2010 Census Redistricting Data Program; Phase 2
Voting District/Block Boundary Suggestion Project
General Guidelines for all Participants

Version 2
October 2008

USCENSUSBUREAU

Helping You Make Informed Decisions

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Note: Grey highlighted text indicates updates since Version 1

I. GENERAL INFORMATION

A. BACKGROUND

Under the provisions of Public Law (P.L.) 94–171 (Title13, United States Code (U.S.C.), Section 141(c)), the Director of the U.S. Census Bureau is required to provide the states with the opportunity to specify geographic areas, such as voting districts and state legislative districts, for which they wish to receive decennial census population totals. In order to comply with P.L. 94-171, the Census Bureau offers each state the opportunity to participate in the 2010 Census Redistricting Data Program. This program is a five phase program for 2010 and Phases 1 and 2 are optional. All 50 states, as well as the District of Columbia and the Commonwealth of Puerto Rico, participated in Phase 1 and have signed up to participate in Phase 2. Phase 1 concluded in January of 2007 with the re-tabulation of 2000 Census Summary File 1 and Summary File 3 data. The five phases are outlined below with their timeline.

- **Phase 1 - State Legislative District Project (SLDP) - 2004-2006**; This phase included the collection of State Legislative District (SLD) boundaries. This was the first effort, post Census 2000, to update SLD boundaries. Participants submitted their SLDs (House and Senate) to the Census Bureau for the development of data products by legislative district. Participation was optional and conducted in a non-partisan manner as required by law. Follow this link to review the data presented from the Phase 1 effort:

  State Legislative District Project, Phase 1
  (http://www.census.gov/rdo/program_phases/009916.html)

- **Phase 2 - Voting District/Block Boundary Suggestion Project (VTD/BBSP) - 2007-2010;** Voting District is a generic term that describes the administrative areas used by each participant to conduct their elections, for example precincts or wards. Phase 2 of the 2010 Census Redistricting Data Program involves the collection of VTD boundaries, updates to legislative districts, and block boundary suggestions for possible inclusion in the 2010 Census block tabulations. Participation is optional and must be conducted in a non-partisan manner. Verification is included for this phase. Follow this link to review the:

  Federal Register Notice announcing Phase 2
  (http://www.census.gov/rdo/recent_news/010333.html)

- **Phase 3 - Data Delivery for the 2010 Census Redistricting Data Program - 2010-2011**; This phase includes the delivery of the geographic products and data products to the majority and minority leadership in each state legislature, as well as the Governor and other officially designated liaisons. The Census Bureau also will deliver data and geographic products to the District of Columbia and the Commonwealth of Puerto Rico. Geographic products will precede the P.L. 94-171 data tabulations that are mandated by law for delivery no later than April 1, 2011, one year following Census Day.

- **Phase 4 - Collection of the Post-2010 Census Redistricting Plans - 2012-2013**; The Census Bureau will collect the new state legislative and congressional district plans that were delineated using the Phase 3 materials. The Census Bureau will produce new data products generated from the 2010 Decennial Census, as well as the American Community Survey. The Census Bureau also will develop geographic products including congressional district atlases, TIGER/Line shapefiles, and maps.

- **Phase 5 - Evaluation and Recommendation for Census 2020 - 2012-2014**; Working with the National Conference of State Legislatures, the Census Bureau will conduct a historical review by the states of the successes and failures of the Census Bureau to meet the P.L. 94-171 requirements. Together they will develop recommendations for the Census 2020 Redistricting Data Program and publish the *View From the States*. Follow this link to the Federal Register Notice announcing the five phase program:

  Redistricting Data: Program Phases
  (http://www.census.gov/rdo/about_the_program/009945.html)

  Follow this link to review:

  Designing PL94-171 Redistricting Data for the year 2010 Census; The View From the States
  (http://www.census.gov/rdo/pdf/DesignPL94-171.pdf)

The purpose of this document is to provide an overview and general guidelines to the Liaisons regarding Phase 2; VTD/BBSP.

Detailed instructions for delineating and submitting your VTDs, SLD and Congressional District (CD) corrections, and suggested 2010 Census tabulation block boundaries are provided in attachments to these general guidelines.

- MAF/TIGER Partnership Software (MTPS) users should follow the instructions provided in **Attachment D.**
- Liaisons using their own Geographic Information System (GIS) software with Census Bureau supplied shapefiles should follow the instructions provide in **Attachment E.**

Attachment A contains an Operational Flowchart to illustrate how materials will flow between the Liaison and the Census Bureau.

B. PROJECT SCOPE

During this project, Liaisons will have the opportunity to provide:

- VTD Boundaries, Codes, and Names

  Unlike the VTDs collected during the Census 2000 Voting District Project, VTD boundaries are **no longer** required to follow a visible feature that would qualify as a Census tabulation block boundary. Because we will accept and hold all VTD boundaries as 2010 Census tabulation blocks, we have designed the program for you to complete VTD delineation before suggesting 2010 Census tabulation block boundaries.

- 2010 Census Tabulation Block Boundary Suggestions

  Participants may review the features that we plan to hold as 2010 tabulation block boundaries and flag additional features that they want to be held or not to be held as 2010 Census tabulation block boundaries.

- SLD and CD Corrections

  Because we have received boundary updates and corrections to legal boundaries some of your SLD and CD boundaries may need corrections. Review these as part of Phase 2 to ensure that the boundaries we have are still correct.

  If you have a new SLD plan approved by either legislation or court order, contact the Census Bureau's Redistricting Data Office (RDO) rather than submit it as part of Phase 2. See contact information in **Section I. D**.

- Relationship Information

  Participants may supply information about relationships that voting districts have with other legal geographic entities. See **Section III** for more information on possible relationships that you may have and how to

ensure the Census Bureau will maintain those relationships during final preparations for data tabulations.

- Feature Updates

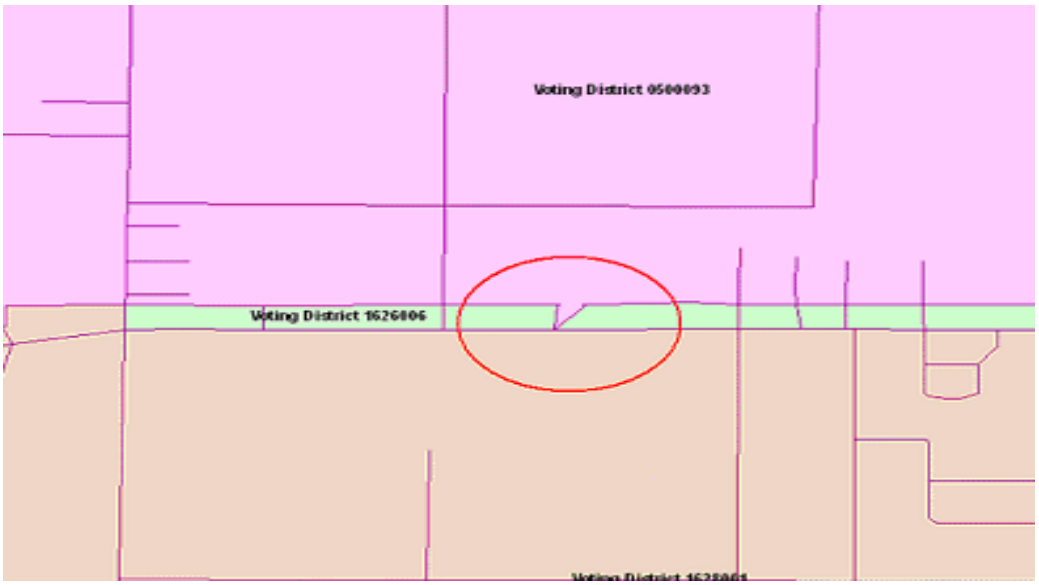
The Census Bureau has spent the last six years improving the spatial accuracy of the roads in our MAF/TIGER system (Master Address File/Topologically Integrated Geographic Encoding and Referencing system). Many organizations throughout the country who maintain geographic information in digital form have worked with us on this project. The local files used during this project were required to have an accuracy of 7.6 meters or better. Overall, the results of this project are positive and those who work with our files have noticed the improved spatial location of our streets and that the files are more up-to-date.

At this point, the Census Bureau is moving forward with our 2010 Census field canvassing and collection activities. This means that we are no longer processing large scale spatial corrections to our street network. What is critical for the success of the 2010 census data tabulation is the location of roads relative to tabulation boundaries. As long as each road is within the correct entity, the population and housing will be properly reported. The guidelines below explain what we can accept.

Street Update Do's and Don'ts

- If a road is missing and it forms the boundary for the area you are defining, add the road and provide the name.

- If you cannot correctly delineate the boundary for an entity you are updating because the feature you need to follow is incorrectly located, mislabeled, or distorted in the Census Bureau's file, put the boundary on the problematic feature in our file. This will establish for us what feature you want the boundary to follow. In addition, report the problem area to the Census Bureau (through your regional office contact) by sending information describing the incorrect feature including the TIGER Line Identifier (TLID) and the specific entity boundary affected. This can be done using e-mail with information to describe the problem, such as an image file, PDF, or other medium showing the appropriate correction. Here is an example of what you might see in your file:



- Do not spatially realign the street features by merging your roads into our spatial file and flagging your roads as adds and our roads as deletes.

- Do not add streets that are missing unless they are needed to form a VTD boundary. We will be adding new or missing streets during our address canvassing operation which will occur in the spring and early summer of 2009. We recommend that you identify these missing streets in your GIS file. The Census Bureau will provide verification materials for VTD/BBSP that will show the results of address canvassing. If these streets are still missing at that time, we will accept these from you as adds.

The Census Bureau staff will contact you if they require more information or have questions about feature updates submitted as part of the VTD/BBSP.

C. PROJECT DELIVERIES AND SCHEDULE

Deliveries

To begin the project, the Census Bureau sent Liaisons a CD/DVD containing the most current data from the Census Bureau's MAF/TIGER Database) MTDB for one county in shapefile format, an electronic version of these guidelines, and a software application developed by the Census Bureau called the MAF/TIGER Partnership Software (MTPS). This will allowed participants to become familiar with the MTPS, organize their work flow, and complete their Phase 2 delineation

work for that first county. With these initial materials, the Census Bureau provided on-site training. For more information on the MTPS see **Section II. B.**

In the fall of 2008 the Census Bureau will send Liaisons a CD/DVD containing shapefiles for the remaining counties (and redeliver the initial county) so you can complete the delineation work.

- **File Redeliveries**

As you began to receive and process your initial county, the Census Bureau discovered that some of these files contained distorted road and water features. These have been referred to as zingers, daggers, or kinks.

The Census Bureau determined that files containing a large number of "zingers" were files that had all migrated to the new MAF/TIGER Data Base before they had been through our realignment process. This involved 1,159 counties, though it is important to note that in many of these counties, the feature distortions may be minor and will not prevent you from using the file.

In response to concerns expressed by some states after reviewing their initial county, the Census Bureau ran the 1,159 counties through new software that reduced the road and water feature distortions. New files for these counties will be delivered in February 2009.

You should not assume that because a county is in the 1,159 universe that it is unusable for your Phase 2 work. Many of you have already worked with and submitted counties that are in the 1,159 universe. We strongly urge you to look at the files delivered in November 2008 and determine if they are usable for your Phase 2 work. One way to determine this is to actually start to delineate your VTDs in that county. Note that once a county is submitted to the Census Bureau as part of the VTD/BBSP, it cannot be re-submitted based on the newer file.

