, area landmark, and point landmark update layers represents the participant's BAS ID found on the BAS Annual Response email or online from this link:

<<https://www.census.gov/programs-surveys/bas/technical-documentation/code-lists.html>>.

**Table 16: Optional Files**

Participant	Changes Submitted For:	Shapefile Naming Conventions
<i>All Participants</i>	Edges	bas21_<basID>_LN_Changes.shp
<i>All Participants</i>	Area Landmarks/ Hydrographic Areas	bas21_<basID>_Alndk_Changes.shp
<i>All Participants</i>	Point Landmarks	bas21_<basID>_Plndk_Changes.shp

### 5.7.6 Compressing the Digital Files

The Census Bureau requires participants to submit all BAS returns through SWIM as compressed (zipped) files. Please compress **ALL** updated materials (including change polygon shapefiles, whole entity shapefiles, linear feature updates, landmark updates, local government feature network and boundary layers, any supporting documentation, and the text or other file with the participant's updated BAS contact information) as zipped files.

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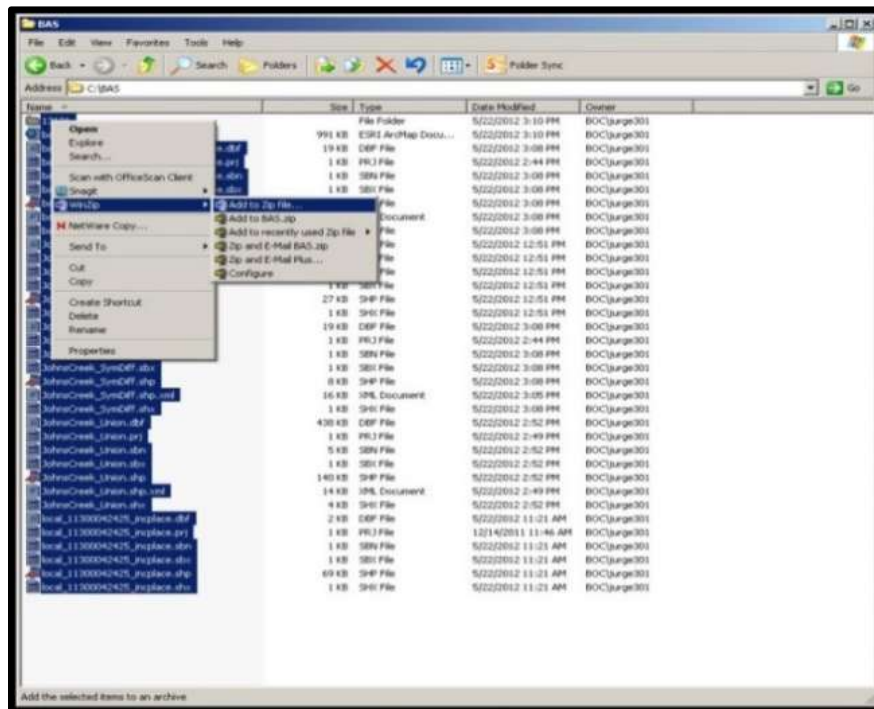
**Note:** Centerline files or any additional information that may be helpful for Census to process the participant's file are optional. One example where this would be helpful is if a particular polygon was not snapped to a river or road because the boundary does not follow the river or road.

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---

Refer to **Figure 18** and the steps listed below to compress digital files:

1. Navigate to the directory with the shapefiles.
2. Select all files and right click on the selection.
3. Select WinZip, and then Add to ZIP file.



**Figure 18. Selecting and Zipping Return Files**

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**Note:** Versions of WinZip may vary so the interface may be slightly different. Software other than WinZip (e.g., 7zip) may be used to ZIP the return files.

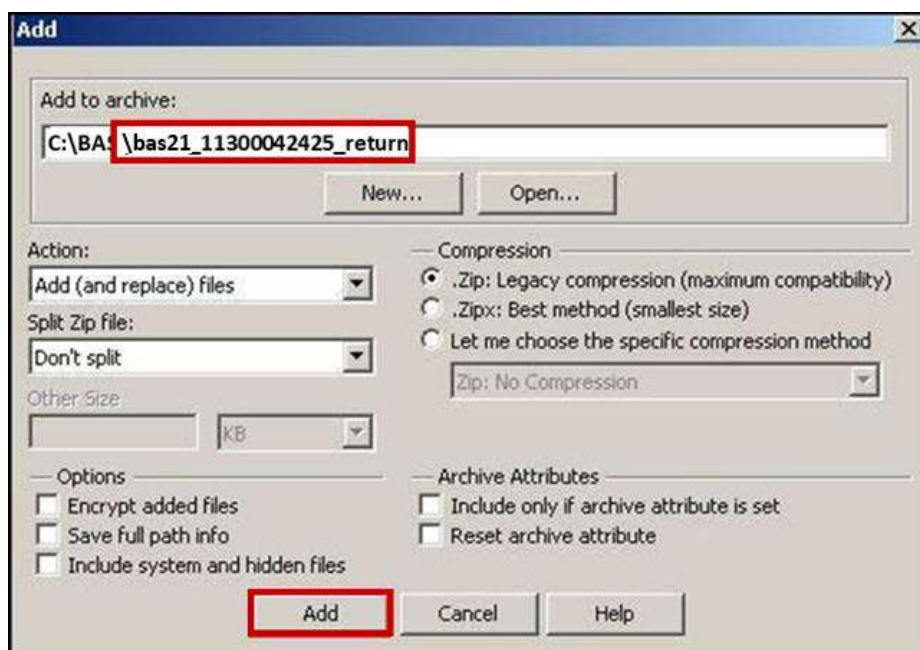
---

4. In the Add window, in the Add to archive field, type the filename in the proper naming convention: bas21\_<basID>\_return and then click Add (**Figure 19**).

---

**Note:** Look for the BAS ID number on the BAS Annual Response email or online from this link: <https://www.census.gov/programs-surveys/bas/technical-documentation/code-lists.html>.

---



**Figure 19. Naming the ZIP File**

5. Check the folder where the ZIP file was saved to verify that it was created properly. If the ZIP file is correct, then the return file is ready for submission.

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**Note:** If assistance is required in preparing or zipping the BAS return files, please call the Census Bureau at **1-800-972-5651** or email [geo.bas@census.gov](mailto:geo.bas@census.gov).

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### 5.7.7 Submitting Digital Files through SWIM

SWIM is a one-stop location for submitting geographic program files to the Census Bureau. The Census Bureau now requires that all BAS participants use the Census Bureau's SWIM for submitting update materials.

Do not send submissions as an email attachment, as the Census Bureau cannot accept them due to security policy.

The Census Bureau will email the BAS contact a SWIM registration token and digital submission instructions five days after the BAS contact responds to the BAS Annual Response indicating that they have changes to report. To respond online, please fill out the online form at [http://www.census.gov/geo/partnerships/bas/bas\\_ar\\_form.html](http://www.census.gov/geo/partnerships/bas/bas_ar_form.html). The five-day waiting period will give the Census Bureau staff time to update the BAS contact record if necessary, so that the email reaches the right person.

This token is good for one personal account within the SWIM. Once participants have registered for an account in SWIM, they will no longer need the token to login into the system. If participants require additional individual SWIM accounts within their organization, please contact the Census Bureau at **1-800-972-5651** or email [geo.bas@census.gov](mailto:geo.bas@census.gov).

### *Current SWIM Users*

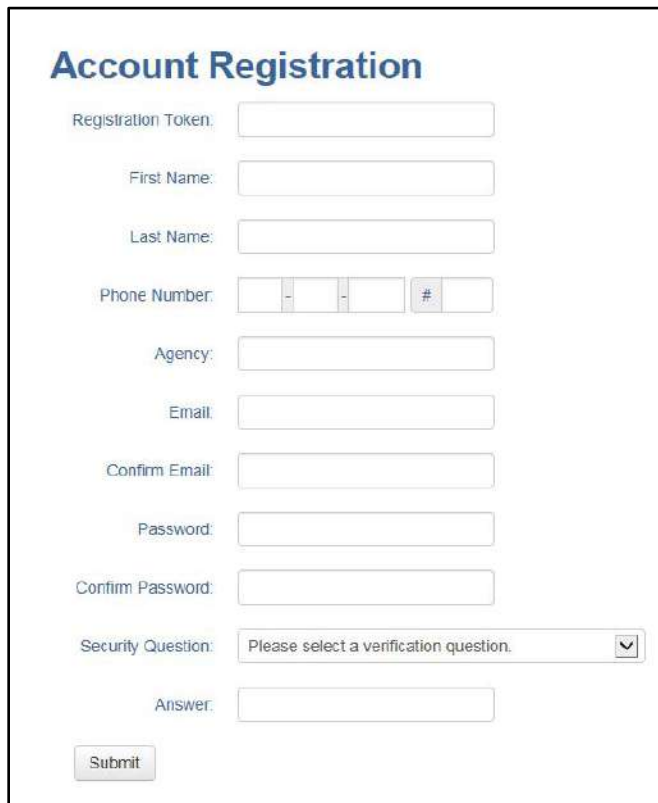
If participants are participating in other Census Bureau partnership programs, or have participated in previous BAS years, and already have SWIM accounts, they may use their current account to submit files for BAS. They do not need to set up a new account.

Participants will **not** be able to upload a file larger than **250 MB**.

SWIM **blocks** participants from uploading a ZIP file that contains another ZIP file.

Follow the instructions listed below:

1. In a web browser, navigate to <<https://respond.census.gov/swim>>.
2. Log in:
3. **New Users:** Participants must have a registration token to create a new account (please see above on how to obtain a SWIM token). Once participants have their token, they should sign-up by clicking the 'Register Account' button. Registration is self-serve but does require the new user to enter a registration token to validate their rights to the system.

The image shows a web form titled "Account Registration" in blue text. The form contains several input fields: "Registration Token:" (a single text box), "First Name:" (a single text box), "Last Name:" (a single text box), "Phone Number:" (a text box with three segments separated by hyphens and a final segment starting with a hash symbol), "Agency:" (a single text box), "Email:" (a single text box), "Confirm Email:" (a single text box), "Password:" (a single text box), "Confirm Password:" (a single text box), "Security Question:" (a dropdown menu with the text "Please select a verification question." and a downward arrow), and "Answer:" (a single text box). At the bottom left of the form is a "Submit" button.

**Figure 20. SWIM Account Registration**

4. **Existing Users:** If participants already have a registered account from a previous BAS year, they should log in with their user credentials.



## 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.

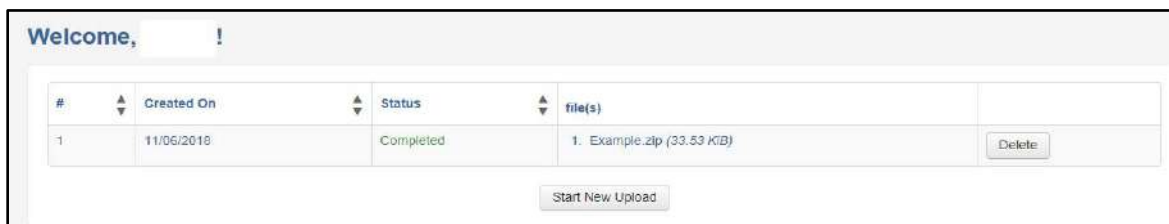
**Email:**

**Password:**

[Forgot your password?](#)

**Figure 21. SWIM Login Window**

5. If participants have submitted files before, SWIM lists them on the startup screen upon login. Click 'Start New Upload' to continue.

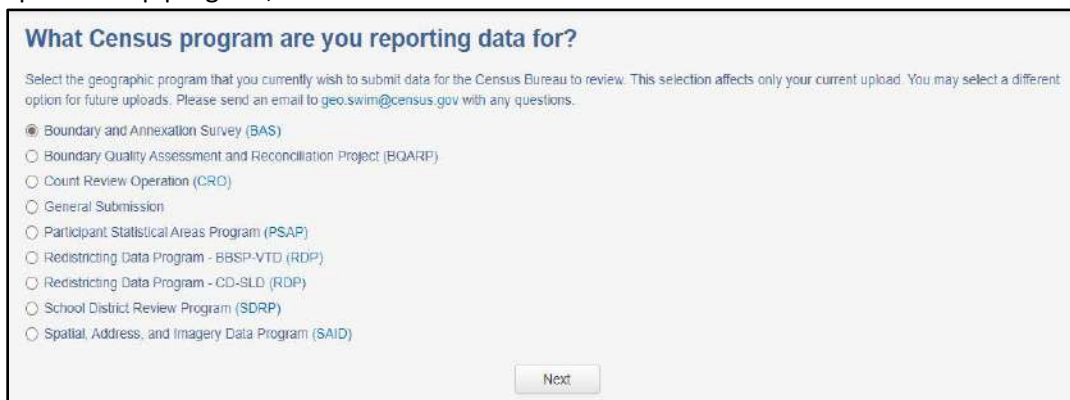


Welcome, [User] !

#	Created On	Status	file(s)	
1	11/06/2018	Completed	1. Example.zip (33.53 KIB)	<input type="button" value="Delete"/>

**Figure 22. Welcome Screen with Upload History**

6. On the next screen, select the “Boundary Annexation Survey (BAS)” option as the geographic partnership program, and click ‘Next’ to continue.



### What Census program are you reporting data for?

Select the geographic program that you currently wish to submit data for the Census Bureau to review. This selection affects only your current upload. You may select a different option for future uploads. Please send an email to [geo.swim@census.gov](mailto:geo.swim@census.gov) with any questions.

- ☒ Boundary and Annexation Survey (BAS)
- ☐ Boundary Quality Assessment and Reconciliation Project (BQARP)
- ☐ Count Review Operation (CRO)
- ☐ General Submission
- ☐ Participant Statistical Areas Program (PSAP)
- ☐ Redistricting Data Program - BBSP-VTD (RDP)
- ☐ Redistricting Data Program - CD-SLD (RDP)
- ☐ School District Review Program (SDRP)
- ☐ Spatial, Address, and Imagery Data Program (SAID)

**Figure 23. Geographic Partnership Program Selection Window**

7. On this screen, participants will select a geographic level. This is the geography type of their agency (e.g., if submitting data for a county government, select county. If an incorporated place, then select place...etc.). Click 'Next' to continue.

What type of BAS are you reporting for?

Please select the entity-type you represent, not the extent or type of data that you are submitting. For example, if you are submitting data on behalf of a "County", but the data being submitted is at the "City" level, then select "County".

☐ State

☐ Place

☐ County

☐ Minor Civil Division (MCD)

☐ Tribal Area

☐ Consolidated City

Previous Next

**Figure 24. Geographic Level Selection Window**

8. Participants will find the name of their government using the drop-down selectors. These options dynamically update based on the geography type selected from the previous screen. Click 'Next' to continue.

Select a State

State:

Select

Previous Next

**Figure 25. Government Selection Window**

9. On the file upload screen, please click on the '+ Add file' button and a file browser dialog will appear.

Select a ZIP file to upload.