Once the MTDB has been updated with the results of the delineation submissions, the Census Bureau will provide shapefiles on a DVD and on the Web Viewer (See Section II.B) for you to verify that your data and information have been entered into the MTDB correctly. Liaisons will work with their respective Census Bureau Regional Census Center (RCC) staff to make any necessary corrections.

Schedule

- July 2007 - Invitations to participate in Phase 2 were sent to each State Liaison, including liaisons in the District of Columbia and the

Commonwealth of Puerto Rico with a distribution to the legislative leadership and the Governor's office.

- March 2008 - The Census Bureau provided shapefiles and the MTPS for the first county.

- March 2008 – **Training** - The Census Bureau began to provide training in the use of the MTPS and assist the participants in submitting the VTDs and BBSP information for the first county.

- **June 2008 – Deadline** for submitting the first county delineations.

- October 2008 – The Census Bureau will begin sending delineation materials for all remaining counties. Once the Liaisons receive their materials, they have four months to review and submit updates to the Census Bureau.

- February 2009 – The Census Bureau will redeliver materials for the 1,159 counties identified to have realignment concerns.

- **May 1, 2009 – Deadline** to submit materials for remaining counties (new deadline for all counties or just the 1159?.

- Winter 2009/2010 – Participants receive verification materials.

- **March 2010– Deadline** to submit verification corrections.

D. Census Bureau Contact & Web Site Information

Redistricting Data Program Liaisons will accomplish most of the work for the VTD/BBSP by working directly with the geographic staff in each of the Census Bureau's 12 Regional Census Centers. The contact information for each of those staffs has been included in **Attachment C** to these guidelines. Liaisons may direct broader Redistricting Data Program (RDP) questions and comments to:

Census Redistricting Data Office (RDO)

- RDO; 301-763-4039
- Fax number; 301-763-4348
- Cathy McCully, Chief
  - catherine.clark.mccully@census.gov
- Deirdre Bishop, Assistant Chief
  - deirdre.dalpiaz.bishop@census.gov
- Office e-mail; RDO@census.gov

Geography Division – Geographic Areas Branch (GAB)

- GAB; 301-763-1099
- Fax number; 301-763-4710
- Jamie Rosenson, Chief 301-763-1112
- GAB RDP Staff group e-mail GEO.Redistricting.List@census.gov

Redistricting Data Office Web Site

The Redistricting Data Office web site (www.census.gov/rdo/), is currently available for you to find information regarding the RDP and related topics.

The Census Bureau's American FactFinder Web Site

You may review your current congressional and legislative districts, and your pre-Census 2000 VTDs by visiting the Census Bureau's American FactFinder (http://factfinder.census.gov/home/saff/main.html?_lang=en) web site. Instructions are found in **Attachment F**.

E. Submission Methods

There are two submission methods for the project.

1. MAF/TIGER Partnership Software (MTPS); this is software developed by the Census Bureau to assist our partners in participating in this program. This software is described in **Section II. B** below and in detail in **Attachment D**.

2. Your own Geographic Information System (GIS) software used to modify shapefiles provided by the Census Bureau. If you choose this option, you must use the standardized format for returning the VTD/BBSP information to us. These instructions are provided in **Attachment E** of these guidelines.

As needed, to support the submission methods outlined above, participants may request paper maps to facilitate collecting the VTD and BBSP updates from local officials. Then, you will use the paper maps to prepare a file for each county using either the MTPS or another GIS software package before submitting the information to the Census Bureau. The Liaison must provide the local officials with instructions on how they would like their VTD name, boundary, and codes annotated on these maps. If you need paper maps to assist in this review, please contact your RCC staff as soon as possible. **Note**: Paper maps were not available for the initial county delineation.

II. DESCRIPTION AND USE OF FILES PROVIDED

The Census Bureau provides each participant with one or more DVDs that contain the complete set of digital map files (shapefiles) for every county (or equivalent) in the state. Also provided is a CD containing the MTPS.

A. DIGITAL MAP FILES (SHAPEFILES)

The shapefiles provided are extracted from the current version of the MTDB. There are separate layers for 2000 VTDs; current SLDs; 110th CDs; and many relevant reference layers, such as incorporated places, school districts, roads, and hydrographic features. Use these files as you would a map to review the relevant boundaries, codes, and names and provide updates or new plans for VTDs.

You also will use these files to view the planned 2010 Census tabulation block boundaries and to supplement them with your block boundary suggestions.

MAF/TIGER Accuracy Improvement Project

Shortly after Census 2000, the Census Bureau launched the MAF/TIGER Accuracy Improvement Project (MTAIP) to improve the spatial quality of road features within the MTDB. During this process, most of the roads in MTDB were moved to a more spatially accurate location. If an SLD boundary was conjoint with one of these realigned roads, the boundary was moved with the road. Where a boundary was not conjoint with a road, there are instances where the boundaries may not have been properly relocated or it may have an incorrect shape. Therefore, review the shapefiles provided and submit corrections for any CD or SLD boundaries where this may have occurred. Pay particular attention to county and county subdivision boundaries that should share SLD boundaries. Shown below is an example where this has happened with a VTD boundary. The Hamilton Township boundary has moved slightly, leaving the Hamilton TWP VTD in its original location.

B. MAF/TIGER Partnership Software

Also included in your VTD/BBSP materials is a unique, customized software application developed by the Census Bureau and called the MAF/TIGER Partnership Software (MTPS).

Participants will have the option to use the MTPS, which allows them to review or create VTDs, review and correct SLD and CD boundaries, and suggest block boundaries to be held or not held for 2010 Census tabulation blocks. It also produces a standard format for returning the VTD/BBSP submissions. Detailed instructions for using the software can be found in **Attachment D**.

Web Viewer

The Census Bureau has also developed a tool to view submissions and updated shapefiles on the World Wide Web. The Web Viewer will be particularly useful if the RCC staff have questions during the VTD/BBSP process. Liaisons and RCC staff can view and discuss specific situations simultaneously over the web and resolve any issues that may arise during any of the processes. The tool will also be available for reviewing your verification materials. See **Attachment G** for instructions on using the Web Viewer.

III. Relationship Information

Some participants may have geographic relationships between their VTDs and other entities that they want the Census Bureau to maintain in the MTDB. For example, some of your VTDs may be coextensive with incorporated places. **Attachment B** includes general relationship information that was provided to the Census Bureau during the Census 2000 VTD project and provides examples of the types of relationships we can maintain in the MTDB. Review this attachment if you have geographic relationships that you expect the Census Bureau to maintain. Details can be submitted to the RCC staff on a list in a file (there is new information in Attachment B regarding creating these standalone lists) or via the MTPS.

IV. Boundary and Annexation Survey

The Boundary and Annexation Survey (BAS) is an annual survey conducted by the Census Bureau to collect and maintain information on the inventory, status, boundaries, and names of all governmental units, including American Indian reservations and off-reservation trust lands, counties, minor civil divisions (MCDs), and incorporated places. The Census Bureau obtains this information by sending out survey forms and maps or shapefiles to each government to collect changes or updates.

The BAS is important for the delineation of VTDs because many VTDs share their boundaries with legal/administrative entities. For the VTDs that must maintain a nesting or coextensive relationship with legal entities, it is critical that the Census Bureau have up-to-date information about the boundaries of all governmental units.

The Census Bureau cannot accept city, minor civil division, county, or American Indian Area boundary changes from VTD/BBSP respondents. It is very important that this boundary information be coordinated within the state and come to the Census Bureau through the BAS respondent. In some states the Census Bureau has a state-level BAS agreement and we can provide more information about these agreements upon request.

As you are completing the work for VTD/BBSP, you may notice legal boundaries that are not up-to-date. When this occurs, contact the BAS respondent in your state and encourage them to report all changes to the legal boundary for the governmental unit. To receive the appropriate BAS contact information, submit an email to geo.bas@census.gov. Include in the email, the entity in question, your name, phone number, and if possible an e-mail address.

V. How to Deliver Submissions

To complete this project in a timely manner, submit your information and updates to the Census Bureau on a county/flow basis within four months after receipt of materials for that county.

Submit your digital files using one of the following approaches:

- Post to the Census Bureau provided FTP site (instructions are provided in **Attachments D and E**.)
- Mail to the appropriate RCC staff on a CD or DVD

If you submit your digital files to the FTP site, please e-mail the appropriate RCC staff to alert them that files have been submitted.

Once the RCC staff receives your submission, they will conduct an initial review for format, completeness, etc. If problems are found at this time, they will contact you to resolve these issues. When all issues have been resolved, your submissions will be inserted into the MTDB. At that time, various validations will determine if there are other issues that need to be resolved (contiguity, complete coverage, relationships, etc.). If there are issues, the RCC staff will contact you to get these resolved.

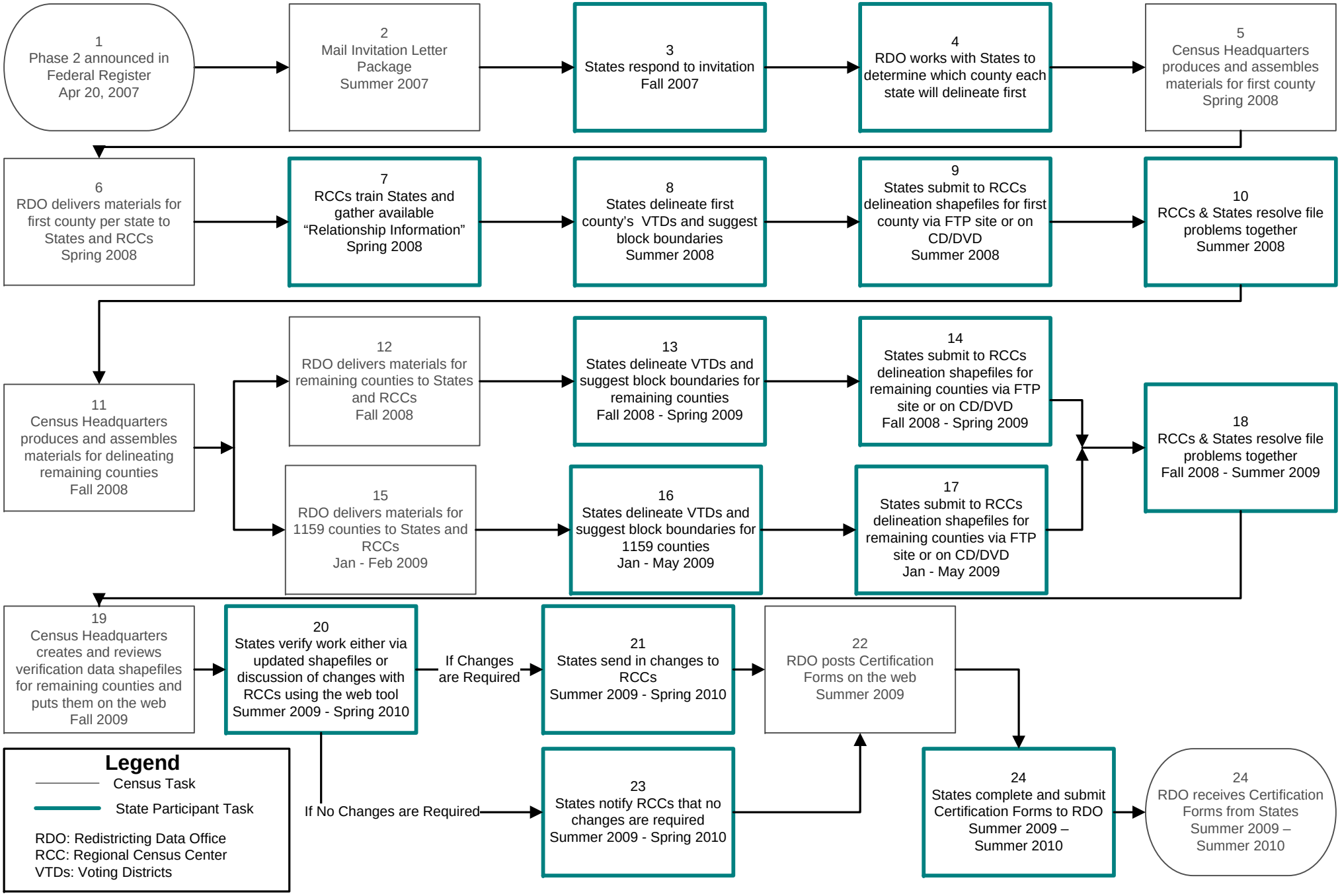
VI. VERIFICATION

Once the Census Bureau has updated the MTDB with your delineations and it has updated the MTDB with the results from our address canvassing activities, we will create verification shapefiles for your review. These files will be delivered to you on a DVD and available for review through the Web Viewer (**See Attachment G**). You will have one month to review these shapefiles. Contact your RCC staff to resolve any problems or issues discovered during verification.

VII. CERTIFICATION

Once you have reviewed your verification shapefiles and believe that the Census Bureau has your information correctly entered into the MTDB, go to the RDO web site; RDO (http://www.census.gov/rdo/) and print out a copy of the "Certification Form". Fill it out, sign it, and fax it to 301-763-4348. This completes the steps for Phase 2 of the Redistricting Data Program.

2010 Decennial Census Voting District and Block Boundary Suggestion Project
Phase 2 of the Redistricting Data Program
Flow of Activities



Attachment B

Relationship Information Review

Version 2
October 2008

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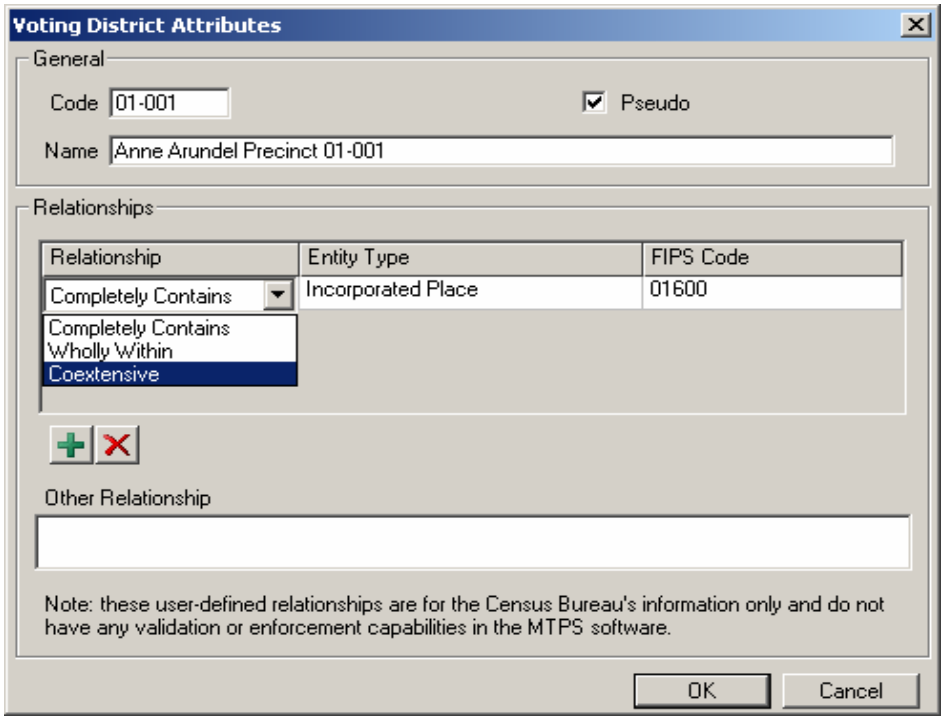
Relationship Information Review

If your Voting Districts (VTDs) have a geographic relationship with another entity that you would like the Census Bureau to maintain, you must provide that information as part of this project. You can submit VTD to entity relationship information using the MTPS, or this information can be supplied to us in a list using similar wording as in the dialog box below. Suggestions for the formatting of the list option are found in Section B below.

The Census Bureau will maintain the relationships described to us during Phase 2 by writing specific business rules and applying them to our database.

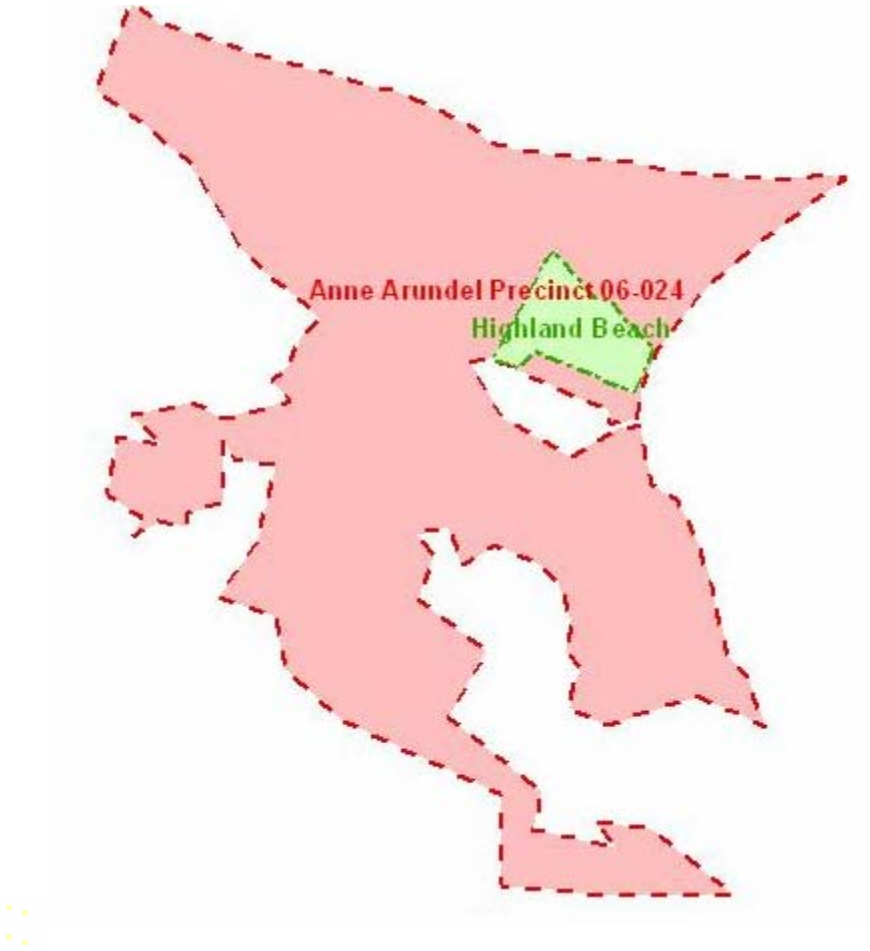
A. Using the MTPS: You can submit relationship information using the MTPS in the "**Voting District Attributes**" dialog box as shown here. If you have any relationships that aren't available for selection in this dialog box, please describe them in the "Other Relationship" text box using similar wording.



We can maintain three types of relationships:

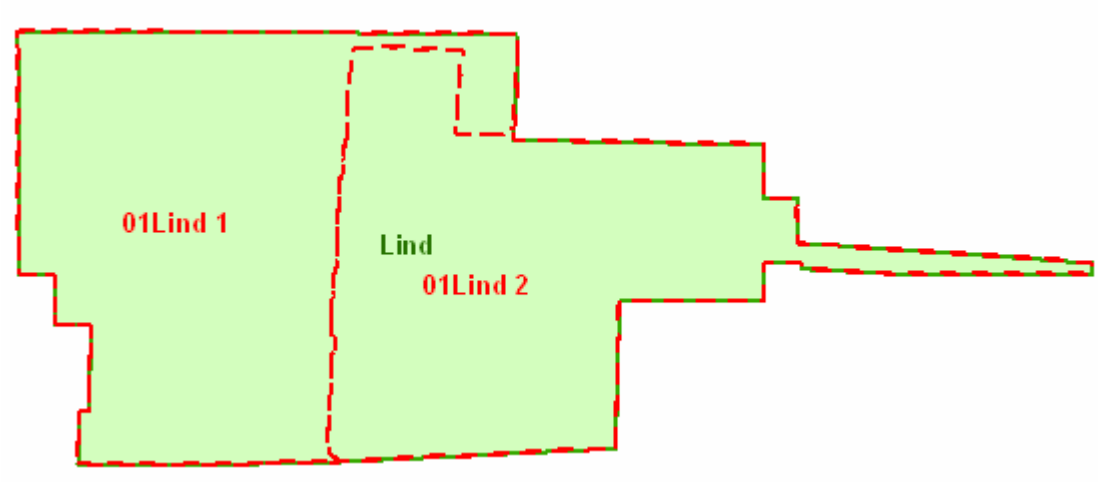
- **Completely Contains**: Select this relationship if an incorporated place is completely within the VTD. See Example 1 below.
- **Wholly Within:** Select this relationship if a VTD is completely within the boundaries of a Minor Civil Division (MCD) or an incorporated place. See Example 2 and 3.
- **Coextensive:** Select this relationship if a VTD and incorporated place or a VTD and an MCD have the same boundaries. VTDs can be coextensive with other legal or administrative entities as well. See Example 4 and 5.

Example 1: VTD Anne Arundel Precinct 06-024 **completely contains** Highland Beach incorporated place.

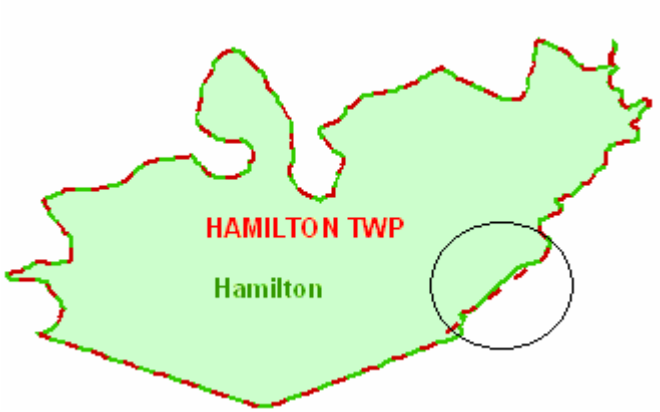


Example 2: VTDs Reading TWP VTD 01 and Reading TWP VTD 02 are **wholly within** Reading Township MCD.

Example 3: VTDs 01Lind 1 and 01Lind 2 are **wholly within** Lind incorporated place.



Example 4: VTD Hamilton TWP is **coextensive** with Hamilton MCD.



Note that the MCD boundary has moved and the VTD boundary remains in its original location. If you tell us that this relationship should be maintained, then the VTD boundary will be moved along with the MCD boundary.

Example 5: VTD 01Hatton City is **coextensive** with the incorporated place of Hatton.

B. Supplying a File: An additional approach to providing the Census Bureau with relationship information is to create a separate file.