File submissions must be in "zip format" and file size should not exceed 250 MB. Please group all related data together into one ZIP archive including any metadata or supporting documentation that you have available. Please include information about how your geographic data is projected if applicable. If you are submitting shapefiles, be sure to include all of the component files necessary to use the shapefile (at a minimum .shp, .prj, .dbf, .shx). If you are submitting a .MXD file please be sure to include all of the separate data files that are used in the Map (all of the layers, shapefiles, etc.). Please provide any additional information, as applicable, in the comments box below.

Choose File: + Add File

Status:

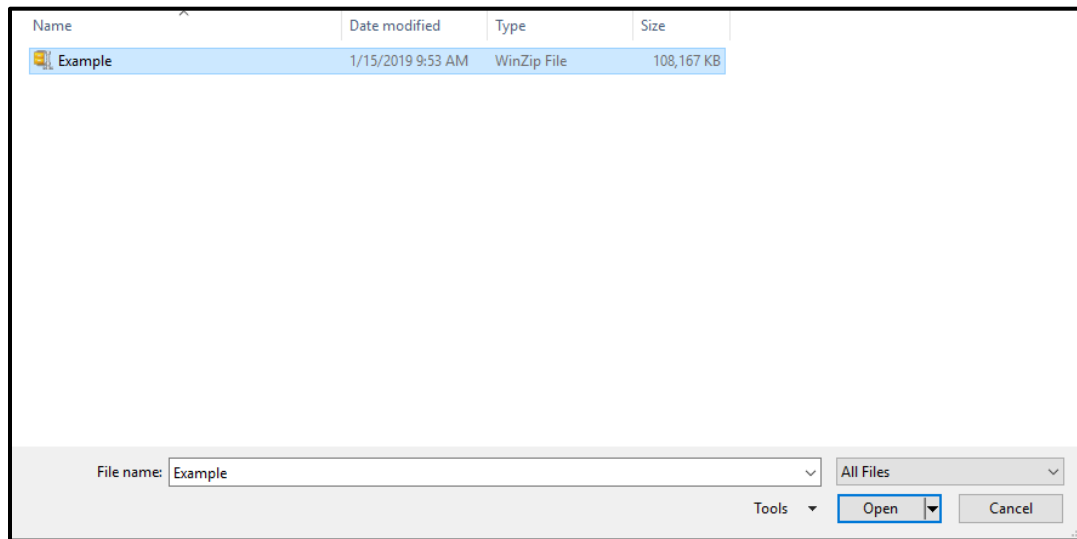
File(s):

Comments:

Previous Next

**Figure 26. File Upload Screen**

10. In the file browser dialog box, select the ZIP file that is to be uploaded. Please be aware that the SWIM website only accepts ZIP files. Click 'Open' to continue.



**Figure 27. File Browser Dialog Box**

11. At this time, participants may enter any comments that they wish to include with their file. Click 'Next' to upload the submission.

Select a .ZIP file to upload.

File submissions must be in "zip format" and file size should not exceed 250 MB. Please group all related data together into one ZIP archive including any metadata or supporting documentation that you have available. Please include information about how your geographic data is projected if applicable. If you are submitting shapefiles, be sure to include all of the component files necessary to use the shapefile (at a minimum .shp, .prj, .dbf, .shx). If you are submitting a .MXD file please be sure to include all of the separate data files that are used in the Map (all of the layers, shapefiles, etc.). Please provide any additional information, as applicable, in the comments box below.

Choose File:

Status: Success

File(s):

- Example.zip

Comments:

Please note that the projection has changed.

**Figure 28. Entering Comments into the File Upload Window**

12. The final screen will be a 'Thank You' screen confirming receipt of the file submission. If this screen does not appear, or if issues occur during this upload process, please contact the Census Bureau at **1-800-972-5651** or [geo.bas@census.gov](mailto:geo.bas@census.gov).

**Thank You**

Thank you for using SWIM. You will receive an email when your file successfully transfers to the Census Bureau.

File: Example.zip

You may [Log Out](#) or return to the [upload form](#), to submit more files.

**Figure 29. Thank You Screen**

## APPENDICES

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## APPENDIX A DATA DICTIONARY

**Table 17: County and Equivalent Areas Shapefile**

ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
STATEFP	2	String	FIPS State Code
COUNTYFP	3	String	FIPS County Code
COUNTYNS	8	String	ANSI feature code for the county or equivalent feature
NAMELSAD	100	String	Name with translated LSAD code
LSAD	2	String	Legal/Statistical Area Description code
FUNCSTAT	1	String	Functional status
CLASSFP	2	String	FIPS 55 class code describing an entity
CHNG_TYPE	2	String	Type of area update
EFF_DATE	8	Date	Effective date or vintage
AUTHTYPE	1	String	Authorization type (O – Ordinance, R – Resolution, L – Local Law, S – State Level Action, X – Other)
DOCU	120	String	Supporting documentation
FORM_ID	4	String	Record ID (GUPS only)
AREA	10	Double	Area of update
RELATE	120	String	Relationship description
JUSTIFY	150	String	Justification of change
NAME	100	String	Entity name
VINTAGE	2	String	Vintage of the data

**Table 18: County Subdivisions Shapefile**

ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
STATEFP	2	String	FIPS State Code
COUNTYFP	3	String	FIPS County Code
COUSUBFP	5	String	FIPS 55 county subdivision code
NAMELSAD	100	String	Name with translated LSAD
COUSUBNS	8	String	ANSI feature code for the county subdivision
LSAD	2	String	Legal/Statistical Area Description
FUNCSTAT	1	String	Functional status
CLASSFP	2	String	FIPS 55 class code describing an entity
CHNG_TYPE	2	String	Type of area update
EFF_DATE	8	Date	Effective date or vintage
AUTHTYPE	1	String	Authorization type (O – Ordinance, R – Resolution, L – Local Law, S – State Level Action, X – Other)
DOCU	120	String	Supporting documentation

ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
FORM_ID	4	String	Record ID (GUPS only)
AREA	10	Double	Area of update
RELATE	120	String	Relationship description
JUSTIFY	150	String	Justification of change
NAME	100	String	Entity name
VINTAGE	2	String	Vintage of the data

**Table 19: Incorporated Place Shapefile**

ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
STATEFP	2	String	FIPS State Code
COUNTYFP	3	String	FIPS County Code
PLACEFP	5	String	FIPS 55 place code
NAMELSAD	100	String	Name with translated LSAD
PLACENS	8	String	ANSI feature code for the place
LSAD	2	String	Legal / Statistical Area Description
FUNCSTAT	1	String	Functional status
CLASSFP	2	String	FIPS 55 class code describing and entity
PARTFLG	1	String	Indicates if only part of a feature is represented
CHNG_TYPE	2	String	Type of area update
EFF_DATE	8	Date	Effective date or vintage
AUTHTYPE	1	String	Authorization type (O – Ordinance, R – Resolution, L – Local Law, S – State Level Action, X – Other)
DOCU	120	String	Supporting documentation
FORM_ID	4	String	Record ID (GUPS only)
AREA	10	Double	Area of update
RELATE	120	String	Relationship description
JUSTIFY	150	String	Justification of change
NAME	100	String	Entity name
VINTAGE	2	String	Vintage of the data

**Table 20: Consolidated City Shapefile**

ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
STATEFP	2	String	FIPS State Code
COUNTYFP	3	String	FIPS County Code
CONCITYFP	5	String	FIPS 55 place code
NAMELSAD	100	String	Name with translated LSAD
PLACENS	8	String	ANSI feature code for the place
LSAD	2	String	Legal/Statistical Area Description
FUNCSTAT	1	String	Functional status
CLASSFP	2	String	FIPS 55 class code describing an entity

ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
PARTFLG	1	String	Indicates if only part of a feature is represented
CHNG_TYPE	2	String	Type of area update
EFF_DATE	8	Date	Effective date or vintage
AUTHTYPE	1	String	Authorization type (O – Ordinance, R – Resolution, L – Local Law, S – State Level Action, X – Other)
DOCU	120	String	Supporting documentation
FORM_ID	4	String	Record ID (GUPS only)
AREA	10	Double	Acreage of update
RELATE	120	String	Relationship description
JUSTIFY	150	String	Justification of change
NAME	100	String	Entity name
VINTAGE	2	String	Vintage of the data

**Table 21: Edges Shapefile**

ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
STATEFP	2	String	FIPS State Code
COUNTYFP	3	String	FIPS County Code
TLID	10	Double	Permanent edge ID
TFIDL	10	Double	Permanent face ID (left)
TFIDR	10	Double	Permanent face ID (right)
MTFCC	5	String	MAF/TIGER Feature Class Code
FIDELITY	1	String	Indication to a respondent when their entity boundary has changed through spatial enhancement
FULLNAME	40	String	Decoded feature name with abbreviated qualifier, direction, and feature type
SMID	22	String	Spatial Theta ID
SMIDTYPE	1	String	SMIDTYPE code
BBSPFLG	1	String	Redistricting data project participant's submitted request of an EDGE for selection as a block boundary
CBBFLG	1	String	Indicates the status of an EDGE for a selection as a block boundary
BBSP_2020	1	String	New BBSP flag
CHNG_TYPE	4	String	Type of linear feature update
JUSTIFY	150	String	Justification of change
LTOADD	10	String	Left To Address
RTOADD	10	String	Right To Address
LFROMADD	10	String	Left From Address
RFROMADD	10	String	Right From Address

ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
ZIPL	5	String	Left ZIP Code
ZIPR	5	String	Right ZIP Code
EXTTYP	1	Char	Extension type
MTUPDATE	10	Date	Date of last update to the edge

**Table 22: Area Landmark Shapefile**

ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
STATEFP	2	String	FIPS State Code
COUNTYFP	3	String	FIPS County Code
MTFCC	5	String	MAF/TIGER Feature Class Code
FULLNAME	120	String	Area landmark name
PARTFLG	1	String	Indicates if only part of a feature is represented
AREAID	22	String	Object ID
ANSICODE	8	String	ANSI code for area landmarks
CHNG_TYPE	2	String	Type of area landmark update
EFF_DATE	8	Date	Effective date or vintage
RELATE	120	String	Relationship description
JUSTIFY	150	String	Justification of change
BAG	3	String	Block area grouping

**Table 23: Hydrographic Area Shapefile**

ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
STATEFP	2	String	FIPS State Code
COUNTYFP	3	String	FIPS County Code
ANSICODE	8	String	ANSI code for hydrography area
MTFCC	5	String	MAF/TIGER Feature Class Code
FULLNAME	120	String	Hydro landmark name
CHNG_TYPE	2	String	Type of hydrographic area update
HYDROID	22	String	Object ID
RELATE	120	String	Relationship description
JUSTIFY	150	String	Justification of change

**Table 24: Point Landmark Shapefile**

ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
STATEFP	2	String	FIPS State Code
COUNTYFP	3	String	FIPS County Code
POINTID	22	String	Object ID
ANSICODE	8	String	ANSI code for point landmarks
MTFCC	5	String	MAF/TIGER Feature Class Code

ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
FULLNAME	120	String	Point landmark name
CHNG_TYPE	2	String	Type of point landmark update
JUSTIFY	150	String	Justification of change

**Table 25: Geographic Offset Shapefile**

ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
TFID	20	Integer	Permanent Face ID
STATEFP	2	String	FIPS State Code
COUNTYFP	3	String	FIPS County Code
OFFSET	1	String	Geographic Offset / Corridor Flag
ADDEXCLUDE	1	String	Address Exclusion Indicator
CHNG_TYPE	2	String	Type of area update
EFF_DATE	8	Date	Effective date or vintage
RELATE	120	String	Relationship description
JUSTIFY	150	String	Justification of change

## APPENDIX B 2021 BAS EXAMPLE PROCESS 1

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The 2021 BAS Example Process 1 provides step-by-step instructions for using the BAS Partnership Toolbox to facilitate the updating process. For best results, use the toolbox in ArcGIS 10.0 and higher (not including ArcGIS Pro).

### B1 How to Use the BAS Partnership Toolbox

In an effort to ease the burden of creating BAS updates, a toolbox was developed for ArcGIS. This toolbox simplifies the updating process by automating the downloading of data, creating changes, removing slivers, formatting and checking attribution, and preparing/exporting files for submission. Before running these tools, users will need the following:

- **The Boundary and Annexation Survey (BAS) Respondent Guide: Digital** which can be downloaded at: download the guide at: [https://www2.census.gov/geo/pdfs/partnerships/bas/21\\_BASRespondentGuideTribalDigital.pdf](https://www2.census.gov/geo/pdfs/partnerships/bas/21_BASRespondentGuideTribalDigital.pdf).
- **The BAS Partnership Toolbox**, which can be downloaded at: <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 or online at: <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 have data including 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).
- **The 2021 BAS Partnership Shapefiles located at:** <https://www.census.gov/geographies/mapping-files/2021/geo/bas/2021-bas-shapefiles.html>.

### B2 Toolbox Tools Setup

These toolbox tools were designed primarily for use in ArcCatalog though they run in ArcMap as well. The instructions for most steps are assuming use in ArcCatalog.

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. Open ArcCatalog and connect to the DBAS folder. When expanded, the following should be visible:

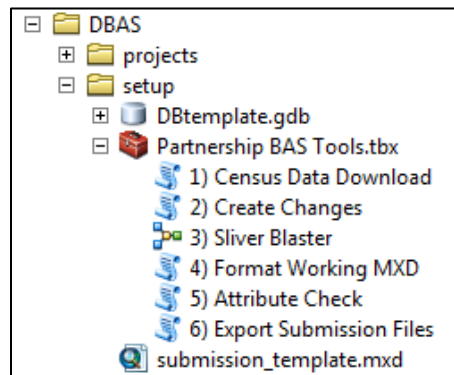


Figure 30. Partnership BAS Tools Menu

---

**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.

---

### B3 Census Data Download Tool

The Census Data Download tool will gather all the partnership shapefile data needed to create changes from the Census Bureau website. If the data is on a Census Bureau provided disc, 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 2021 BAS Partnership Shapefiles site:

<<https://www.census.gov/geographies/mapping-files/2021/geo/bas/2021-bas-shapefiles.html>> and outlined in [Chapter 3](#). Please follow the steps below to run the Census Data Download tool.

1. Expand the **DBAS folder** and the **setup subfolder**. In the setup folder, find the **Partnership Toolbox**. Expand the toolbox and double click on the **1) Census Data Download** tool.