If you already have the information stored in your own Word document, spreadsheet, or database, provide us with a text file, Word document or Excel spreadsheet that describes the relationships. Include the following information in the file you provide:

- 2-digit State FIPS code
- 3-digit County FIPS code
- County Name
- VTD Code recognized by the Census Bureau (maximum of 6 characters)
- VTD Name
- Type of relationship (The Census Bureau will maintain "Completely Contains," "Wholly Within," and "Coextensive" relationships.)
- Entity with which the VTD has a relationship (incorporated place, minor civil division (MCD), or American Indian Area (AIA))
- Census code for the entity with which VTD has the relationship (5-digit code for incorporated places and MCDs, and 4-digit code for AIAs)

You do not have to follow a specific format, as long as you provide all the information in the bullets above. However, if you would like to have a file layout to use as a guide, see below:

Field Name	Length	Type	Description	Legal Values/Range
STATEFP	2	String	State FIPS Code	01 to 72
County Name	100	String	County Name	
COUNTYFP	3	String	County Code	001 to 840
VTDST	6	String	Voting District Code	
VTD_Name	100	String	VTD Name	
Relate_type	25	String	Type of relationship VTD has with other entity	Completely Contains Wholly Within Coextensive
Relate_Name	100	String	Name of entity to which VTD is related	
Relate_Code	5	String	Code of entity to which VTD is related	00001 to 89999 (for incorporated place) 00001 to 98999 (for MCDs) 0001 to 9998 (for AIAs)

Word document examples:

- VTD 001 in Suffolk County (003) is wholly within Springfield township (05248)
- VTD 005 in Darlington County (013) completely contains Smithberg village (25618)

Spreadsheet examples:

STATE FIPS	COUNTY FIPS	VTD Code	VTD Name	Relationship Type	Name of Related Entity	Related Entity_Code
05	115	001	001	wholly within	Springfield township	05248
05	013	005	005	completely contains	Smithberg village	25618

If you want us to maintain **general** relationships between VTDs and other entities, we do not recommend using the MTPS.

(Example: "All VTDs are coextensive with MCDs, All VTDs completely contain incorporated places, etc)

Provide a text file, Word document or Excel spreadsheet that describes the relationships. In some cases, a one-sentence Word document, provided to your Regional Census Center (RCC), may be sufficient. For example, if all your VTDs are coextensive with MCDs, send the document to the RCC indicating just that general relationship. Additional examples of how to provide this information in a Word document or spreadsheet are below.

Word document examples*:*

All VTDs are wholly within MCDs

OR

All VTDs in Jefferson County completely contain places

Spreadsheet examples:

County	Type of Relationship	Entity with which VTD has Relationship
All Counties	Wholly within	MCDs

OR

County	Type of Relationship	Entity with which VTD has Relationship
Jefferson	completely contains	places

Relationship Information Submitted by States for Census 2000

State	VTDs are wholly within state legislative districts (Upper and Lower)	VTDs are wholly within places	VTDs are wholly within MCDs	VTDs are coextensive with MCDs	VTDs are coextensive with places
Alaska	Yes				
Arizona	Yes				
Delaware		49 VTDs			
Georgia	Yes				
Idaho		6 VTDs			4 VTDs
Kansas		949 VTDs			19 VTDs
Massachusetts	Yes				
Michigan	Yes				
Minnesota		Yes		Yes	
North Carolina		16 VTDs	145 VTDs	283 VTDs	7 VTDs
Pennsylvania	Yes		7792 VTDs	1510 VTDs	
Washington	Yes for 18 counties	4328 VTDs			69 VTDs
Wisconsin	Yes				
Wyoming		199 VTDs			24 VTDs

Attachment C

Regional Census Center (RCC) Geographic Staff Contact Information

(With state FIPS code)

If your state is:	Your RCC is:
Alabama (01)	Atlanta
Alaska (02)	Seattle
Arizona (04)	Denver
Arkansas (05)	Kansas City
California (06)	Los Angeles
Colorado (08)	Denver
Connecticut (09)	Boston
Delaware (10)	Philadelphia
DC (11)*	Philadelphia
Florida (12)	Atlanta
Georgia (13)	Atlanta
Hawaii (15)	Los Angeles
Idaho (16)	Seattle
Illinois (17)	Chicago
Indiana (18)	Chicago
Iowa (19)	Kansas City
Kansas (20)	Kansas City
Kentucky (21)	Charlotte
Louisiana (22)	Dallas
Maine (23)	Boston
Maryland (24)	Philadelphia
Massachusetts (25)	Boston
Michigan (26)	Detroit
Minnesota (27)	Kansas City
Mississippi (28)	Dallas
Missouri (29)	Kansas City
Montana (30)	Denver
Nebraska (31)	Denver
Nevada (32)	Denver
New Hampshire (33)	Boston
New Jersey (34)	New York
New Mexico (35)	Denver
New York (36)	New York
North Carolina (37)	Charlotte
North Dakota (38)	Denver
Ohio (39)	Detroit
Oklahoma (40)	Kansas City
Oregon (41)	Seattle
Pennsylvania (42)	Philadelphia
Rhode Island (44)	Boston
South Carolina (45)	Charlotte
South Dakota (46)	Denver
Tennessee (47)	Charlotte
Texas (48)	Dallas
Utah (49)	Denver
Vermont (50)	Boston
Virginia (51)	Charlotte
Washington (53)	Seattle
West Virginia (54)	Detroit
Wisconsin (55)	Chicago
Wyoming (56)	Denver
Puerto Rico (72)*	Boston

*Statistical Equivalent

Regional Office	RO Geography Email	RO Geography Phone Number	RCC Geography Phone Number
Atlanta	atlanta.geography@census.gov	(404) 331-1339	(404) 332-2710
Boston	boston.geography@census.gov	(617) 424-4597	(617) 223-3600
Charlotte	charlotte.geography@census.gov	(704) 424-6420	(704) 936-4200
Chicago	chicago.geography@census.gov	(630) 288-9245	(312) 454-2705
Dallas	dallas.geography@census.gov	(214) 253-4470	(214) 267-6920
Denver	denver.geography@census.gov	(303) 264-0290	(720) 475-3600
Detroit	detroit.geography@census.gov	(313) 656-0183	(313) 396-5002
Kansas City	kansas.city.geography@census.gov	(913) 551-6833	(816) 994-2020
Los Angeles	los.angeles.geography@census.gov	(818) 267-1724	(818) 717-6701
New York	new.york.geography@census.gov	(212) 584-3430	(212) 971-8800
Philadelphia	philadelphia.geography@census.gov	(215) 717-1830	(215) 717-1000
Seattle	seattle.geography@census.gov	(206) 381-6260	(425) 908-3010

Geography Staff will move from Regional Offices (ROs) to Regional Census Centers (RCCs) in Spring 2008

Attachment D

Instructions for Completing the VTD/BBSP using the MAF/TIGER Partnership Software

Version 2
October 2008

USCENSUSBUREAU

Helping You Make Informed Decisions

Table of Contents

Note: Grey highlighted text indicates updates since Version 1

I. Installation and Review of the MAF/TIGER Partnership Software

The MAF/TIGER Partnership Software (MTPS) is the Census Bureau's primary tool for submission and review of Voting Districts (VTDs) and Block Boundary Suggestions. This attachment to the General Guidelines provides specific instructions on the installation and use of the MTPS for submitting VTDs and block suggestions to the Census Bureau.

It is very important that you read this document in its entirety, as the sections build upon each other and each step is important.

You will find the MTPS on the CD provided to your state for this project. It is labeled "MAF/TIGER Partnership Software; Program Disc." It is designed to work with Windows based PCs and will run on Windows 98, 2000, ME, NT, and XP. You also will find a CD/DVD data disc. This data disc includes entity layers in ESRI shapefile[1] format for all of your counties. Later in 2008 you will receive a CD/DVD that will include shapefiles for your remaining counties. Depending on your computer and equipment, and the size of your state, installation of the MTPS and the data can take up to 45 minutes.

The software and data may be loaded into more than one computer or a local network server (see **Attachment J**). However, make sure that only one person is working on a county. Multiple data sets cannot be merged for the same county.

Also, since the MTPS is built on Maptitude, and only one Maptitude session can run at a time, you must first close any other Maptitude session before opening the MTPS.

A. Installation

To install the MTPS, follow these steps:

1. "**Start**" Windows.
2. Insert the Program CD into your CD drive.
3. If the "Installation Wizard" does not automatically start up, choose the "**Run**" command from the "**Start**" menu.

[1] The use of brand names does not represent an endorsement of a company or its products by the U.S. government. Due to the wide use of ESRI products by our partners in the GIS community, and the ubiquitous use of the shapefile format as a medium for GIS data exchange, the Census Bureau is providing this data in shapefile format.

4. Type the location of your CD drive plus the word "**setup"** (for example, type **d:\setup**), or use the "**Browse**" button to locate the SETUP.EXE file on the CD.

5. Click "OK." In a moment, the installation program will appear on your screen.

6. On the "**Welcome**" screen, click "Next."

7. For "**Installation Type**," choose "**Single User**" and click "Next."

8. The setup program guides you through the installation process, asking questions and making suggestions along the way. It is best to accept the default settings. The MTPS sets up a folder on your C drive called "MTPS Data."

9. Once the program has been installed, the setup program indicates that "**Setup Needs the Census Data**" to prompt you to insert the Census RDP State Data CD/DVD. Remove the program CD and insert the RDP State Data CD/DVD. Browse to where the Census State Data CD/DVD is located and click "OK." The file name will be RDP_ss, where ss = the FIPS code for your state.

10. After the state data files are copied, the installation process is complete and the "Setup" is finished. Click on "Finish."

11. Click the "**Start**" button on the Windows taskbar and from the **Programs** menu, choose "**MAF-TIGER Partnership Software**" and then "**MAF-TIGER Partnership Software 3.8**."

12. Click "OK." This will display the "**Please Log In"** dialog box. Enter the User Name "RDP" (case sensitive).

13. Click "OK."

14. You are then prompted with two "Startup Choices":

- Run the MAF/TIGER Partnership Software Computer Based Training (CBT)
- Go Directly to the MAF/TIGER Partnership Software program (default)

When you first open the software, take the time to run the CBT.
Even if you are a sophisticated GIS user, reviewing the CBT will provide you with time-saving information.

Once you have begun to use the software, you can refer back to the CBT by choosing "**Start (your Windows start button)→ Programs→ MAF-TIGER Partnership Software→ Computer Based Training for MAF-TIGER Partnership Software."**

New for 2010 Census: Nonvisible Voting District Boundaries

The Census Bureau has changed its policy on the acceptance of VTD boundaries. In the past, we required you to modify your VTDs that followed nonvisible boundaries, such as section lines or rear lot lines. Although we still believe visible features make better geographic boundaries, we will accept nonvisible VTD boundaries. If you have VTDs that follow nonvisible lines, we require you to provide us with a description of the line. If your state requires the VTDs to follow visible features, the Census Bureau expects the State Liaison to communicate that information to any local officials submitting the VTDs and modify the submission to comply with the state law.

Delineating VTDs Prior to Making Block Boundary Suggestions

The MTPS is designed for you to do your VTD work first, followed by the block boundary suggestion work. Because your VTD boundaries will be held as 2010 Census tabulation block boundaries, delineating your VTD boundaries first may preclude your having to suggest as many "Must Holds."