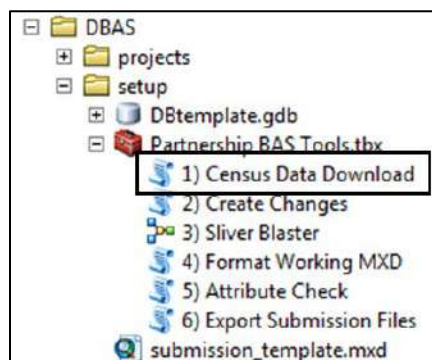
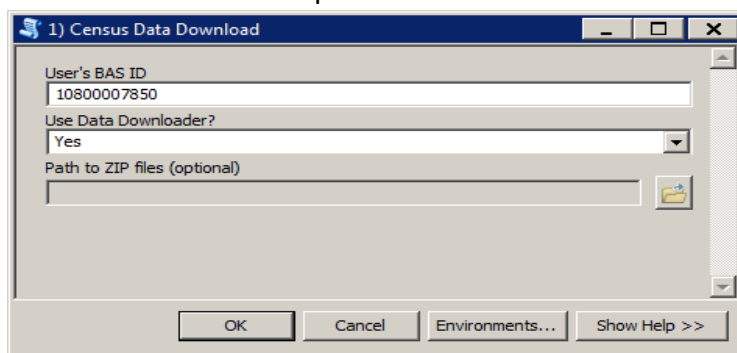


Figure 31. Partnership BAS Tools Menu with Census Data Download Selected

2. 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\_20v2\_<st> and partnership\_shapefiles\_20v2\_<stcou>). The tool will look for these partnership\_shapefiles ZIP files when it runs.

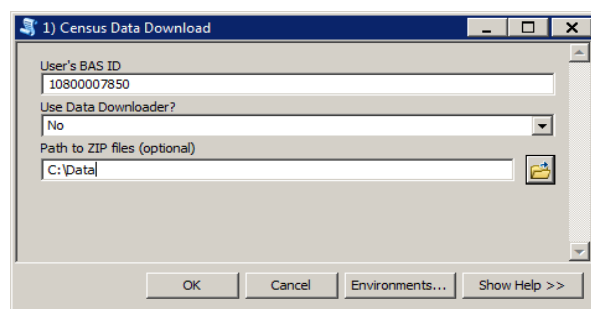
- Enter the 11-digit BAS ID in the **User's BAS ID** field. If you are a county participant, responding for the governments within your jurisdiction, you will enter the County BAS ID.
- Select Yes or No under the **Use Data Downloader?** field. If you select No, you must enter a path to the already downloaded partnership shapefiles in the next 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.

This example shows how a user would complete the fields to have data downloaded for them.



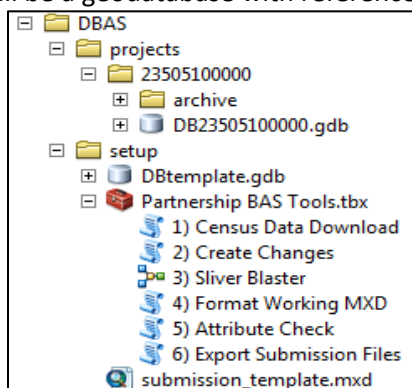
**Figure 32. The Census Data Download Window with 'Yes' in the Use Data Downloader Field**

This example shows how a user would complete the fields if they already have the partnership shapefiles downloaded and saved on their computer.



**Figure 33. The Census Data Download Window with 'No' in the Use Data Downloader Field**

3. Click **OK** to run.
4. 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 with reference data in it and an archive folder.



**Figure 34. Partnership Tools Menu Showing a Folder for the BAS ID in the Projects Folder**

---

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

---

## B4 Create Changes Tool

Once the necessary Census Bureau data is obtained, run the **2) Create Changes** tool to create the change polygons. Before this tool can successfully complete, there must be an attribute field in the local boundary layer that contains the name of the government or governments as they appear in Census Bureau records (**Figure 35**). This includes matching capitalization, spacing, and in the case of MCDs a descriptor of the geography (e.g. township, village, borough, etc.) which can be found in the NAMELSAD field of the bas\_cousub layer in the reference feature dataset (**Figure 36**). If it is a new entity or the legal name is changing, it does not need to agree though other attribution must be updated to reflect this change.

STATEFP	COUNTYFP	PLACEFP	NAME	NAMELSAD	PLAC
42	007	00820	Aliquippa	Aliquippa city	01214
42	007	02288	Ambridge	Ambridge borough	01214
42	005	02720	Apollo	Apollo borough	01214
42	005	02752	Applewold	Applewold borough	01214
42	003	03320	Aspinwall	Aspinwall borough	01214
42	005	03480	Atwood	Atwood borough	01214
42	003	03608	Avalon	Avalon borough	01214
42	007	03736	Baden	Baden borough	01214
42	003	03928	Baldwin	Baldwin borough	01214
42	121	04136	Barkeyville	Barkeyville borough	01215

OBJECTID	MUNICIPALI	MCN_CODE	MCN_NAME	NAME
8	BRUN BORO	340	BRUIN	Bruin
34	BUTLER CITY	560	BUTLER	Butler
52	CALLERY BORO	350	CALLERY	Callery
5	CHERRY VALLEY BORO	360	CHERRY VALLEY	Cherry Valley
24	CHICORA BORO	460	CHICORA	Chicora
42	CONNOQ BORO	370	CONNOQ	Connoq
36	EAST BUTLER BORO	380	EAST BUTLER	East Butler
6	EAU CLAIRE BORO	390	EAU CLAIRE	Eau Claire
46	EVANS CITY BORO	400	EVANS CITY	Evans City
20	FAIRVIEW BORO	410	FAIRVIEW	Fairview

**Figure 35. NAME Field in Census Data vs Local Boundary Data**

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

Shape	STATEFP	COUNTYFP	COUSUBFP	NAMELSAD	COUSUBNS	L5
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	01214763	21

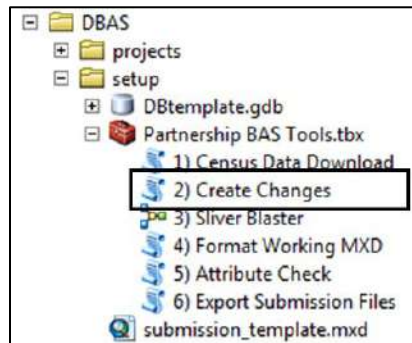
  

FID	Shape	OBJECTID_1	OBJECTID	MUNICIPALI	MCN_CODE
28	Polygon	0	4	Adams township	010
3	Polygon	0	7	Allegheny township	020
9	Polygon	0	16	Brady township	030
31	Polygon	0	5	Buffalo township	040
20	Polygon	0	3	Butler township	050
15	Polygon	0	2	Center township	060
6	Polygon	0	1	Cherry township	070
10	Polygon	0	16	Clay township	080
22	Polygon	0	3	Clearfield township	090
30	Polygon	0	5	Clinton township	100

**Figure 36. Appropriate Attribution for COUSUB or AIANNH Changes**

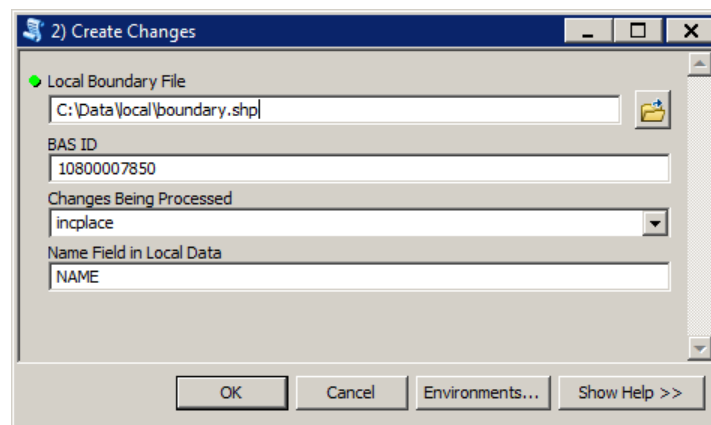
The bas\_cousub attribution on the left in the NAMELSAD field shows how the local MUNICIPAL field on the right should be formatted to ensure that the Create Changes tool works for the MCD changes in Butler County, PA.

1. Double click on **2) Create Changes** tool.



**Figure 37. Partnership Tools Menu with Create Changes Tool Selected**

2. In the **Create Changes** window:
  - In the **Local Boundary File** field, enter the path or navigate to the full boundary polygon.
  - 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. Incplace (incorporated place).
    - b. County.
    - c. Cousub (MCDs).
    - d. AIANNH (Tribal areas).
  - For the **Name Field in Local Data**, the boundary file may need to be modified to agree with a field in the Census Bureau's data. Type the name of the field (as it appears in ArcCatalog) containing the information matching the Census Bureau's NAME field. If processing an MCD or AIANNH file where the Census Bureau NAME field contains duplicates, match the Census Bureau's NAMELSAD.



**Figure 38. Create Changes Window**

3. Click **OK** to run the tool.

4. Once the tool is complete, the output will be placed in the geodatabase under the submission feature dataset.

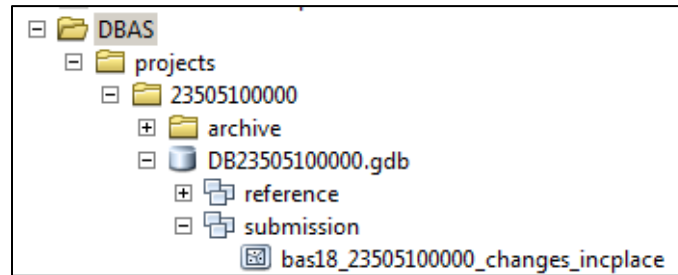


Figure 39. Partnership Tools Menu with Geodatabase

5. Repeat steps for any other levels of geography that need changes created.

## B5 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, 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.

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

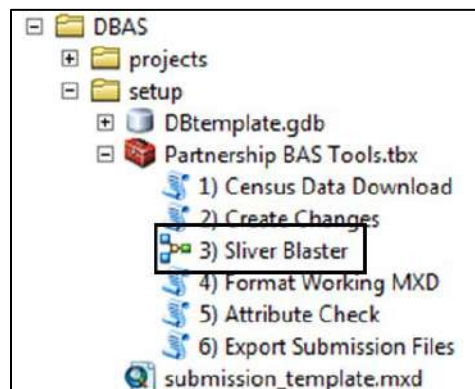


Figure 40. Partnership Tools Menu with Sliver Blaster Selected

2. In the **Sliver Blaster** tool window:
  - The **Changes File** refers to the file created in the previous step, found in the submission feature dataset.
  - The **Census Edges** feature class is found in the reference feature dataset and is called `bas_edges`.
  - The **Buffer Distance** field is set to 30 feet by default, but this can be adjusted to accommodate smaller changes.
3. Click **OK** to run.

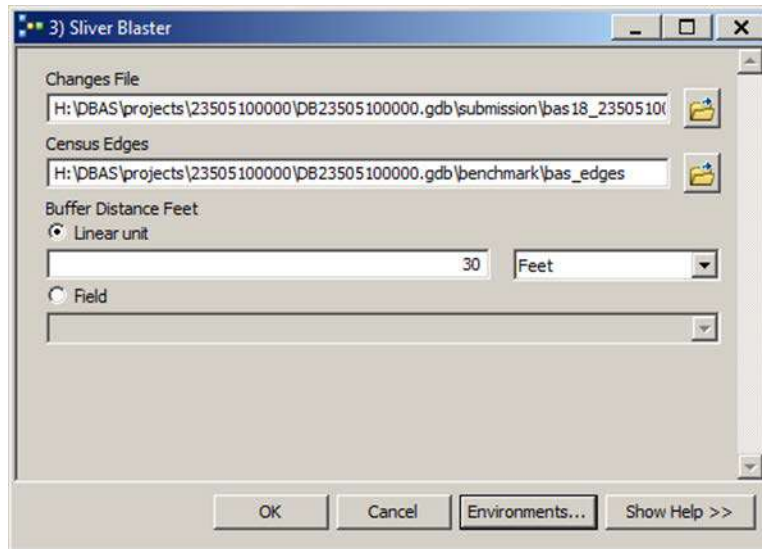


Figure 41. Sliver Blaster Window

## B6 Format Working MXD Tool (Optional)

The intent of this tool is to create a map document (.mxd) for users containing their change file and the reference layers they will need to finalize a submission. If users would prefer to use their own .mxd, this step is not required.

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

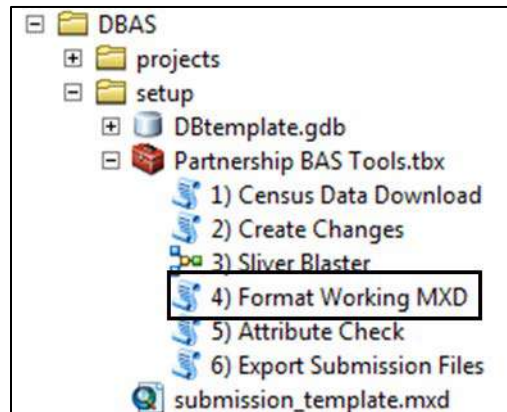


Figure 42. Partnership Tools Menu with Format Working MXD Selected

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

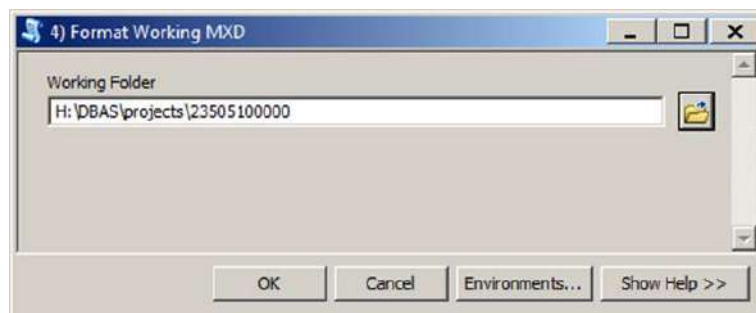


Figure 43. Format Working MXD Window

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

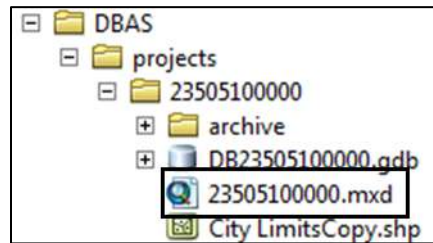


Figure 44. Projects Submenu with mxd file Selected

## B7 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 (see 5.6 for guidance on conducting a spatial review). 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.

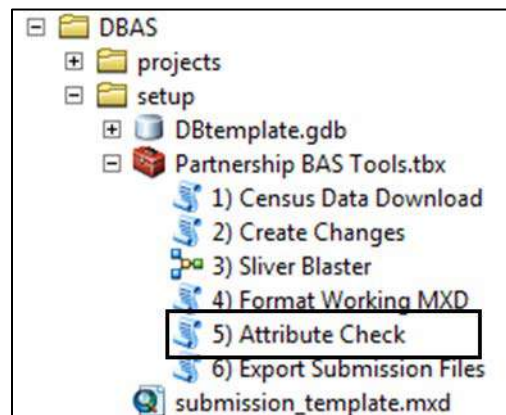


Figure 45. Partnership Tools Menu with Attribute Check Selected

2. In the **Attribute Check** window:
  - The **Change File** should be the change file created in tool **2) Create Changes** for which to generate a report.
  - In **Geography Type**, chose 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.

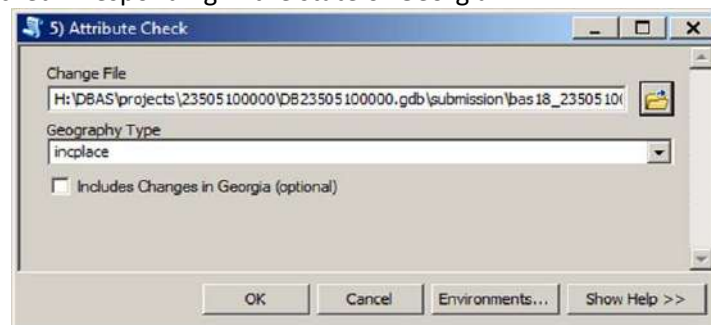
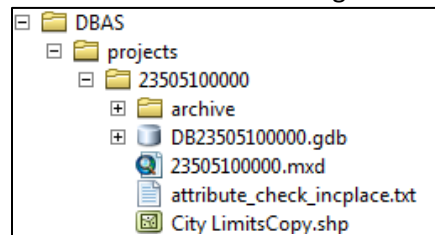


Figure 46. Attribute Check Window

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 47. Projects Submenu Showing an attribute\_check Text File**

## B8 Export Submission Tool

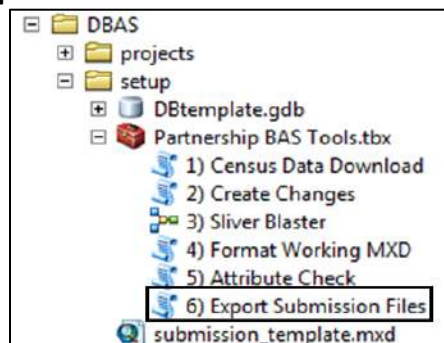
Upon review of the changes file and the attribute error report, the finalized changes may be exported for submission to the Census Bureau. This tool can also be used to provide updated contact information with the submission.

---

**Note:** This tool does not submit the changes, it just makes a file for submission. Please follow **Step 9** for submission guidelines.

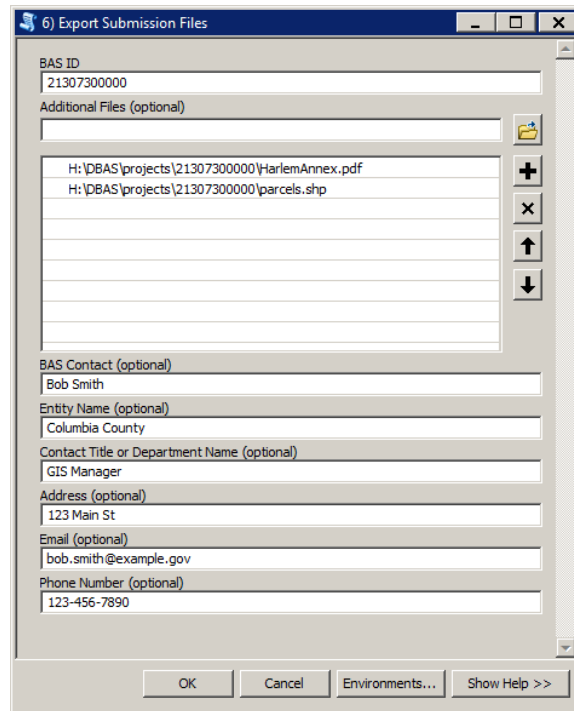
---

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



**Figure 48. 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.
  - Under **Additional Files**, drag in or navigate to any additional files to be included in the submission. This can include parcel data, 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 49. Export Submission Files Window**

3. Click **OK** to run the tool.

## **B9 Submitting Files through the Secure Web Incoming Module (SWIM)**

The Census Bureau requires participants to submit updated BAS materials as ZIP files using the Census Bureau’s **SWIM** site. Please submit only the ZIP file(s). **SWIM** is located at <https://respond.census.gov/swim>. For instructions on how to use SWIM, see [5.7.7, Submitting Digital Files through SWIM](#).

## APPENDIX C 2021 DIGITAL BAS EXAMPLE PROCESS 2

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The 2021 Digital BAS Example Process 2 provides step-by-step instructions for participants creating their own change shapefiles using ArcGIS.

### C1 Required Census Bureau Shapefiles

When downloading shapefiles for the 2021 BAS, shapefiles will begin with the prefix **PVS** (e.g., **PVS\_20\_v2\_edges\_<ssccc>.shp**). Throughout this guide, Census Bureau uses the prefix of **bas\_2021**, but the **PVS files** are exactly the same.

Copy the data to a hard drive/server and unzip the data to ensure that the correct data was downloaded. For an incorporated place, these layers are critical:

- PVS\_20\_v2\_place\_<ssccc>.shp
- PVS\_20\_v2\_edges\_<ssccc>.shp

---

---

**Note:** <ssccc> represents the two-digit state code and three-digit county code.

---

---

The shapefiles should include the home county/counties as well as all adjacent counties (if necessary).

---

---

**Note:** The Census Bureau suggests that participants make an extra copy of the data as an emergency backup.

---

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### C2 Local Data





The minimum data necessary is a jurisdiction polygon shapefile showing only the outer boundary or boundaries. Local parcel files are not acceptable for this method. If each jurisdiction's boundaries are contiguous, the file should contain only one polygon for each government; if some of the governments within the jurisdiction are non-contiguous, they may be saved as a multi-part polygon or consist of one polygon for each disjointed part. Other local data layers that may be helpful, if available, include centerline data, hydrography, railroad or other linear feature data, and imagery.

### C3 Symbolizing Layers in ArcGIS

The following are suggestions for symbolizing Census Bureau data in ArcGIS. For the Edges layer, symbolize the linear features by grouping like MTFCC codes (codes sharing the same first character). See

**Table 26.**

**Table 26: Suggested MTFCC Symbolization**

MTFCC 1st Character	Linear Feature Type	Symbol
H	Hydrographic	
P	Non-Visible Feature (boundary)	
R	Railroad	
S	Road	

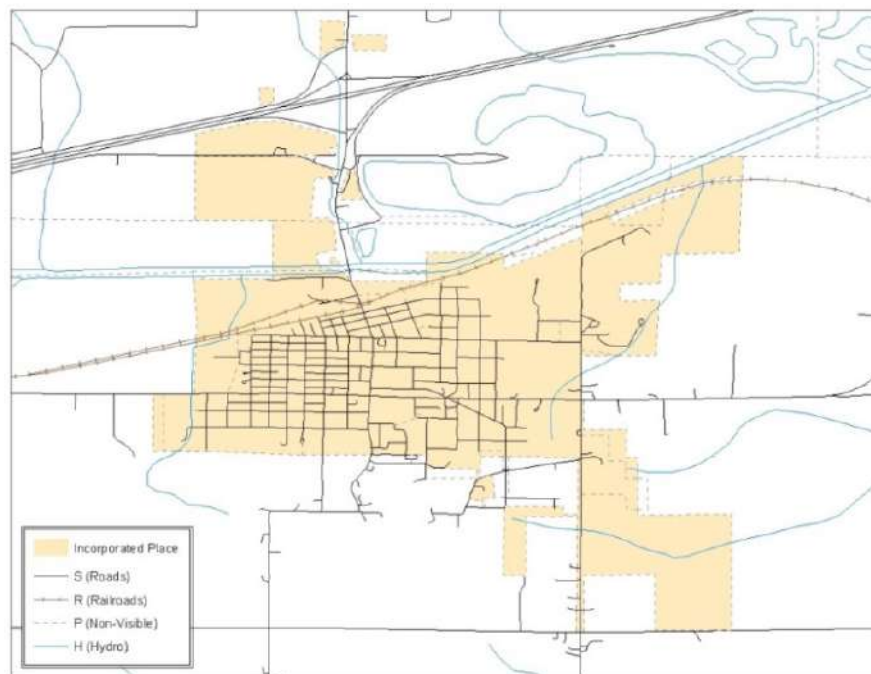
## C4 Symbolizing Geographic Areas

Symbolize the place layer using Fill Color of RGB (255, 235, 190) with no outline.

---

**Note:** County participants with many adjacent incorporated places may want to use different colors to distinguish one place from another.

---



**Figure 50. Suggested Map Symbolization**

## C5 Extracting Incorporated Place or MCD Data from Census Shapefiles

Participants submitting for a single incorporated place or MCD will need to extract their government from the appropriate data layer.

---

**Note:** County participants submitting county boundary changes can skip this step. Use the *PVS\_20\_v2\_county\_<ssccc>* shapefile which only contains the county boundary. Counties submitting for multiple incorporated places or MCDs skip ahead to [C6, Merging Multipart Place Data](#).

---

## C5.1 Filtering the Data

1. In ArcMap, click **Selection** and then click **Select by Attributes**.
2. In the Select By Attributes window:
  - From the Layer dropdown, select PVS\_20\_v2\_{place|mcd}\_<ssccc>.
  - Double click **"NAME."**
  - Left click the = button.
  - Click the **Get Unique Values** button.
  - In the list, locate and double click the name of the government (It will appear in the formula).
  - Click **OK**.

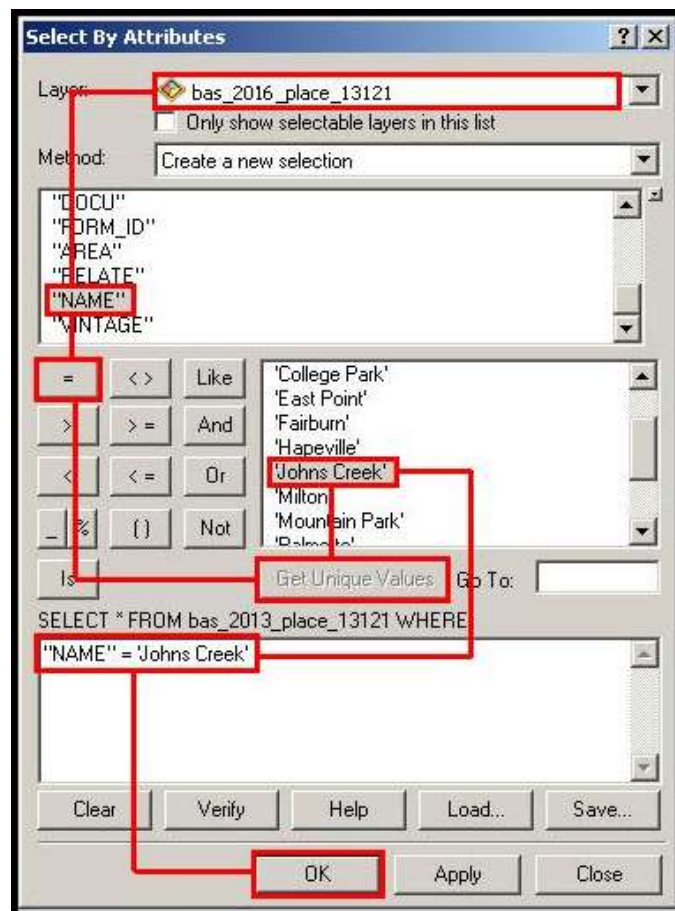


Figure 51. Filtering Data

## C5.2 Exporting the Data to a New Shapefile

1. In the **Table of Contents**, right click the Incorporated **Place** or **MCD** layer, select **Data**, and then click **Export Data**.
2. In the **Export Data** window:
  - From the **Export** dropdown, choose **Selected Features**.
  - In the **Output feature class** field, enter a location to save the shapefile.
  - Click **OK**.

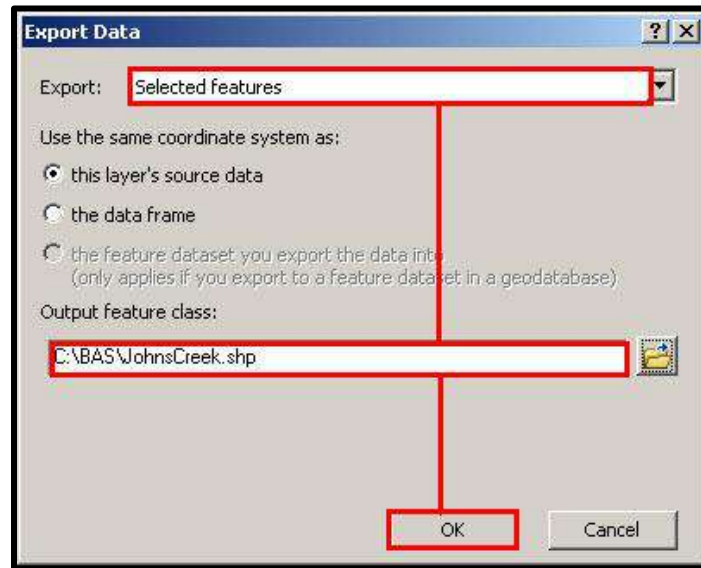


Figure 52. Export Data Window

**Note:** If the incorporated place spans more than one county, it will need to be exported from each county's place shapefile and merged. Follow the instructions in [C6, Merging Multipart Place Data](#) if the incorporated place needs to merge, otherwise skip to [C7.2, Creating Change Polygons Using Union](#).

## C6 Merging Multipart Place Data

1. In **ArcToolbox**, double-click **Data Management Tools**, then double-click **General**, and then double-click **Merge**.
2. In the **Merge** window:
  - Next to the **Input Datasets** field, click the arrow and select each layer (or use the Browse button to the right of the field to find the layers)
  - In the **Output Dataset** field, browse to and select a location to save the shapefile.
    - Name the shapefile **Export\_Output\_Final** or **Merged**, or anything easy to find/remember.
  - Click **OK**.

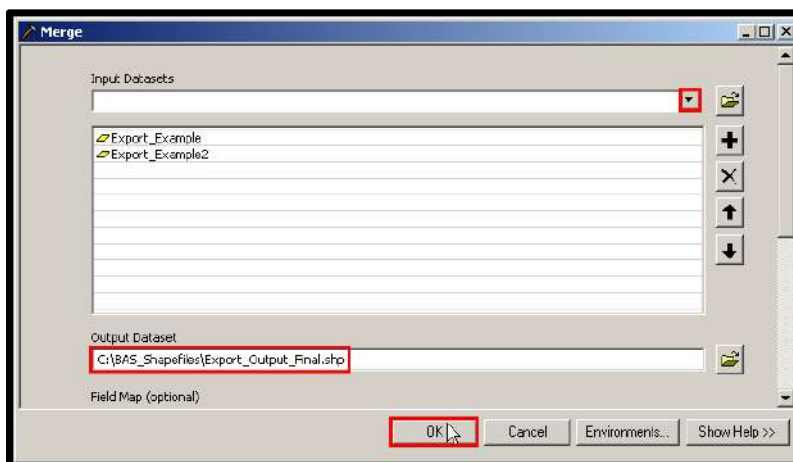


Figure 53. Finalizing the Merge Process

## C7 Creating Change Polygons

There are two methods used for creating change polygons. Symmetrical Difference is the recommended method for single geographic areas and those with an appropriate ArcGIS license. Steps for using a symmetrical difference are outlined in [C7.1, Creating Change Polygons Using Symmetrical Difference](#). Otherwise, the Union method is acceptable and outlined in [C7.2, Creating Change Polygons Using Union](#).