B. VTD/BBSP "Help"

Review the on-line help for the VTD/BBSP program by choosing from the top menu, **Help→ Contents→ MTPS Census Programs Help→ VTD/BBSP**. Here you will find more detailed information regarding the topics included in this document. The **"Help"** menu also provides instructions for various other topics. For instance, under "**Basic Skills**" you can learn how to create layouts that you can use in documents or reports. You can preview and make changes to a layout, and edit and replace maps and dataviews, and print a layout. The **"Help**" menu also includes an "**Index**" tab at the top and you can search on a topic.

Note: To learn more about a command, dialog box, or toolbox, open or highlight the item and press F1 to get the appropriate topic in the on-line help. To review the function of an icon on any toolbox, hover the cursor over the icon and a text box will appear describing the function.

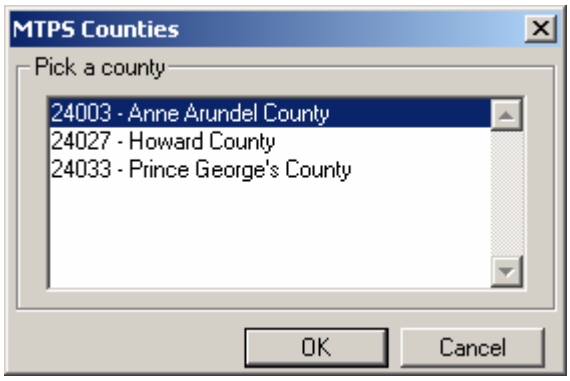
C. Starting the MTPS for VTD/BBSP/Selecting a County

Before you can open the VTD/BBSP map window you must pick a county to work with. The MTPS will then import the data for that county. The MTPS is designed to work on one county at a time, with the option to view adjacent counties, including any updates that have been made. Each time you open the VTD/BBSP map window, it will display the last county you were editing. To work with a different county you must close the VTD/BBSP Map window, pick another county, and open the VTD/BBSP map window again.

To select a County (or county equivalent) follow these steps:

1. Choose, from the menu bar at the top, **VTD/BBSP→ Pick a County**. The MTPS displays the "**MTPS Counties**" dialog box.

2. Highlight a county in the scroll list.



3. Click "OK."

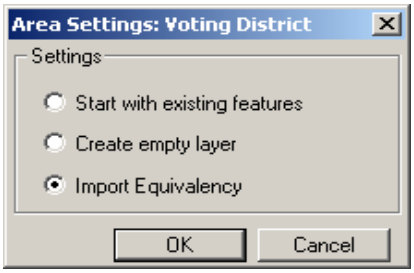
Before starting the import process, the MTPS displays a message to recommend that you disable any anti-virus software to speed the process. When you click "OK," the MTPS imports the county, makes it the current county, and displays a message indicating success. Depending on your equipment and the size of the county, importing a county could take up to 10 minutes. When this is complete, a message box pops up saying that your county was imported successfully.

Note: Your session continuously saves while working. You can also save and re-open your session at any time. Your session saves when you close the county.

D. Working With Your Selected County

1. Choose **VTD/BBSP→ Open**. The MTPS displays the VTD/BBSP map window.

2. If this is the first time you have run the VTD/BBSP module for a given county, the software presents you with this box:



"Start with existing features" means that your map will include the VTDs submitted for use in the Census 2000 tabulation P.L. 94-171 data products. Those are likely to be a 1998 vintage. If the VTDs of your state do not change frequently, you may want to use the Census 2000 VTDs as a reference or starting point. If this is the case, use the default selection, "Start with existing features." Instructions for this approach are included in the section called "**Create VTDs using your Census 2000 VTDs**" on page 34.

If viewing the older VTDs would be of no help to you in submitting VTDs for the 2010 Census, select "Create empty layer." Instructions for this approach are included in the section called "**To Create a New VTD"** on page 26.

If you want to create your VTDs starting with a block equivalency file that you have maintained in your own database or GIS application, select "Import Equivalency." Instructions for this approach are included in the section called "**To Create VTDs Using Your Block Equivalency File**" on page 32.

After selecting your approach, click "OK."

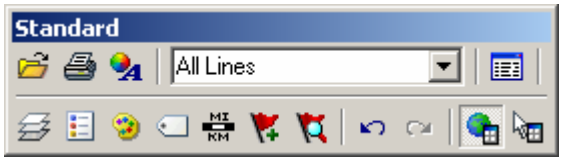
Note: If your state did not submit Census 2000 VTDs, the only available option is "Create empty layer."

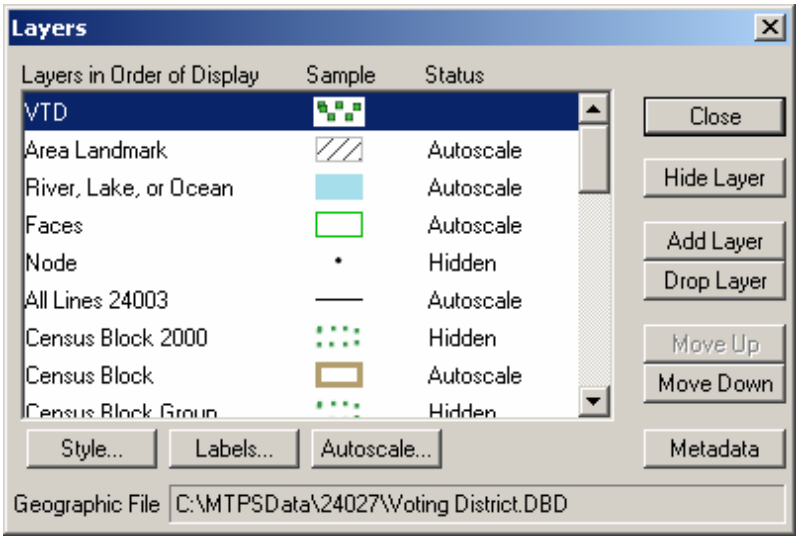
3. The **"Standard"** toolbar appears across the top of the screen and the MTPS opens the "**Tools**" and "**VTD Editing**" toolboxes, and the "**Map Layers**" legend.

Note: To learn more about a command, dialog box, or toolbox, open or highlight the item and press F1 to get the appropriate topic in the on-line help. To review the function of an icon on any toolbox, hover the cursor over the icon and a text box will appear describing the function.

The "**Map Layers**" Legend shows which layers are displayed. The default setting shows all layers in the MTPS except Census 2000 blocks, block groups, state legislative districts, and congressional districts.

E. The "Standard" Toolbar and Map "Layers" Dialog Box





You can turn map layers on or off depending on what you want displayed on the map. For example, if your VTDs have nothing in common with school districts, there is no need to display them and you should turn that layer off. If you want to review your SLDs or CDs to ensure that the relationships they have with other governmental units is in tact, you should turn those layers on.

Note that the first item listed in the "Layers in Order of Display" column (described below), VTD, is the first layer drawn on the map. The remaining layers are drawn sequentially, with each added layer being drawn on top of the previous one.

Use the map **Layers** dialog box on the **Standard** toolbar across the top of the screen to see the map layers and their settings, as follows:

To do this…	Do this…
Open the Layers dialog box	Choose "**Map→ Layers**" or click on the Standard toolbar, or click the right mouse button on the map window and choose "Layers." The MTPS displays the "Layers" dialog box.
Choose a layer	Within the layers dialog box, highlight the layer in the scroll list. This list shows the layers in the order they will be drawn, a sample of the style, and the status. • **Hidden** means the layer will not be drawn.

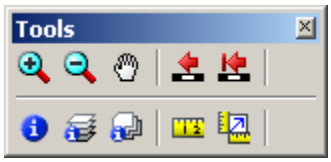
	• **Autoscale** means the layer will be drawn between certain scales. • **Blank** means the layer will be drawn at all scales. You can also hold the Shift key and click on another layer to highlight a range of layers, or hold the Ctrl key and click on a layer to toggle the highlight on or off and select multiple layers.
Hide a layer	Click "Hide Layer." The button will change to "Show Layer" so that you can reshow the layer. The layer's status will change to "Hidden."
Add a layer	Click "Add Layer" to display the "File Open dialog" box. You can choose the type of file and one or more files to open. Click "Cancel" to close the dialog box without adding any layers.
Drop a layer	Click "Drop Layer." The MTPS displays a "Confirm" dialog box. Click Cancel to close the dialog box without dropping the layer. **Only drop layers that you have imported from your own shapefile. If you do not want to see a layer that is included in the MTPS, you should "Hide" the layer rather than drop it.**
Change the **order** of the layers	Click "Move Up" or "Move Down." The MTPS moves the highlighted layer up or down.
Change the **style** settings for a layer	Click "Style" to display the "Style" dialog box, which is different for point, line, and area layers. You can choose different styles from the dropdown settings. Your selections are illustrated in the box to the right of the settings. Click "Apply" if you want to try out changes to style settings, but click "Cancel" to close the dialog box without changing the settings. If you want to save these settings, click "OK."
Change the **label** settings for a layer	Click "Labels" to display the "Automatic Labels" dialog box. Click "Apply" if you want to try out changes to label settings, but click "Cancel" to close the dialog box without changing the settings. If you want to save these settings, click "OK."
Change the **autoscale** settings for a layer	Click Autoscale to display the "Autoscale" dialog box. The Largest dropdown list, if not blank, shows the largest scale at which to display the layer, as you zoom in. The smallest dropdown list, if not blank, shows the smallest scale at which to display the layer, as you zoom out. Click "Cancel" to close the dialog box without changing the settings.
Close the Layers dialog box	Click "Close."

Additional Labeling Information

The MTPS labeling engine places the labels on the center of the district. If the center of the district is outside of the district itself (as in a crescent shaped district), the label is supposed to be attached to the edge nearest to the center point. The labels are static in that they will not move as you zoom and pan.

The labeling engine makes a determination of which labels to draw and which to suppress when the drawing of all the labels would cause them to overlap. If you are zoomed into where the individual blocks are being labeled, this "knocks out" the VTD labels in some areas where drawing them would force an overlapping label. If you wish to see those labels and you don't need the block labels, turn off the block labels. As long as no other area or feature labels would intrude, your VTD labels should then appear.

F. The "Tools" Toolbox



Use the tools on the "**Tools**" toolbox to move around the map and change the map scale, as follows:

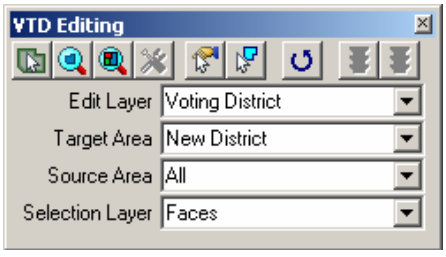
To do this…	Do this…
Zoom in to a point or a rectangle	Click on the "**Tools**" toolbar and click on a point or drag a rectangle. The MTPS increases the scale and changes the center of the map.
Zoom out from a point or a rectangle	Click on the "**Tools**" toolbar and click on a point or drag a rectangle. The MTPS makes the scale smaller and changes the center of the map.
Move the map in any direction	Click on the "**Tools**" toolbar and drag the map. The MTPS changes the center of the map.
Return to the previous scale and center	Choose, from the top menu bar "**Map→Previous Scale**" or click on the **"Tools"** toolbar.
Return to the original scale and center	Choose, from the top menu bar "**Map→Original Scale**" or click on the **"Tools"** toolbar.