### C7.1 Creating Change Polygons Using Symmetrical Difference

1. In **ArcToolbox**, double-click **Analysis Tools**, then double-click **Overlay**, and then double-click **Symmetrical Difference**.
2. In the Symmetrical Difference window:
  - In the **Input Features** field, click the arrow (or browse) and select the layer created in [C6, Merging Multipart Place Data](#) if the Census Bureau data required merging.
  - In the **Update Features** field, click the arrow (or browse) and select the local government boundary layer (the participant's data).
  - In the **Output Feature Class** field, browse to and select a location to save the shapefile.
  - Name the shapefile **Differences\_between\_BAS\_local**, **Differences1**, or anything easy to find/remember.
  - Click **OK**.

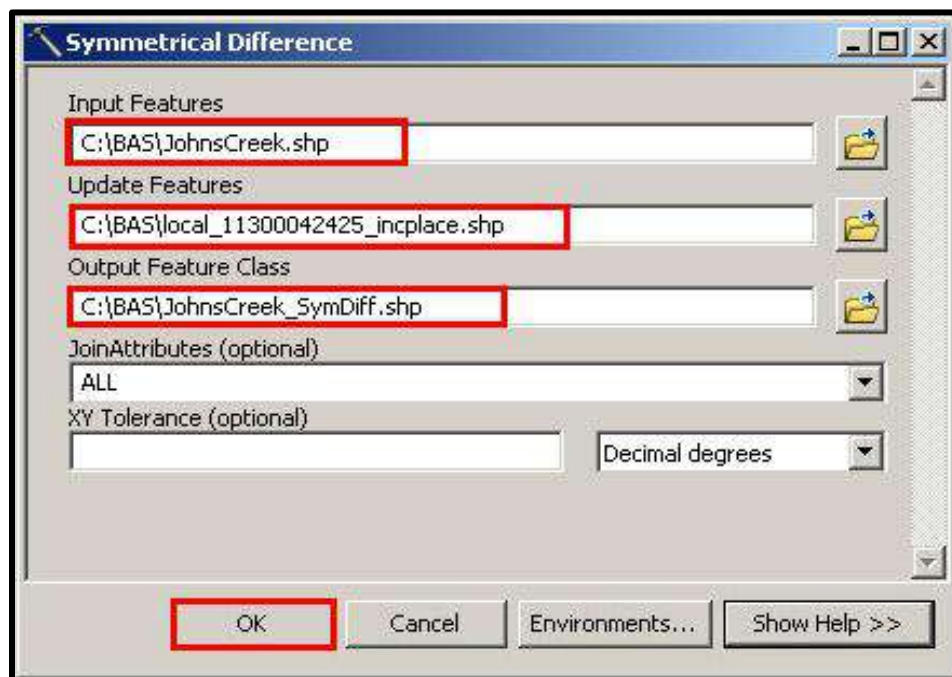



Figure 54. Finalizing the Symmetrical Difference Process

---

**Note:** This process creates a layer that contains the differences between Census Bureau and local boundaries. However, the Symmetrical Difference tool creates multipart polygons that need to be broken up and individually coded.

---

3. Turn on Editing (using the **Editing** dropdown in the **Editor** toolbar). Select all records in the layer that were created in the Symmetrical Difference step.
4. On the **Advanced Editing** toolbar, click the **Explode** tool . The layer will now contain a separate record for each change.

The created layer shows individual change polygons representing the differences between the Census Bureau and local government boundaries. Please review these differences and code them appropriately.

Skip to [0](#),

## Reviewing and Attributing Change Polygons.

### C7.2 Creating Change Polygons Using Union

1. In **ArcToolbox**, double-click **Analysis Tools**, then double-click **Overlay**, and then double-click **Union**.
2. In the **Union** window:
  - In the **Input Features** field, click the arrow (or browse) and select **PVS\_20\_v2\_{place|mcd}\_<ssccc>**, and the local incorporated place or MCD layer.
  - In the **Output Feature Class**, browse to and select a location to save the shapefile.
    - Name the shapefile **Export\_Output\_union**, or **Union**, or anything easy to find/remember.
  - Click **OK**.

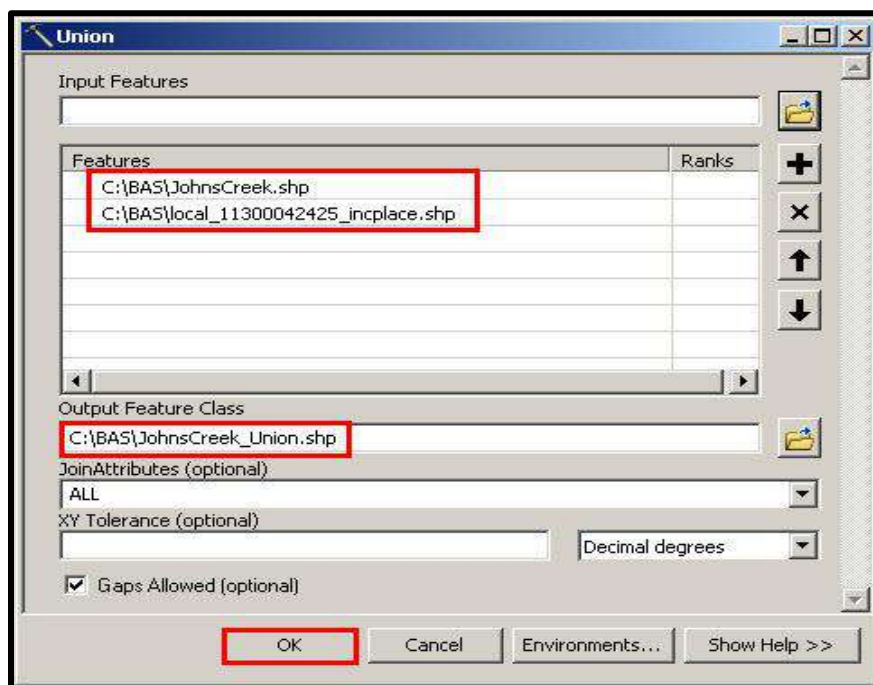
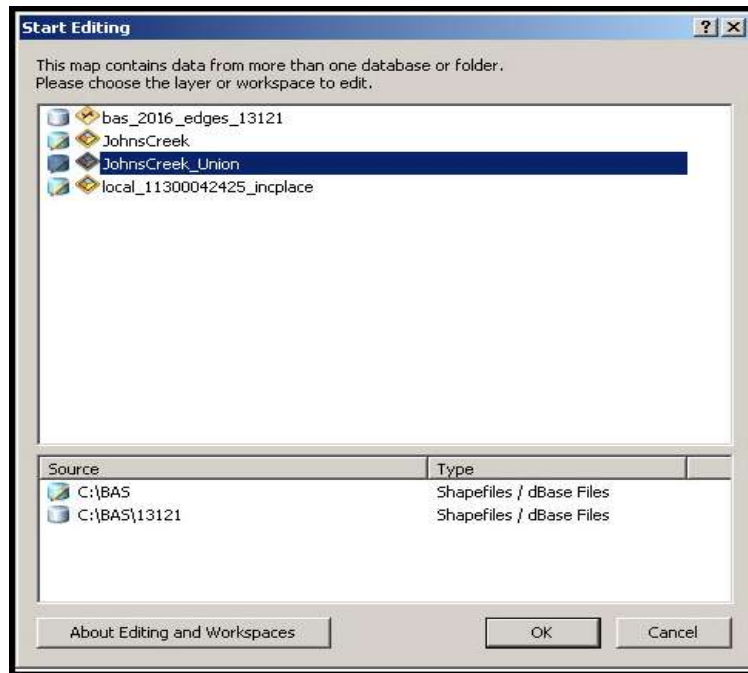


Figure 55. Finalizing the Union Process



The union operation will create records that contain differences as well as areas that are in common between the Census Bureau and local government boundary layers.

The next step is selecting and deleting the areas in common between the Census Bureau and local government boundary layers.

1. On the **Editor** toolbar, click **Editor**, and then click **Start Editing**.
2. If a **Start Editing** window opens, in the top pane click to highlight the **union** shapefile, and then click **OK**.



**Figure 56. Locating the Union Shapefile**

3. In **ArcMap**, in the **Tools** toolbar, click the **Select Features**  button.
  - Locate features on the map that the Census Bureau and the local government layers have in common.
  - Select each feature individually or click and hold the left mouse button and drag a box to highlight the common features.
  - Press **Delete**.
4. Repeat these steps until only the features that have changed are left in the map.
5. Once all of the areas in common have been removed from the union shapefile, on the **Editor** toolbar, click **Editor**, and then click **Save Edits**.
6. Select all of the remaining records in the layer that was created in the Union step.
7. On the **Advanced Editing** toolbar, click the **Explode** tool . The layer will now contain a separate record for each change.

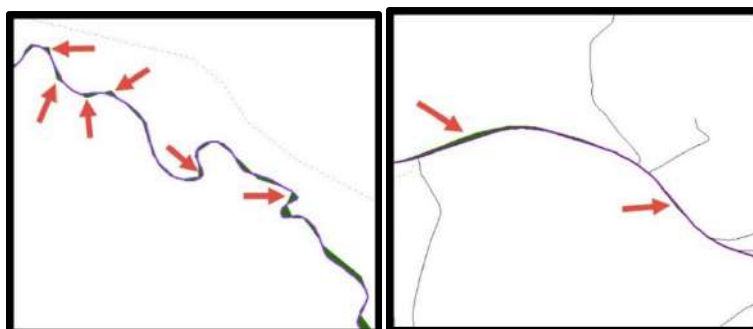
The new layer shows individual change polygons representing the differences between the Census Bureau and the local government's representation of the boundaries. Please review these differences make sure they are coded appropriately. Continue to the next section for instructions on reviewing and coding change polygons.

## C8 Reviewing and Attributing Change Polygons

After the individual change polygons have been created, each must be reviewed and appropriately coded. When reviewing the polygons, please refer to [5.3, Boundary Changes](#) in the main part of this guide to look for polygons that should be deleted from the submission, as well as those that should be snapped to nearby visible features to maintain boundary-to-feature relationships.

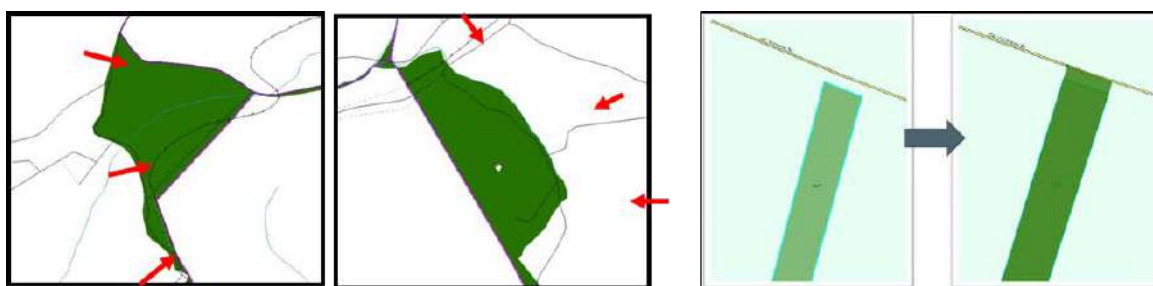
### C8.1 Examples

These examples show very small sliver polygons that should be deleted during review as they eliminate boundary-to-feature relationships with a river (left) and a road (right). Furthermore, these boundary corrections also are not located near legal changes or corridor/offset changes (type 'A', 'D', 'C', 'F'), so they should be removed from consideration.



**Figure 57. Small Slivers That Should Be Deleted**

The examples in Figure 57 show small slivers along rivers (left) or roads (right) that should be deleted.



**Figure 58. Polygons (Before and After) Snapped to Roads or Rivers**

The two examples on the left show polygons that should be snapped to rivers (left) or roads (right). The two examples on the right show how a snapped area will look.



## C9 Attribute Information

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Note: All updates MUST be attributed. [Table 2](#), [Table 3](#), and [Table 4](#) in [5.3, Boundary Changes](#) cover the required attributes.

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

## C9.1 To Begin Updating Attributes for Annexation

- On the **Editor Toolbar**, click **Editor**, and then click **Start Editing**.
- On the **Editor Toolbar**, click the **Edit Tool**  button and select the annexation polygon.
- On the **Editor Toolbar**, click the **Attributes**  button.
- In the **Attributes** window, fill out the mandatory fields required for an annexation:
  - NAME, CHNG\_TYPE, AUTHTYPE, DOCU and EFF\_DATE.
  - The **CHNG\_TYPE** for an annexation is **A**.



## C9.2 To Begin Updating Attributes for Deannexation

- On the **Editor Toolbar**, click the **Edit Tool**  button and select the deannexation polygon.
- On the **Editor Toolbar**, click the **Attributes**  button.
- In the **Attributes** window, fill out the mandatory fields required for a deannexation:
  - **NAME, CHNG\_TYPE, AUTHTYPE, DOCU and EFF\_DATE.**
  - The **CHNG\_TYPE** for an annexation is **D**.

## C9.3 To Begin Updating Attributes for Geographic Corridors

- On the **Editor Toolbar**, click the **Edit Tool**  button and select the corridor polygon.
- On the **Editor Toolbar**, click the **Attributes**  button.
- In the **Attributes** window, fill out the mandatory fields required for a corridor:
  - **NAME, CHNG\_TYPE, RELATE.**
  - The **CHNG\_TYPE** for a corridor changes is **C**.
  - In the **RELATE** field, enter **IN** if the change is adding corridor area to the place or **OUT** if the change is removing corridor area.

## C9.4 To Begin Updating Attributes for Geographic Offsets

- On the **Editor Toolbar**, click the **Edit Tool**  button and select the offset polygon.
- On the **Editor Toolbar**, click the **Attributes**  button.
- In the **Attributes** window, fill out the mandatory fields required for an offset:
  - **NAME, CHNG\_TYPE, RELATE.**
  - The **CHNG\_TYPE** for an offset change is **F**.
  - In the **RELATE** field, enter **IN** if the change is adding offset area to the place or **OUT** if the change is removing offset area.

## C9.5 To Finish Updating Attributes

- Once all attribute changes have been made, in the **ArcMap** menu, click **Editor**, and then click **Stop Editing**. (In the **Save** window, click **Yes**.)

## C10 Renaming and Finalizing Change Polygons

After creating and coding all change polygons, please rename the change polygon layer prior to its submission to the Census Bureau. This process must be completed for each level of geography (county, place, MCD) that has changes.