Use the Info tool to see the attributes for a layer, as follows:

To do this…	Do this…
Change the working layer	Choose the layer you want from the dropdown list on the **"Standard"** toolbar.
Get information on a map feature	Click on the "**Tools**" toolbar to activate the Info tool and click on a feature on the map. The MTPS marks the feature with an "i" and displays the data for the feature in the Info window.
Get information on several features	Click on the "**Tools**" toolbar to activate the Info tool and drag a circle around the map features. The MTPS marks the features

	with an "i" and displays the data for the features in the Info window.
Get information on several layers	Click  on the "**Tools"** toolbar to activate the Multi-Layer Info tool. Click at a location on the map. MTPS displays the Multi-Layer Information toolbox, and shows the information for the first feature in the first layer. Make choices as follows:
Get information on area layers	Click  on the **"Tools"** toolbar to activate the Multi-Layer Area Info tool. Click at a location on the map. MTPS displays the Multi-Layer Area Information toolbox, and shows the information for the features in the chosen area layers.
Measure distance between points	Click  on the **"Tools"** toolbar to activate the Distance tool. o Click on the map at the starting point. MTPS starts a line at the point you marked. MTPS displays the elapsed length of the line in the status bar at the bottom of the screen. o If the line is not straight, click on one or more shape points. MTPS continues the line through each one. o Double-click on the last point to end the line. MTPS displays the total length of the line in a Note dialog box. o Click OK to close the dialog box.
Measure the size of an area	Click  on the **"Tools"** toolbar to activate the Size tool. o Click on the map at the starting point of the area. MTPS starts a line at the point you marked. o Click on the corners of the area. MTPS continues the line through each one. o Double-click to end the area. MTPS connects the first and last point automatically. MTPS displays the size of the area (in map units and acres) and its perimeter (in map units) in a Note dialog box. o Click OK to close the dialog box.
Change the fields that are displayed	Right click on the "Info" window and choose "**Field Sets**," highlight an existing set or click Add to create a new set, and click "OK." The MTPS displays just the fields in the field set, in the order you chose.
Close the Info window	Click the "Close" box in the upper right corner.

G. The "VTD Editing" Toolbox



Depending on your method of creating VTDs (by using your 2000 VTDs, creating new VTDs from an empty layer, or importing your own shapefiles) you will make different selections. Refer to the various methods in **Section II,** beginning on page 26, in order to decide what to select from the different dropdown menus.
The dropdown selections in the "**VTD Editing"** toolbox are:

- Edit Layer: The layer to edit (What are you going to create or update; VTD, SLD, or CD?)
- Target Area: The area to edit, either a new district, an existing district, or the unassigned area
- Source Area: The areas from which to select, either all areas, an existing district, or the unassigned area
- Selection Layer: The layer from which to select (If your VTDs are coextensive with incorporated places, you may want to select incorporated places here.)

1. Choose an edit layer from the "Edit Layer" dropdown list in the "**VTD Editing"** toolbox. (Selections are Voting District for creating new VTDs or viewing 2000 VTDs; or SLD lower, SLD upper, and Congressional District for corrections to these existing entities.)

2. Choose a Target Area as follows:

To do this…	Do this…
Pick the target area in the toolbox	Choose a target area from the "Target Area" dropdown list
OR	
Pick the target area on the map	Click  and click in an area on the map
Create a new target area	Choose "New District" from the "Target Area" dropdown list

The MTPS makes the area you select the target area and, if it is an existing area, shades it on the map. If your water layer is turned on and there is water in the area, the water will be displayed instead of the shading. You may want to turn your water layer off at this point.

3. Use the following buttons in the "**VTD Editing"** toolbox:

To zoom to…	Do this…
An existing target area	Click  . The MTPS zooms the map so that the whole target area is visible. You cannot zoom to the target area if you chose "New District" in the "Target Area" dropdown list.
The entire map	Click  . The MTPS zooms to show the entire map.

Note: You can also use tools in the "**Tools**" toolbox to move around the map.

Other buttons in the **"VTD Editing"** toolbox:

To do this…	Do this…
Update target area attributes	Click  to display the Attributes dialog box. Make updates as necessary.
Delete all work in the county	Click 
Choose areas to create a VTD	Click  to select one or more areas, or click and drag a rectangle around areas to select them. The entire polygon or face must be within the rectangle or shape in order to be included.
Unselect a face	Hold the <Ctrl> key while using the pointer tool (above) on the face. This will unselect it.
Select areas by shape	Click  to select areas within a shape, then click on the map and move your mouse and click again until all the areas you want to select are inside the shape. Double click to end. The entire polygon or face must be within the rectangle or shape in order to be included.
Save work on current action	Click 
Undo work on current action that has not been saved	Click 
Undo work on current action that has been saved	From the menu selections across the top of the Standard Toolbar, select "Edit," "Undo". It starts with undoing whatever you have just committed or saved. You'll get a pop up box asking if you want to continue undoing your "area" or "line" edit. Then it goes backwards until it reaches the end of everything you have saved or committed during that session. Once you close the file, you cannot "Undo" anything.

H. To Reset the Edit Layer (Use with caution!)

Note: Before you use this tool it is important that you realize that it completely deletes all of your saved VTD delineations from all current and past sessions. This does not include BBSP flags that have been set. Any BBSP "Hold" or "Do not hold" flags that you have set will not be deleted.

1. Click  in the "**VTD Editing**" toolbox. The MTPS displays a message confirming that you want to delete all of the VTDs you have created in the edit layer and start over.
2. Click "Yes." The MTPS displays the "**Area Settings**" dialog box.

3. Click the “Start with existing features” or “Create empty layer” radio button.

4. Click “OK.”

The MTPS resets the VTD layer.

I. Backing Up Your Work

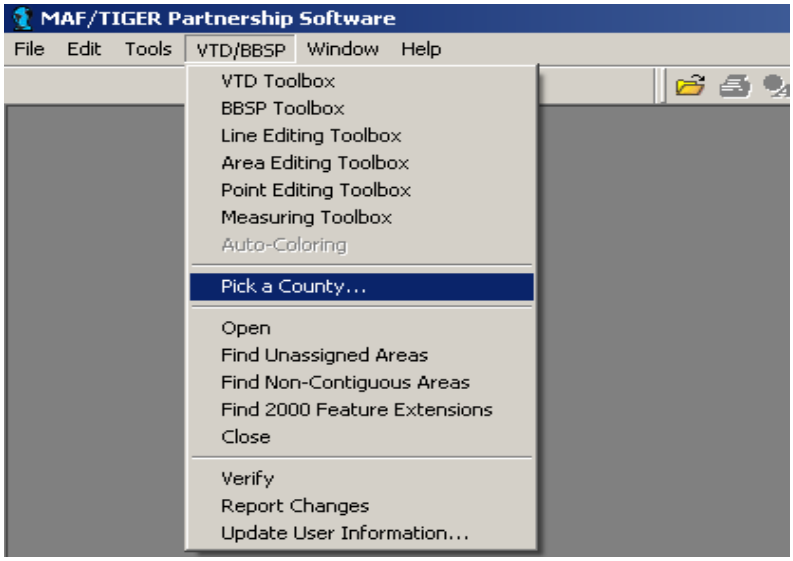
If you would like to backup your work, there are 2 options:

Option 1: Copy the entire county subfolder for the county you want to back-up to another location. When you want to restore to the backed up version, you need to replace the county subfolder (with MTPS closed) in your main MTPS data folder with the one copied as a back-up.

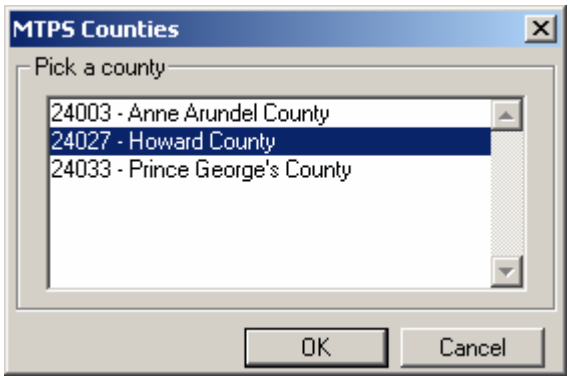
Option 2: First, verify and report changes (as instructed in Section VI.) and save the Return.zip file that is created. Then follow these instructions to import your Return.zip file back into the MTPS.

1.) Go into your state’s annotation MTPS data directory and delete the county subfolder of the county you plan to re-import.
2.) Create a fresh import of the original annotation county that you wish to work with into the MTPS. To do this, open the MTPS and use the VTD/BBSP pull down menu to select the Pick a County command.

WARNING: It is extremely important that you use the **Pick a County** function. If you use the **Open** function at this stage you will corrupt the data for your entire state.



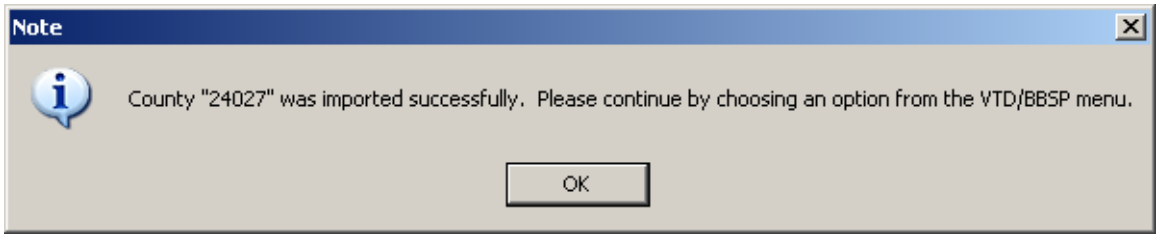
3.) In the Pick a County window that opens, choose the county in which you wish to work.



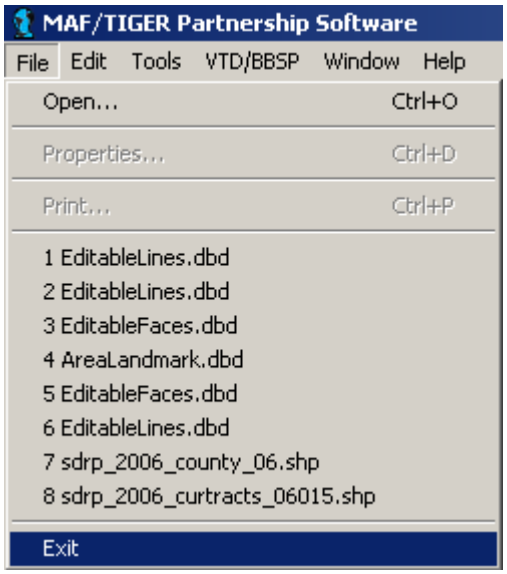
4.) The MTPS has to re-import the county to create the editable files and map layout. It will first warn you about being slowed by your anti-virus software. It is not necessary for your anti-virus software to be turned off. Click OK to allow the import to proceed.

5.) The software will import the county you wish to work with.