### C10.1 Renaming the Shapefile



1. In **ArcMap**, open the **ArcCatalog** tab.
2. In **ArcCatalog**, navigate to shapefile, right-click and select **Rename**.
3. Save the output shapefile in the proper naming convention:  
**bas21\_<basID>\_changes\_<government\_type>**.

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**Note:** The BAS ID numbers can be found on the BAS Annual Response email or online from this link:  
<<https://www.census.gov/programs-surveys/bas/technical-documentation/code-lists.html>>



**Note:** See [5.7.6, Compressing the Digital Files](#) for instructions on zipping updates.

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### C10.2 Submitting the shapefile

The Census Bureau requires participants submit BAS return ZIP files using the Census Bureau's **SWIM** site. Please submit only the ZIP file. The **SWIM** is located at <<https://respond.census.gov/swim>>. For instructions on how to use SWIM, see [5.7.7, Submitting Digital Files through SWIM](#) of this respondent guide.

### C10.3 To Begin Updating Attributes for Boundary Corrections

- On the **Editor Toolbar**, click the **Edit Tool**  button and select the boundary correction polygon.
- On the **Editor Toolbar**, click the **Attributes**  button.
- In the **Attributes** window, fill out the mandatory fields required for a boundary correction:
  - NAME, CHNG\_TYPE, RELATE.
  - The **CHNG\_TYPE** for a boundary correction is **B**.
  - In the **RELATE** field, enter **IN** if the boundary correction is adding area or **OUT** if the boundary correction is removing area.

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**Note:** If a county is reporting for adjacent incorporated places or MCDs, and a boundary correction to one government affect or takes land from another, use RELATE = IN and NAME = <government being added to>. This is due to the fact that RELATE = OUT leaves a question as to whether or not there should be a gap between the two governments.

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## APPENDIX D MTFCC DESCRIPTIONS

The MAF/TIGER Feature Classification Code (MTFCC) is a 5-digit code assigned by the Census Bureau to classify and describe geographic objects or features in Census Bureau MAF/TIGER products.

MTFCC	Feature Class	Feature Class Description
C3022	Mountain Peak or Summit	A prominent elevation rising above the surrounding level of the Earth's surface.
C3023	Island	An area of dry or relatively dry land surrounded by water or low wetland [including archipelago, atoll, cay, hammock, hummock, isla, isle, key, moku and rock].
C3024	Levee	An embankment flanking a stream or other flowing water feature to prevent overflow.
C3026	Quarry (not water-filled), Open Pit Mine or Mine	An area from which commercial minerals are or were removed from the Earth; not including an oilfield or gas field.
C3027	Dam	A barrier built across the course of a stream to impound water and/or control water flow.
C3061	Cul-de-sac	An expanded paved area at the end of a street used by vehicles for turning around. For mapping purposes, the Census Bureau maps it only as a point feature.
C3062	Traffic Circle	A circular intersection allowing for continuous movement of traffic at the meeting of roadways.
C3066	Gate	A movable barrier across a road.
C3067	Toll Booth	A structure or barrier where a fee is collected for using a road.
C3070	Tower/Beacon	A manmade structure, higher than its diameter generally used for observation, storage, or electronic transmission.
C3071	Lookout Tower	A manmade structure, higher than its diameter, used for observation.
C3072	Transmission Tower including cell, radio and TV	A manmade structure, higher than its diameter, used for electronic transmission.
C3073	Water Tower	A manmade structure, higher than its diameter, used for water storage.
C3074	Lighthouse Beacon	A manmade structure, higher than its diameter, used for transmission of light and possibly sound generally to aid in navigation.
C3075	Tank/Tank Farm	One or more manmade structures, each higher than its diameter, used for liquid (other than water) or gas storage or for distribution activities.
C3076	Windmill Farm	One or more manmade structures used to generate power from the wind.
C3077	Solar Farm	One or more manmade structures used to generate power from the sun.
C3078	Monument or Memorial	A manmade structure to educate, commemorate, or memorialize an event, person, or feature.
C3079	Boundary Monument Point	A material object placed on or near a boundary line to preserve and identify the location of the boundary line on the ground.
C3080	Survey Control Point	A point on the ground whose position (horizontal or vertical) is known and can be used as a base for additional survey work.

MTFCC	Feature Class	Feature Class Description
C3081	Locality Point	A point that identifies the location and name of an unbounded locality (e.g., crossroad, community, populated place or locale).
C3085	Alaska Native Village Official Point	A point that serves as the core of an Alaska Native village and is used in defining Alaska Native village statistical areas.
C3088	Landfill	A disposal facility at which solid waste is placed on or in the land.
G2100	American Indian Area	A legally defined state- or federally recognized reservation and/or off-reservation trust land (excludes statistical American Indian areas).
G2101	American Indian Area (Reservation Only)	American Indian Area (Reservation Only)
G2102	American Indian Area (Off-Reservation Trust Land Only)	American Indian Area (Off-Reservation Trust Land Only)
G2120	Hawaiian Homeland	A legal area held in trust for the benefit of Native Hawaiians.
G2130	Alaska Native Village Statistical Area	A statistical geographic entity that represents the residences, permanent and/or seasonal, for Alaska Natives who are members of or receiving governmental services from the defining legal Alaska Native Village corporation.
G2140	Oklahoma Tribal Statistical Area	A statistical entity identified and delineated by the Census Bureau in consultation with federally recognized American Indian tribes that have no current reservation but had a former reservation in Oklahoma.
G2150	State-designated Tribal Statistical Area	A statistical geographic entity identified and delineated for the Census Bureau by a state-appointed liaison for a state-recognized American Indian tribe that does not currently have a reservation and/or lands in trust.
G2160	Tribal Designated Statistical Area	A statistical geographic entity identified and delineated for the Census Bureau by a federally recognized American Indian tribe that does not currently have a reservation and/or off-reservation trust land.
G2170	American Indian Joint Use Area	An area administered jointly and/or claimed by two or more American Indian tribes.
G2200	Alaska Native Regional Corporation	Corporate entities established to conduct both business and nonprofit affairs of Alaska Natives pursuant to the Alaska Native Claims Settlement Act of 1972 (Public Law 92-203). There are twelve geographically defined ANRCs and they are all within and cover most of the State of Alaska (the Annette Island Reserve-an American Indian reservation-is excluded from any ANRC). The boundaries of ANRCs have been legally established.
G2300	Tribal Subdivision	Administrative subdivisions of federally recognized American Indian reservations, off-reservation trust lands, or Oklahoma tribal statistical areas (OTSAs). These entities are internal units of self-government or administration that serve social, cultural, and/or economic purposes for the American Indians on the reservations, off-reservation trust lands, or OTSAs.
G2400	Tribal Census Tract	A relatively small and permanent statistical subdivision of a federally recognized American Indian reservation and/or off-reservation trust land, delineated by American Indian tribal participants or the Census Bureau for the purpose of presenting demographic data.

MTFCC	Feature Class	Feature Class Description
G2410	Tribal Block Group	A cluster of census blocks within a single tribal census tract delineated by American Indian tribal participants or the Census Bureau for the purpose of presenting demographic data.
G3100	Combined Statistical Area	A grouping of adjacent metropolitan and/or micropolitan statistical areas that have a degree of economic and social integration, as measured by commuting.
G3110	Metropolitan and Micropolitan Statistical Area	An area containing a substantial population nucleus together with adjacent communities having a high degree of economic and social integration with that core, as measured by commuting. Defined using whole counties and equivalents.
G3120	Metropolitan Division	A county or grouping of counties that is a subdivision of a Metropolitan Statistical Area containing an urbanized area with a population of 2.5 million or more.
G3200	Combined New England City and Town Area	A grouping of adjacent New England city and town areas that have a degree of economic and social integration, as measured by commuting.
G3210	New England City and Town Metropolitan and Micropolitan Statistical Area	An area containing a substantial population nucleus together with adjacent communities having a high degree of economic and social integration with that core, as measured by commuting. Defined using Minor Civil Divisions (MCDs) in New England.
G3220	New England City and Town Division	A grouping of cities and towns in New England that is a subdivision of a New England City and Town Area containing an urbanized area with a population of 2.5 million or more.
G3500	Urban Area	Densely settled territory that contains at least 2,500 people. The subtypes of this feature are Urbanized Area (UA), which consists of 50,000 + people and Urban Cluster, which ranges between 2,500 and 49,999 people.
G4000	State or Equivalent Feature	The primary governmental divisions of the United States. The District of Columbia is treated as a statistical equivalent of a state for census purposes, as is Puerto Rico.
G4020	County or Equivalent Feature	The primary division of a state or state equivalent area. The primary divisions of 48 states are termed County, but other terms are used such as Borough in Alaska, Parish in Louisiana, and Municipio in Puerto Rico. This feature includes independent cities, which are incorporated places that are not part of any county.
G4040	County Subdivision	The primary divisions of counties and equivalent features for the reporting of Census Bureau data. The subtypes of this feature are Minor Civil Division, Census County Division/Census Subarea, and Unorganized Territory. This feature includes independent places, which are incorporated places that are not part of any county subdivision.
G4050	Estate	Estates are subdivisions of the three major islands in the United States Virgin Islands (USVI).
G4060	Subbarrio (Subminor Civil Division)	Legally defined divisions (subbarrios) of minor civil divisions (barrios-pueblo and barrios) in Puerto Rico.
G4110	Incorporated Place	A legal entity incorporated under state law to provide general-purpose governmental services to a concentration of population. Incorporated places are generally designated as a city, borough, municipality, town, village, or, in a few instances, have no legal description.
G4120	Consolidated City	An incorporated place that has merged governmentally with a county or minor civil division, but one or more of the incorporated places

MTFCC	Feature Class	Feature Class Description
		continues to function within the consolidation. It is a place that contains additional separately incorporated places.
G4210	Census Designated Place	A statistical area defined for a named concentration of population and the statistical counterpart of an incorporated place.
G4300	Economic Census Place	The lowest level of geographic area for presentation of some types of Economic Census data. It includes incorporated places, consolidated cities, census designated places (CDPs), minor civil divisions (MCDs) in selected states, and balances of MCDs or counties. An incorporated place, CDP, MCD, or balance of MCD qualifies as an economic census place if it contains 5,000 or more residents, or 5,000 or more jobs, according to the most current data available.
G5020	Census Tract	Relatively permanent statistical subdivisions of a County or equivalent feature delineated by local participants as part of the Census Bureau's Participant Statistical Areas Program.
G5030	Block Group	A cluster of census blocks having the same first digit of their four-digit identifying numbers within a Census Tract. For example, block group 3 (BG 3) within a Census Tract includes all blocks numbered from 3000 to 3999.
G5040	Tabulation Block	The lowest-order census defined statistical area. It is an area, such as a city block, bounded primarily by physical features but sometimes by invisible city or property boundaries. A tabulation block boundary does not cross the boundary of any other geographic area for which the Census Bureau tabulates data. The subtypes of this feature are Count Question Resolution (CQR), current, and census.
G5200	Congressional District	The 435 areas from which people are elected to the U.S. House of Representatives. Additional equivalent features exist for state equivalents with nonvoting delegates or no representative. The subtypes of this feature are 106th, 107th, 108th, 109th, and 111th Congressional Districts, plus subsequent Congresses.
G5210	State Legislative District (Upper Chamber)	Areas established by a state or equivalent government from which members are elected to the upper or unicameral chamber of a state governing body. The upper chamber is the senate in a bicameral legislature, and the unicameral case is a single house legislature (Nebraska).
G5220	State Legislative District (Lower Chamber)	Areas established by a state or equivalent government from which members are elected to the lower chamber of a state governing body. The lower chamber is the House of Representatives in a bicameral legislature.
G5240	Voting District	The generic name for the geographic features, such as precincts, wards, and election districts, established by state, local, and tribal governments for the purpose of conducting elections.
G5400	Elementary School District	A geographic area within which officials provide public elementary grade-level educational services for residents.
G5410	Secondary School District	A geographic area within which officials provide public secondary grade-level educational services for residents.
G5420	Unified School District	A geographic area within which officials provide public educational services for all grade levels for residents.

MTFCC	Feature Class	Feature Class Description
G6100	Public-Use Microdata Area	A decennial census area with a population of at least 100,000 or more persons for which the Census Bureau provides selected extracts of household-level data that are screened to protect confidentiality.
G6300	Traffic Analysis District	An area delineated by Metropolitan Planning Organizations (MPOs) and state Departments of Transportation (DOTs) for tabulating journey-to-work and place-of-work data. A Traffic Analysis District (TAD) consists of one or more Traffic Analysis Zones (TAZs).
G6320	Traffic Analysis Zone	An area delineated by Metropolitan Planning Organizations (MPOs) and state Departments of Transportation (DOTs) for tabulating journey-to-work and place-of-work data.
G6330	Urban Growth Area	An area defined under state authority to manage urbanization that the Census Bureau includes in the MAF/TIGER® System in agreement with the state.
G6340	ZIP Code Tabulation Area (Three-Digit)	An approximate statistical-area representation of a U.S. Postal Service (USPS) 3-digit ZIP Code service area.
G6350	ZIP Code Tabulation Area (Five-Digit)	An approximate statistical-area representation of a U.S. Postal Service (USPS) 5-digit ZIP Code service area.
G6400	Commercial Region	For the purpose of presenting economic statistical data, municipios in Puerto Rico are grouped into commercial regions.
H1100	Connector	A known, but nonspecific, hydrographic connection between two nonadjacent water features.
H2025	Swamp/Marsh	A poorly drained wetland, fresh or saltwater, wooded or grassy, possibly covered with open water [includes bog, cienega, marais, and pocosin].
H2030	Lake/Pond	A standing body of water that is surrounded by land.
H2040	Reservoir	An artificially impounded body of water.
H2041	Treatment Pond	An artificial body of water built to treat fouled water.
H2051	Bay/Estuary/Gulf/Sound	A body of water partly surrounded by land [includes arm, bight, cove and inlet].
H2053	Ocean/Sea	The great body of salt water that covers much of the earth.
H2060	Gravel Pit/Quarry filled with water	A body of water in a place or area from which commercial minerals were removed from the Earth.
H2081	Glacier	A body of ice moving outward and down slope from an area of accumulation; an area of relatively permanent snow or ice on the top or side of a mountain or mountainous area [includes ice field and ice patch].
H3010	Stream/River	A natural flowing waterway [includes anabranch, awawa, branch, brook, creek, distributary, fork, kill, pup, rio, and run].
H3013	Braided Stream	A natural flowing waterway with an intricate network of interlacing channels.
H3020	Canal, Ditch or Aqueduct	An artificial waterway constructed to transport water, to irrigate or drain land, to connect two or more bodies of water, or to serve as a waterway for watercraft [includes lateral].
K1121	Apartment Building or Complex	A building or group of buildings that contain multiple living quarters generally for which rent is paid.
K1223	Trailer Court or Mobile Home Park	An area in which parking space for house trailers is rented, usually providing utilities and services.

MTFCC	Feature Class	Feature Class Description
K1225	Crew-of-Vessel Location	A point or area in which the population of military or merchant marine vessels at sea are assigned, usually being at or near the home port pier.
K1226	Housing Facility/Dormitory for Workers	A structure providing housing for a number of persons employed as semi-permanent or seasonal laborers.
K1227	Hotel, Motel, Resort, Spa, Hostel, YMCA or YWCA	A structure providing transient lodging or living quarters, generally for some payment.
K1228	Campground	An area used for setting up mobile temporary living quarters (camp) or holding a camp meeting, sometimes providing utilities and other amenities.
K1229	Shelter or Mission	A structure providing low-cost or free-living quarters established by a welfare or educational organization for the needy people of a district.
K1231	Hospital/Hospice/Urgent Care Facility	One or more structures where the sick or injured may receive medical or surgical attention [including infirmary].
K1233	Nursing Home, Retirement Home, or Home for the Aged	A structure to house and provide care for the elderly.
K1234	County Home or Poor Farm	One or more structures administered by a local government that serve as living quarters for the indigent.
K1235	Juvenile Institution	A facility (correctional and non-correctional) where groups of juveniles reside; this includes training schools, detention centers, residential treatment centers and orphanages.
K1236	Local Jail or Detention Center	One or more structures that serve as a place for the confinement of adult persons in lawful detention, administered by a local (county, municipal, etc.) government.
K1237	Federal Penitentiary, State Prison, or Prison Farm	An institution that serves as a place for the confinement of adult persons in lawful detention, administered by the federal government or a state government.
K1238	Other Correctional Institution	One or more structures that serve as a place for the confinement of adult persons in lawful detention, not elsewhere classified or administered by a government of unknown jurisdiction.
K1239	Convent, Monastery, Rectory, Other Religious Group Quarters	One or more structures intended for use as a residence for those having a religious vocation.
K1241	Sorority, Fraternity, or College Dormitory	One or more structures associated with a social or educational organization that serve as living quarters for college students.
K2100	Governmental	A place where employees are employed in federal, state, local, or tribal government.
K2146	Community Center	A meeting place used by members of a community for social, cultural, or recreational purposes.
K2110	Military Installation	An area owned and/or occupied by the Department of Defense for use by a branch of the armed forces (such as the Army, Navy, Air Force, Marines, or Coast Guard), or a state-owned area for the use of the National Guard.
K2165	Government Center	A place used by members of government (either federal, state, local, or tribal) for administration and public business.
K2167	Convention Center	An exhibition hall or conference center with enough open space to host public and private business and social events.

MTFCC	Feature Class	Feature Class Description
K2180	Park	Parkland defined and administered by federal, state, and local governments.
K2181	National Park Service Land	Area—National parks, National Monuments, and so forth—under the jurisdiction of the National Park Service.
K2182	National Forest or Other Federal Land	Land under the management and jurisdiction of the federal government, specifically including areas designated as National Forest, and excluding areas under the jurisdiction of the National Park Service.
K2183	Tribal Park, Forest, or Recreation Area	A place or area set aside for recreation or preservation of a cultural or natural resource and under the administration of an American Indian tribe.
K2184	State Park, Forest, or Recreation Area	A place or area set aside for recreation or preservation of a cultural or natural resource and under the administration of a state government.
K2185	Regional Park, Forest, or Recreation Area	A place or area set aside for recreation or preservation of a cultural or natural resource and under the administration of a regional government.
K2186	County Park, Forest, or Recreation Area	A place or area set aside for recreation or preservation of a cultural or natural resource and under the administration of a county government.
K2187	County Subdivision Park, Forest, or Recreation Area	A place or area set aside for recreation or preservation of a cultural or natural resource and under the administration of a minor civil division (town/township) government.
K2188	Incorporated Place Park, Forest, or Recreation Area	A place or area set aside for recreation or preservation of a cultural or natural resource and under the administration of a municipal government.
K2189	Private Park, Forest, or Recreation Area	A privately owned place or area set aside for recreation or preservation of a cultural or natural resource.
K2190	Other Park, Forest, or Recreation Area (quasi-public, independent park, commission, etc.)	A place or area set aside for recreation or preservation of a cultural or natural resource and under the administration of some other type of government or agency such as an independent park authority or commission.
K2191	Post Office	An official facility of the U.S. Postal Service used for processing and distributing mail and other postal material.
K2193	Fire Department	Fire Department.
K2194	Police Station	Police Station.
K2195	Library	Library.
K2196	City/Town Hall	City/Town Hall.
K2300	Commercial Workplace	A place of employment for wholesale, retail, or other trade
K2361	Shopping Center or Major Retail Center	A group of retail establishments within a planned subdivision sharing a common parking area.
K2362	Industrial Building or Industrial Park	One or more manufacturing establishments within an area zoned for fabrication, construction, or other similar trades.
K2363	Office Building or Office Park	One or more structures housing employees performing business, clerical, or professional services
K2364	Farm/Vineyard/Winery/Orchard	An agricultural establishment where crops are grown and/or animals are raised, usually for food.
K2366	Other Employment Center	A place of employments not elsewhere classified or of unknown type.

MTFCC	Feature Class	Feature Class Description
K2400	Transportation Terminal	A facility where one or more modes of transportation can be accessed by people or for the shipment of goods; examples of such a facility include marine terminal, bus station, train station, airport and truck warehouse.
K2424	Marina	A place where privately owned, light-craft are moored.
K2432	Pier/Dock	A platform built out from the shore into the water and supported by piles. This platform may provide access to ships and boats, or it may be used for recreational purposes.
K2451	Airport or Airfield	A manmade facility maintained for the use of aircraft [including airstrip, landing field and landing strip].
K2452	Train Station, Trolley or Mass Transit Rail Station	A place where travelers can board and exit rail transit lines, including associated ticketing, freight, and other commercial offices.
K2453	Bus Terminal	A place where travelers can board and exit mass motor vehicle transit, including associated ticketing, freight, and other commercial offices.
K2454	Marine Terminal	A place where travelers can board and exit water transit or where cargo is handled, including associated ticketing, freight, and other commercial offices.
K2455	Seaplane Anchorage	A place where an airplane equipped with floats for landing on or taking off from a body of water can debark and load.
K2456	Airport—Intermodal Transportation Hub/Terminal	A major air transportation facility where travelers can board and exit airplanes and connect with other (i.e. non-air) modes of transportation.
K2457	Airport—Statistical Representation	The area of an airport adjusted to include whole 2000 census blocks used for the delineation of urban areas.
K2458	Park and Ride Facility/Parking Lot	A place where motorists can park their cars and transfer to other modes of transportation.
K2459	Runway/Taxiway	A fairly level and usually paved expanse used by airplanes for taking off and landing at an airport.
K2460	Helicopter Landing Pad	A fairly level and usually paved expanse used by helicopters for taking off and landing.
K2540	University or College	A building or group of buildings used as an institution for post-secondary study, teaching, and learning [including seminary].
K2543	School or Academy	A building or group of buildings used as an institution for preschool, elementary or secondary study, teaching, and learning [including elementary school and high school].
K2545	Museum, Visitor Center, Cultural Center, or Tourist Attraction	An attraction of historical, cultural, educational or other interest that provides information or displays artifacts.
K2561	Golf Course	A place designed for playing golf.
K2564	Amusement Center	A facility that offers entertainment performances or sporting events. Examples include arena, auditorium, theater, stadium, coliseum, racecourse, theme park, fairgrounds, and shooting range.
K2582	Cemetery	A place or area for burying the dead [including burying ground and memorial garden].
K2586	Zoo	A facility in which terrestrial and/or marine animals are confined within enclosures and displayed to the public for educational, preservation, and research purposes.

MTFCC	Feature Class	Feature Class Description
K3544	Place of Worship	A sanctified place or structure where people gather for religious worship; examples include church, synagogue, temple, and mosque.
L4010	Pipeline	A long tubular conduit or series of pipes, often underground, with pumps and valves for flow control, used to transport fluid (e.g., crude oil, natural gas), especially over great distances.
L4020	Powerline	One or more wires, often on elevated towers, used for conducting high-voltage electric power.
L4031	Aerial Tramway/Ski Lift	A conveyance that transports passengers or freight in carriers suspended from cables and supported by a series of towers.
L4110	Fence Line	A man-made barrier enclosing or bordering a field, yard, etc., usually made of posts and wire or wood, used to prevent entrance, to confine, or to mark a boundary.
L4121	Ridge Line	The line of highest elevation along a ridge.
L4125	Cliff/Escarpment	A very steep or vertical slope [including bluff, crag, head, headland, nose, palisades, precipice, promontory, rim and rimrock].
L4130	Point-to-Point Line	A line defined as beginning at one location point and ending at another, both of which are in sight.
L4140	Property/Parcel Line (Including PLSS)	This feature class may denote a nonvisible boundary of either public or private lands (e.g., a park boundary) or it may denote a Public Land Survey System or equivalent survey line.
L4150	Coastline	The line that separates either land or Inland water from Coastal, Territorial or Great Lakes water. Where land directly borders Coastal, Territorial or Great Lakes water, the shoreline represents the Coastline. Where Inland water (such as a river) flows into Coastal, Territorial or Great Lakes water, the closure line separating the Inland water from the other class of water represents the Coastline.
L4165	Ferry Crossing	The route used to carry or convey people or cargo back and forth over a waterbody in a boat.
P0001	Nonvisible Linear Legal/Statistical Boundary	A legal/statistical boundary line that does not correspond to a shoreline or other visible feature on the ground.
P0002	Perennial Shoreline	The more-or-less permanent boundary between land and water for a water feature that exists year-round.
P0003	Intermittent Shoreline	The boundary between land and water (when water is present) for a water feature that does not exist year-round.
P0004	Other non-visible bounding Edge (e.g., Census water boundary, boundary of an aerial feature)	A bounding Edge that does not represent a legal/statistical boundary and does not correspond to a shoreline or other visible feature on the ground. Many such Edges bound area landmarks, while many others separate water features from each other (e.g., where a bay meets the ocean).
R1011	Railroad Feature (Main, Spur, or Yard)	A line of fixed rails or tracks that carries mainstream railroad traffic. Such a rail line can be a main line or spur line, or part of a rail yard.
R1051	Carline, Streetcar Track, Monorail, Other Mass Transit	Mass transit rail lines (including lines for rapid transit, monorails, streetcars, light rail, etc.) that are typically inaccessible to mainstream railroad traffic and whose tracks are not part of a road right-of-way.
R1052	Cog Rail Line, Incline Rail Line, Tram	A special purpose rail line for climbing steep grades that is typically inaccessible to mainstream railroad traffic. Note that aerial tramways and streetcars (which may also be called “trams”) are accounted for by other MTFCCs and do not belong in R1052.

MTFCC	Feature Class	Feature Class Description
S1100	Primary Road	Primary roads are generally divided, limited-access highways within the interstate highway system or under state management, and are distinguished by the presence of interchanges. These highways are accessible by ramps and may include some toll highways.
S1200	Secondary Road	Secondary roads are main arteries, usually in the U.S. Highway, State Highway or County Highway system. These roads have one or more lanes of traffic in each direction, may or may not be divided, and usually have at-grade intersections with many other roads and driveways. They often have both a local name and a route number.
S1400	Local Neighborhood Road, Rural Road, City Street	Generally, a paved non-arterial street, road, or byway that usually has a single lane of traffic in each direction. Roads in this feature class may be privately or publicly maintained. Scenic park roads would be included in this feature class, as would (depending on the region of the country) some unpaved roads.
S1500	Vehicular Trail (4WD)	An unpaved dirt trail where a four-wheel drive vehicle is required. These vehicular trails are found almost exclusively in very rural areas. Minor, unpaved roads usable by ordinary cars and trucks belong in the S1400 category.
S1630	Ramp	A road that allows controlled access from adjacent roads onto a limited access highway, often in the form of a cloverleaf interchange. These roads are unaddressable and do not carry a name in the MAF/TIGER System.
S1640	Service Drive usually along a limited access highway	A road, usually paralleling a limited access highway, that provides access to structures along the highway. These roads can be named and may intersect with other roads.
S1710	Walkway/Pedestrian Trail	A path that is used for walking, being either too narrow for or legally restricted from vehicular traffic.
S1720	Stairway	A pedestrian passageway from one level to another by a series of steps.
S1730	Alley	A service road that does not generally have associated addressed structures and is usually unnamed. It is located at the rear of buildings and properties and is used for deliveries.
S1740	Private Road for service vehicles (logging, oil fields, ranches, etc.)	A road within private property that is privately maintained for service, extractive, or other purposes. These roads are often unnamed.
S1750	Internal U.S. Census Bureau use	Internal U.S. Census Bureau use.
S1780	Parking Lot Road	The main travel route for vehicles through a paved parking area.
S1820	Bike Path or Trail	A path that is used for manual or small, motorized bicycles, being either too narrow for or legally restricted from vehicular traffic.
S1830	Bridle Path	A path that is used for horses, being either too narrow for or legally restricted from vehicular traffic.
S2000	Road Median	The unpaved area or barrier between the carriageways of a divided road.

**Note:** The information in this table was last updated in November 2020.

## Appendix M



## **Community Census Team AGENDA**

May 21, 2018

Location: Flagstaff City Hall Staff Conference Room- Second Floor to Left at top of stairs

2:00-2:10 Introductions -All

2:10-2:20 Proposed Framework of Community Census Team- Kim Musselman  
Joint City/County Presentation Highlights

2:20-3:00pm CC Training Overview and Census Bureau Update - Fred Steven,  
Census Partnership Specialist





## **Community Census Team AGENDA**

June 4, 2018

Location: Coconino County HR 420 N. San Francisco St, Weatherford Room

2:00-2:05pm Introductions -All

2:05-2:20pm Joint City/County Presentation Highlights- Kim

2:20-2:30pm Debrief visit from Fred Stevens, Census Partnership Specialist-All  
Questions and requests of Census Bureau

2:30-3:00pm Planning-  
Future training-  
Sub-committee assignments-  
Summer scheduling-





## **Community Census Team AGENDA**

August 27, 2018

Location: Coconino County Admin 219 E. Cherry Ave, 2<sup>nd</sup> Floor Grand Canyon Room

2:00-2:10pm Introductions -All

2:10-2:30pm Report on LUCA- next steps/timeline Sara D./Kim  
Update on outreach, trainings and presentations to date- Kim  
Update: Census Bureau information, recruitment & timelines-Kim

2:30-2:50pm Participant Statistical Areas Program (PSAP)-Sara D./Kim  
What it is and why it is important-  
Timeline-  
GIS role- Sara D., Kris E., Helen C.  
PSAP Team-All

2:50-3:00pm Standing meeting dates/times-All  
PSAP committee mtg. dates/times-PSAP Team  
Upcoming presentations- All





## Community Census Team AGENDA

September 24, 2018

Location: Coconino County Admin 219 E. Cherry Ave, 1<sup>st</sup> Floor Board Room

2:00-2:10pm **Introductions -All**

2:10-2:45pm **Census Bureau Updates- Vianey Celestino- Census Partnership Specialist  
Q & A**

2:45-2:55pm **Participant Statistical Areas Program (PSAP)-Sarah**  
MAG PSAP training- October 1<sup>st</sup> 1pm-4pm  
GIS updates? - Sara D., Kris E., Helen C. Jason James

2:50-3:15pm **Upcoming trainings-NACOG-Jason**  
**Standing meeting dates/times-All**  
Proposed Dates: **10/29 2:00pm**  
**11/26 2:00pm**  
**01/28 2:00pm**  
**02/25 2:00pm**  
**03/25 2:00pm**

**Announcements- All**



## **Community Census Team AGENDA**

October 29, 2018

Location: Bright Angel Room County HR 420 N. San Francisco St.