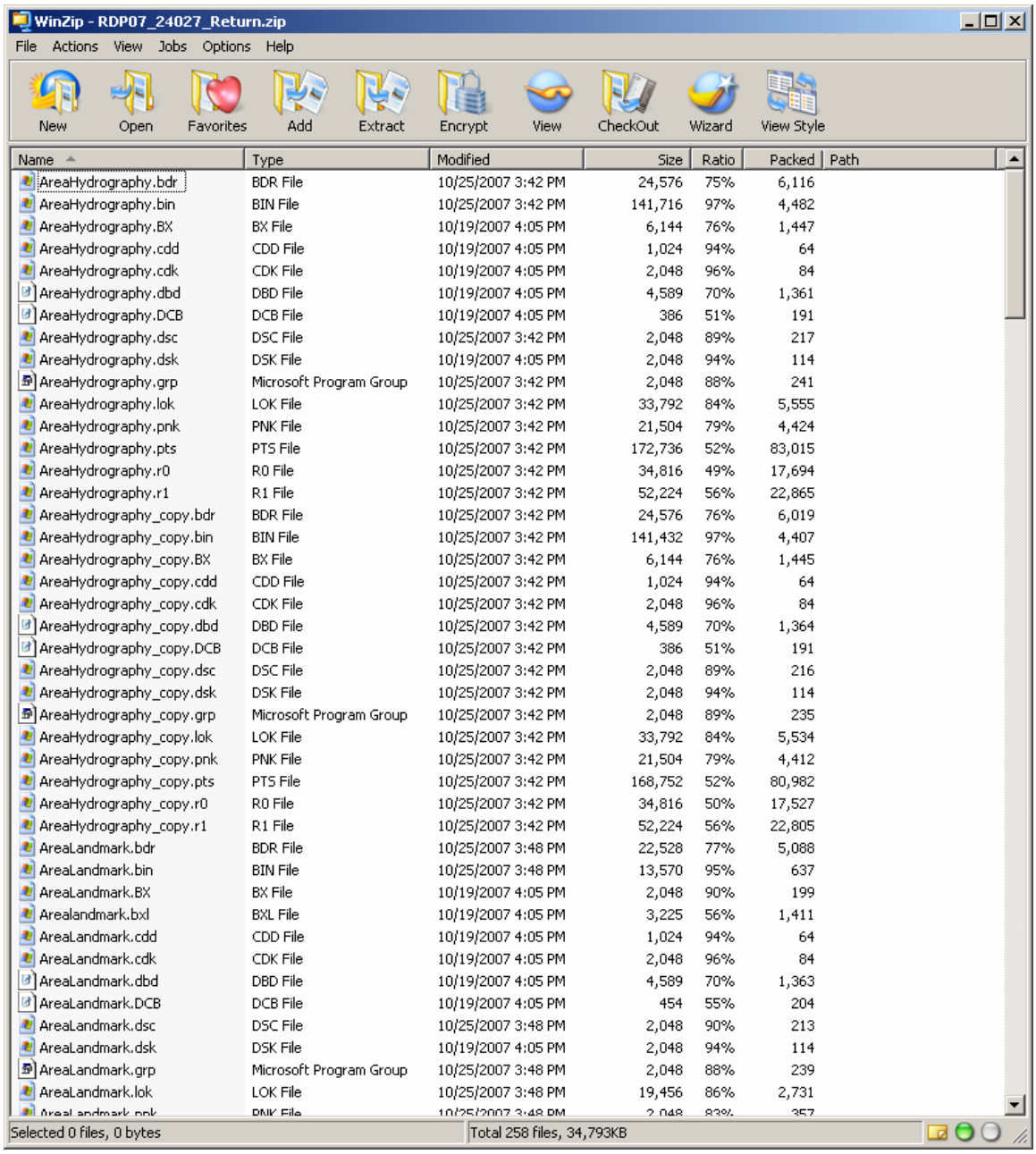
6.) Once the county's import is complete, click OK to close the import window.



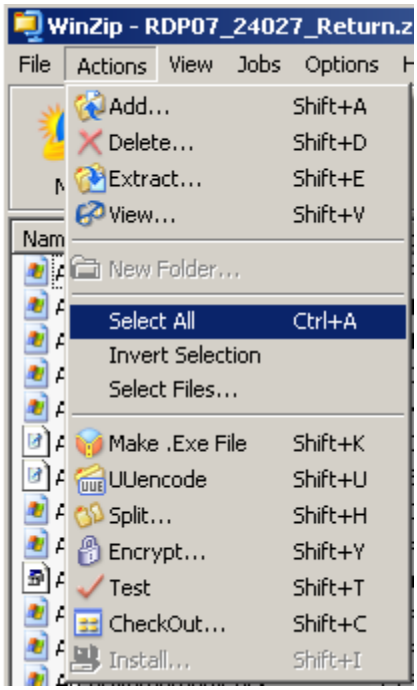
7.) Now close the MTPS completely by choosing Exit from the File pull down menu.



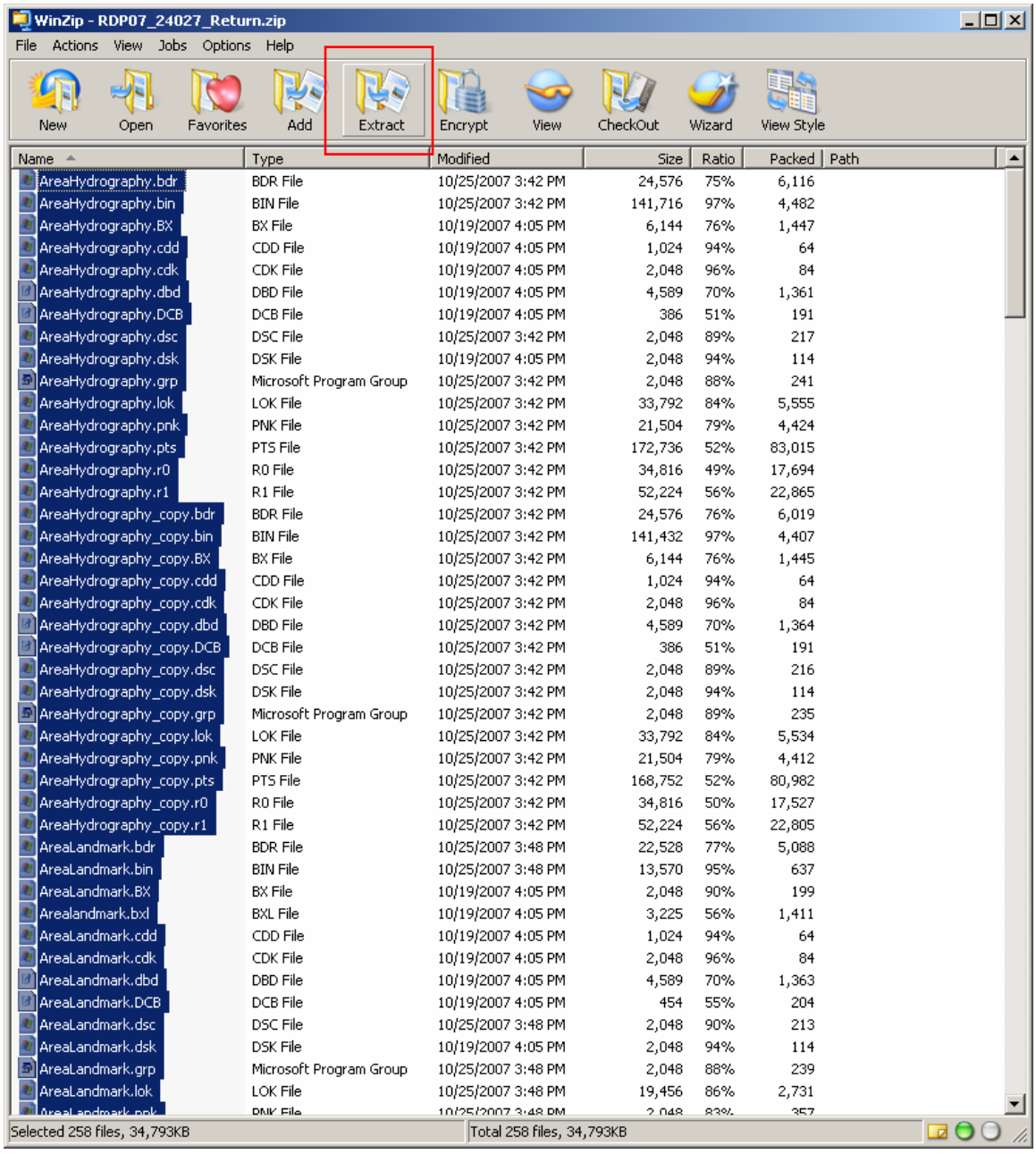
8.) Navigate to your returned county .ZIP file and open it. It should be named RDP_<stcty>_Return.zip and look something like the image below.



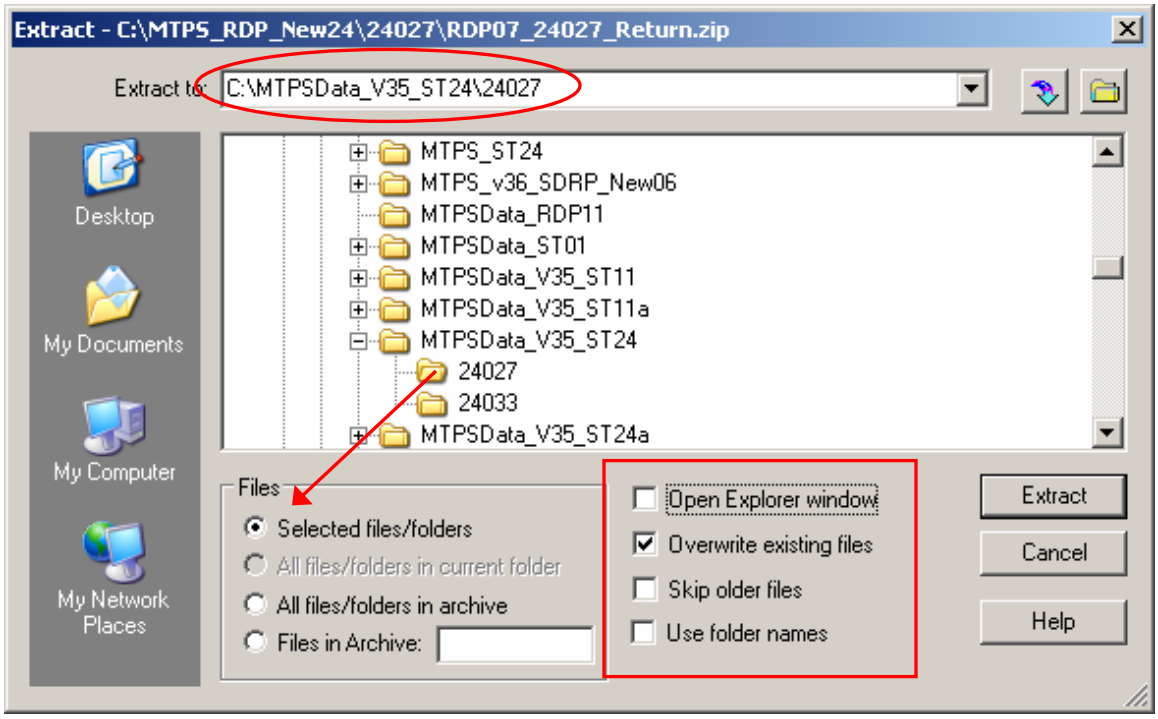
9.) Select all the files in the Return.zip file by using the Actions pull down menu and choosing Select All.



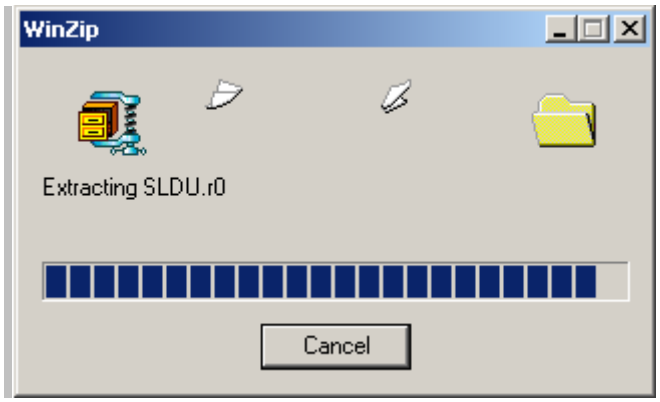
10.) With all of the files selected, click the Extract button.