2:00-2:10pm **Introductions -All**

2:10-3:10pm **PSAP Overview & Preliminary Map Review- Kris Estes & Kim Lyons**

3:10-3:30pm **Discussion of PSAP Process and Timeline-Sara Dechter**

Next Meeting: **11/26 2:00-3:30 pm Bright Angel Room County HR 420 N. San Francisco St.**



## **Community Census Team AGENDA**

November 26, 2018

Location: Bright Angel Room County HR 420 N. San Francisco St.

**2:00-2:05pm Introductions -All**

**2:05-2:30pm PSAP Maps and GIS Updates- Kris Estes & Kim Lyons**

**2:30-3:30pm Census Solutions Workshop- budget, outreach subcommittee role, timing, inclusion  
Tech investments (e.g. Help Desk Chat Bots)-Sara Dechter  
Census Management Team (role is budget oversight)- what is it and who is on it  
Recruitment Subcommittee-Chairperson, membership and meeting schedule  
Outreach Subcommittee- Chairperson, membership and meeting schedule**

**Next Meeting: 1/28 2:00-3:30 pm Location TBD**



## Community Census Team AGENDA

**January 28, 2019**

Time: 2:00-4:00pm

Location: Ponderosa Room: 2625 N. King St. County Health & Comm Services Bldg  
Conference Line Number: 928-679-7234

2:00-2:10pm **Introductions** -All

2:10-2:30pm **Updates and Timelines**- Kim  
NAU Meeting  
Partnership Specialist  
Local Census Office Location  
Recruitment

2:30-2:45pm **Navajo Nation Coordination Opportunities**- Kim, Arbin Mitchell, Partnership Specialist  
CCC-NNC Resolution  
NNC Subcommittees- Land Use Plan Committees- 13 Chapters

2:45-3:00pm **NAU Communication Capstone**-Sara, Jerry Thull  
Objectives/Outcomes

3:00-3:10pm **Part-Time Volunteer Coordinator position**- Sara & Kim  
Duties, scope of work, estimated cost

3:10-4:00pm **Public Relations contract scope**- All  
RFP timelines  
Communications-Media

Next Meeting: **2/25 2:00-3:30 pm Ponderosa Room, 2625**

**N. King St. Flagstaff**



## Community Census Team AGENDA

**February 28, 2019**

Time: 1:30-3:00pm

Location: County HR Bldg 420 N. San Francisco St. Bright Angel Conference Room  
Conference Line Number: 928-679-7122

1:30-1:35pm **Introductions -All**

1:35-2:00pm **NALAO Census Video-** Supervisor Archuleta  
**PSAP Update-** Sam Dinning  
**Census Recruitment Update-**Cheryl Weiss, Census  
**Partnership Specialist Update-**Vianey

2:00-2:45pm **PT Volunteer and Event Coordinator Recruitment-**Sara, Kim  
**PR Contract Update-**Kim  
**Census Oversight Committee Mtg-**Sara, Kim

**Next Meeting: 3/25 2:00-3:30 pm Ponderosa Room, 2625 N. King St. Flagstaff**



## Community Census Team AGENDA

**March 25, 2019**

**Time:** 2:00-3:30pm

**Location:** 2625 N. King St. Flagstaff (Ponderosa Room)  
Conference Line Number: 928-679-7922

### **Introductions -All**

- I. PSAP Update-** Sam, Kim, Sara
- II. Census Recruitment Update-**Cheryl Weiss, Recruiting Assistant Coconino County
- III. Navajo Nation Partnership Specialist Update-**Arbin Mitchell
- IV. PT Volunteer and Event Coordinator Recruitment/Interviews-**Kim
- V. Census Oversight Committee Mtg Outcomes-**Sara, Kim
- VI. PR Contract Next Steps-**Kim
- VII. April 1, 2019 Joint City/County/NAU Meeting- Census Item-**Sara
- VIII. Census Actions/Info/Upcoming Activities:**
  - **Census Day2019-Webinar** <https://www.census.gov/newsroom/census-live.html>
  - **20 Actions for 2020**
  - **How Census Invites Everyone to Participate**
  - **Citizenship Question Status-**

**Next Meeting: 4/29 2:00-3:30 pm TBD**



## **Community Census Team AGENDA**

**May 20th, 2019**

**Time:** 2:00-3:30pm

**Location:** 211 W Aspen Ave, Flagstaff, AZ 86001 (Staff Conference Room)  
Conference Line Number:

### **Introductions -All**

- I. Introduction of Census Event Coordinator**
- II. PSAP update**
- III. PR Committee and PR contract update**
- IV. Partnership Specialist Hiring Update**
- V. NAU Capstone Overview**
- VI. Sub-Committee Membership and Recruitment**



## **Community Census Team AGENDA**

**June 24th, 2019**

**Time:** 2:00-3:00pm

**Location:** 211 W Aspen Ave, Flagstaff, AZ 86001 (Staff Conference Room)  
Conference Line Number: 1-877-820-7831 Guest Code 364117

### **Introductions -All**

- I. Census Bureau Partnership Update**
- II. PR Committee and PR contract update**
- III. Sub-Committee Membership and Recruitment**
- IV. 4<sup>th</sup> of July Parade**
- V. Next Meeting- July 29<sup>th</sup>? and/or August 26th**



## **Community Census Team AGENDA**

**July 29th, 2019**

**Time:** 2:00-3:00pm

**Location:** 211 W Aspen Ave, Flagstaff, AZ 86001 (Staff Conference Room)  
Conference Line Number: 1-877-820-7831 Guest Code 364117

### **Introductions -All**

- I. Census Bureau Partnership Update**
- II. PR Committee and PR contract update**
- III. Early Advertising Needs**
- IV. Sub-Committee Recruitment and Scheduling**
- V. Events Update**
- VI. Next Meeting- August 26th**



## **Community Census Team AGENDA**

**August 26th, 2019**

**Time:** 2:00-3:00pm

**Location:** 211 W Aspen Ave, Flagstaff, AZ 86001 (Staff Conference Room)  
Conference Line Number: 1-877-820-7831 Guest Code 364117

### **Introductions -All**

- I. Census Bureau Partnership Update**
- II. PR Committee and PR contract update**
- III. Census Champions-Regional Get Out the Count Summit**
- IV. Sub-Committee Updates**
- V. Events Update**
- VI. Next Meeting- September 30th**



## **Community Census Team AGENDA**

**September 30th, 2019**

**Time:** 2:00-3:00pm

**Location:** 211 W Aspen Ave, Flagstaff, AZ 86001 (Staff Conference Room)  
Conference Line Number: 1-877-820-7831 Guest Code 364117

### **Introductions -All**

- I. Census Bureau Partnership Update**
- II. City of Page CCC update**
- III. Sub-Committee Updates**
- IV. Events Update**
- V. Next Meeting- October 28th**



## **Community Census Team AGENDA**

**November 25th, 2019**

**Time:** 2:00-3:00pm

**Location:** 211 W Aspen Ave, Flagstaff, AZ 86001 (CR- Staff Room)  
Conference Line Number: 1-877-820-7831 Guest Code 364117

### **Introductions -All**

#### **I. Census Bureau Partnership Update**

Recruiting and operations update

#### **II. PR Contract Update**

Campaign selection and material development update.

#### **III. NAU Sub-Committee and Partner Updates**

Meeting updates and upcoming schedule

#### **IV. Events Update**

USCB recruiting events  
Balloon Regatta  
Williams Clothing Swap

#### **V. Next Meeting- December 16th**



## **Community Census Team AGENDA**

**January 27, 2020**

**Time:** 2:00-3:00pm

**Location:** 211 W Aspen Ave, Flagstaff, AZ 86001 (CR- Staff Room)  
Conference Line Number: 1-877-820-7831 Guest Code 364117

### **Introductions -All**

#### **I. Census Bureau Partnership Update**

Operations update  
Online Census Response Demo

Recruitment update

#### **II. PR/Media Update**

Preview of outreach and marketing materials.

#### **III. NAU Sub-Committee Updates**

Meeting updates and upcoming schedule

#### **IV. Rural Sub-Committee Updates**

#### **V. Events Update**

Get Census Educated

#### **VI. Next Meeting- February 24, 2020**



## **Community Census Team AGENDA**

**February 24, 2020**

**Time: 2p.m. to 3p.m.**

**Location: Flagstaff City Hall- CR-Staff Conference Room**

211 E Aspen Ave, Flagstaff

**Conference Line- 1-877-820-7831- Conference Guest Code- 364117**

- I. Census Bureau Partnership Update**
  - Partnership Specialist update
  - Recruitment Specialist update
- II. PR/Media and Communications Update**
  - Census Day Event- April 1<sup>st</sup>, 2020
  - Advertising and Outreach Materials update
  - Social Media and Video update
- III. NAU Update**
  - NAUgo APP Census launch
  - On campus housing update
- IV. Sub-Committee Update**
  - Rural Team- postcard mailing update
  - Language Team- Social media and video update
- V. Events Update**
  - Feb 26<sup>th</sup>- AZ Superintendents Webinar
  - Feb 26<sup>th</sup>- NAU CSAC Mixer
  - March 8<sup>th</sup>- NACA Oak Creek Overlook lottery
  - Jan 30 & Feb 8- Get Census Educated Follow-up
  - TBD- NAU Off-Campus Housing Tabling
- VI. Partner Updates**
- VII. Next Meeting March 30th**



## **Community Census Team AGENDA**

**March 30, 2020**

**Time: 2p.m. to 3p.m.**

**Location: Teleconference Only**

**Conference Line- 1-877-820-7831- Conference Guest Code- 364117**

- I. Census Bureau Partnership Update**
  - Partnership Specialist update
- II. Response Rate- Updates and Mapper**
- III. PR Update- Adjustments to Outreach for COVID-19 crisis**
  - Census Day Event- April 1<sup>st</sup>, 2020- Digital media event
  - Advertising and Outreach Materials update
  - Social Media and Video update
- IV. NAU Update**
  - On-Campus Count
  - Off-Campus Outreach
- V. Events Update**
  - All events canceled until conditions allow for their resumption.
- VI. Partner Updates**
- VII. Next Meeting April 27, 2020, 2:00pm – 3:00pm**



## Community Census Team AGENDA

**April 27, 2020**

**Time: 2p.m. to 3p.m.**

**Location: Teleconference Only**

**Conference Line- 1-877-820-7831- Conference Guest Code- 364117**

- I. Census Bureau Partnership Update**
  - Partnership Specialist update
- II. Response Rate- Updates and Mapper**
- III. PR Update- Adjustments to Outreach for COVID-19 crisis**
  - Social Media and Video update
- IV. NAU Update**
  - On-Campus Count
  - Off-Campus Outreach
- V. Events Update**
  - All events canceled until conditions allow for their resumption.
- VI. Partner Updates**
- VII. Next Meeting May 25, 2020, 2:00pm – 3:00pm**

**Sheri P, Josh M, Dawn H, Sara D, Claire H, Melissa S, Kacia R, Jerry T, Zach F, Carmen S, Sam D, Will A, Valeria C, Jason J, Jamie W, Jared T, Judy M, M.C. Baldwin, Dan Folk, Kim Robinson, Tim S,**



## **Community Census Team AGENDA**

**May 25th, 2020**

**Time: 2p.m. to 3p.m.**

**Location: Teleconference Only**

**Conference Line- 1-877-820-7831- Conference Guest Code- 364117**

- I. Census Bureau Partnership Update**
  - Partnership Specialist update
- II. Response Rate- Updates and Mapper**
- III. PR Update- Adjustments to Outreach for COVID-19 crisis**
  - Social Media and Video update
- IV. NAU Update**
  - On-Campus Count
  - Off-Campus Outreach
- V. Events Update**
  - All events canceled until conditions allow for their resumption.
- VI. Partner Updates**
- VII. Next Meeting May 25, 2020, 2:00pm – 3:00pm**



## **Community Census Team AGENDA**

**June 8th, 2020**

**Time: 2p.m. to 3p.m.**

**Location: Teleconference Only**

**Conference Line- 1-877-820-7831- Conference Guest Code- 364117**

Sara, Kim R. Carmen, Carlton, Josh, Will, Arbin, Claire, Valeria, Sam, Jess, David, Jennifer, Judy, Kim M., Landhese, Alicia,

- I. Census Bureau Partnership Update**
  - Partnership Specialist update
- II. Response Rate- Updates and Mapper**
- III. PR Update- Adjustments to Outreach for COVID-19 crisis**
  - Social Media and Video update
- IV. NAU Update**
  - On-Campus Count
  - Off-Campus Outreach
- V. Events Update**
  - All events canceled until conditions allow for their resumption.
- VI. Partner Updates**
- VII. Next Meeting June 29th, 2020, 2:00pm – 3:00pm**



## **Community Census Team AGENDA**

**June 29th, 2020**

**Time: 2p.m. to 3p.m.**  
**Location: Microsoft Team Meeting**

- I. Census Bureau Partnership Update**
  - Partnership Specialist update
- II. Response Rate- Updates and Mapper**
- III. PR Update- Adjustments to Outreach for COVID-19 crisis**
  - Riester contract extension
  - Resumption of campaign in July
- IV. NAU Update**
  - On-Campus Count
  - Off-Campus Outreach
- V. Events Update**
  - Events still on hold.
  - Flyers, posters, and other materials will be distributed throughout County over next few weeks
- VI. Partner Updates**
- VII. Next Meeting July 27th, 2020, 2:00pm – 3:00pm**



## **Community Census Team AGENDA**

**September 28th, 2020**

**Time: 2p.m. to 3p.m.**  
**Location: Microsoft Team Meeting**

- I. Census Bureau Update**
  - Operations report
  - Extension (if applicable)
- II. Response Rate Update**
  - Self-Response
  - Total Response
- III. NAU Update**
- IV. Events Update**
  - Library sponsored drive up events completed
    - Mormon Lake 8/1
    - Blue Ridge 8/7
    - Valle 8/15
    - Tusayan 8/22
    - Ash Fork 8/29
    - Forest Lakes 9/5
    - Bitter Springs 9/12
    - Sunnyside 9/19
    - Leupp 9/26
  - Other Events
    - Joined USCB Tabling in Tuba City, Leupp, Page, and Flagstaff
- V. Final Push**
- VI. Discussion of Future for CCC**

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