11.) Using the Extract window that opens, navigate to the folder that contains your state's annotation data and select the specific county subfolder that you are trying to review. Also, make sure that the "Selected files/folders" radio button is active and the "Overwrite existing files" checkbox is checked. All the other checkboxes should be unchecked.

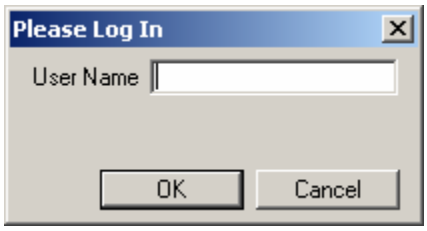


12.) Once these parameters are set, click the Extract button to unload all of the contents of the .ZIP file into the county sub-folder of your annotation data.

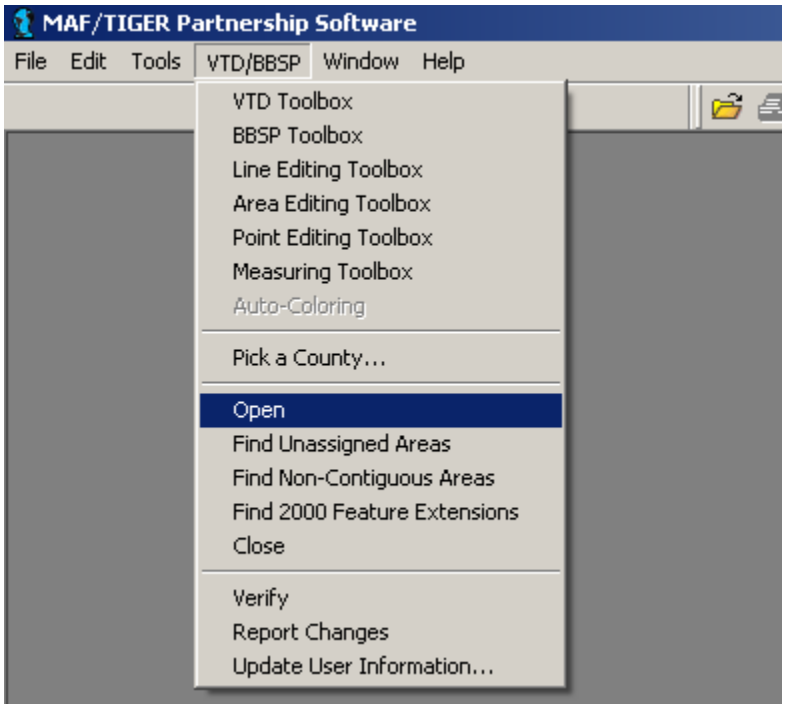


13.) You can close the .ZIP software as soon as the process is complete.

14.) Launch the MAF/TIGER Partnership Software again and log in (User Name = RDP).



15.) Use the VTD/BBSP pull down menu to select Open. This will open the county you selected earlier. The county will look and perform exactly as it did on your computer just prior to using the Report Changes command.



J. Data Corruption

In extreme cases where the files become corrupted for an individual county, it may become necessary to reset that county's data. The following instructions explain how to perform this operation.

- Navigate to the main MTPS data folder for your state.
- Identify the corrupted county's sub-folder by the state county FIPS code.
- Delete the corrupted county's sub-folder.
- Launch the MAF/TIGER Partnership software (MTPS).

- Use the VTD/BBSP pull down menu and use the Pick a County function to select the county you just deleted.

WARNING: It is extremely important that you use the **Pick a County** function. If you use the **Open** function at this stage you will corrupt the data for your entire state.

- Allow the county to import.
- Once the county has completely imported, use the VTD/BBSP pull down to select the Open command.
- You can now work in your county as needed.

II. Creating and Modifying VTDs

A. To Create a New VTD

When you open the county in which you want to work: select "Create empty layer" from the "**Area Settings: Voting District**" box.

As you create your VTDs, the MTPS applies a color to the individual VTD, and adjacent VTDs will receive a different color. You can adjust the color scheme with the Map→ Coloring box. This will only change the "scheme". You cannot select a specific color for a specific VTD.

Note: At any time during your VTD delineations you may want to see a list of all of the existing VTDs to review all the VTDs you have created at this point. When the **"VTD Editing"** toolbox is open you can generate an inventory file for all current VTD codes with associated names by county by selecting "VTD" from the dropdown menu on the "**Standard**" toolbar and then clicking on the "New Dataview" icon.  Two other columns in this "Dataview" are:

- **VTD1:** This stands for Voting District Indicator. A = Actual; P =Psuedo.
- **LSAD:** This stands for legal statistical area description. These are codes that determine the way the names of some entities will appear in products. A V2 means the words "Voting District" would be used as a suffix along with the district's name. A V1 would use "Voting District" as a prefix. A 00 indicates that there is no suffix or prefix.

Note: Turn off or hide the water layer in the "**Map Layers"** dialog box any time you are adjusting VTD coverage because that layer will appear on top of the VTD layer, making it difficult to view the VTD coverage.

1. Make sure that "Voting District" is selected from the "Edit Layer" dropdown list in the "**VTD Editing"** toolbox.
2. Choose "New District" from the "Target Area" dropdown list.
3. Choose the source of the areas to select from the "Source Area" dropdown list. You can choose "All" or "Unassigned" areas. Only choose "Unassigned" areas if you are trying to ensure that you have complete coverage or if you want to make sure you do not select a face already assigned to another VTD.
4. Choose the selection layer from the "Selection layer" dropdown list.
   - If your VTD is coextensive with a place, MCD, etc., you may want to select that area as the "Selection layer." Otherwise, select faces.

5. Use the tool to select one or more areas or the tool to select areas within a shape. If you use the select areas within a shape tool, when drawing the "fence" or "lasso" around the desired selected area for the new VTD, click at each point and left double-click to complete the "fence." The faces that are entirely inside the selected area are highlighted. When you use the tool, you can click on one or more areas, or click and drag a rectangle around areas to select them. You can also hold the Ctrl key and click on selected areas to remove them from the selection.

   - When annotating a VTD boundary along a road that is shown as a double-line you can select the faces along either one of the lines to be the boundary, but be consistent. For some of the hydrographic features, there may be three lines for selection: (1) The left shore, (2) the middle centerline, or (3) the right shore. You may select any of these, but be consistent throughout the length of the boundary edge.

6. To change the way areas are selected, return to Step 3 to change the source of the areas or Step 4 to change the selection layer. To cancel the selections for the VTD you are currently working and not all VTDs created during this session, click .

Note: If your VTD boundary follows a nonvisible line or a visible feature that is not in the MTPS, you need to add a line to create your VTD. (See the "**To Add a Line**" section on page 38.)

7. When you have created your VTD, click to save your work and to display the "**Voting District Attributes**" dialog box. You must type a valid VTD code in the "**Code**" edit box. It is the only required attribute.

   - VTD codes can range from 1-6 alphanumeric characters. This includes dashes, dots, spaces, or forward slashes. If you want to use a different character, notify the RCC staff.

   - VTDs are often, but not required to be, named. If the VTD has a name, type a name in the "**Name**" box. If a name is not supplied, the Census Bureau will use the VTD code as the name. Names can be up to 100 characters, including alphanumeric, spaces, and all special characters. Names appear on the Census Bureau's data website, the American FactFinder, and in the PL 94-171 summary files when the data is released after the 2010 Census.

   - Codes and names should be consistent and should be reviewed for spelling accuracy, keeping in mind that these names will appear in public products.

- We request that you code all areas, including water, to a VTD. If you do not code each area, the Census Bureau will assign the code of "ZZZZZZ" to the unassigned areas. This allows us to ensure we have all areas coded to a VTD.

- If the VTD is an "actual" district, **uncheck** the "Pseudo" box. Otherwise, it will be considered "pseudo."

  An "actual" VTD is one that exactly matches the precincts or other election areas in your state. You may choose to identify your submitted VTDs as "actual." Otherwise they will be considered "pseudo" so as not to confuse the data user. For example, states may choose to identify multiple layers of election areas within their VTD framework and may wish to identify them as pseudo. This is an acceptable approach to the submission of the VTD plans.

  If you submitted voting district delineations for Census 2000 that were designated as "actual," then the file that you get in the MTPS for Census 2010 will have "actual" designation. If this is no longer accurate, you will need to review the appropriate voting districts and make the necessary changes.

Create/edit relationships in the **"Voting District Attributes"** dialog box as follows:

To do this…	Do this…
To create a relationship	Click  , choose a relationship type from the "Relationship" dropdown list, choose an entity type from the "Entity Type" dropdown list, and select a FIPS code from the FIPS Code dropdown list. • To find the name that matches the listed FIPS code: From the dropdown menu on the **"Standard"** toolbar, select "Incorporated Place" and click on the "Dataview"  icon.
To remove a relationship	Highlight the relationship and click 
To add other relationships	Type the relationships in the "Other Relationships" dialog box, using the abbreviations CC for completely contains, WW for wholly within, CO for coextensive.

8. Click "OK."

   The MTPS saves the attributes.

   See **Attachment B** for detailed information regarding the various types of relationship information that we want to receive.

B. To create VTDs Using a Layer From Your Database as the Source

Some states maintain a VTD layer in their own GIS software. The MTPS allows users to import these files and use them as a starting point for adding these VTDs to the Census Bureau supplied data shapefiles. To import data from your GIS and create a new layer, do the following steps:

1. When you open the county in which you want to work, select "Create empty layer" from the "**Area Settings: Voting District**" box.

2. From the "**Layers**" dialog box, select "add a Layer."

3. From the "**File open**" box, select the type of file you want added from the "Files of Type" dropdown menu.

4. Select your file.

5. Click "open."

6. "**ESRI shapefile**" dialog box opens.

7. Click "coordinates."

8. Set "Data Conversion" if necessary, to NAD 83. For example, if your shapefile is USA NAD 27, select "USA NAD 27 to NAD 83.

9. Click "OK."

10. The file appears in the "Layers" menu as a new layer.

11. Change the "Styles" of borders, fills, etc., in the "**Layers**" dialog box. Set the style to a symbology that is conducive to seeing the local VTD boundaries superimposed on the file. A "Border Style" with a "dashed" symbology, "Border Color" of "red," and "Border Width" of "1.5" is one suggestion.

12. Set the labels to identify the VTDs by clicking on "Labels." Scroll to "Precinct" on the "Field" at the "Centered" "Position" with "Arial" "Font" at "Size" "16" "Bold" is one suggestion.

13. Click "Apply."

14. Close and re-open the **"VTD Editing"** toolbox.

15. Now you will see the layer you added as a layer selection in the **"Layers"** dialog box.

When you add an external file (a local GIS file, table, or imagery) to your MTPS project, it is essential that you not move the file from the location from which it was added. To do so will cause the application to be unable to open since it will not be able to find the added file and it will crash. However, the file can be moved back into the folder where it was originally (MTPS will tell you for which file it is looking and in what directory) and MTPS will be able to open up as normal, after which time you can drop the layer, move the file, and re-add the layer from its new location.

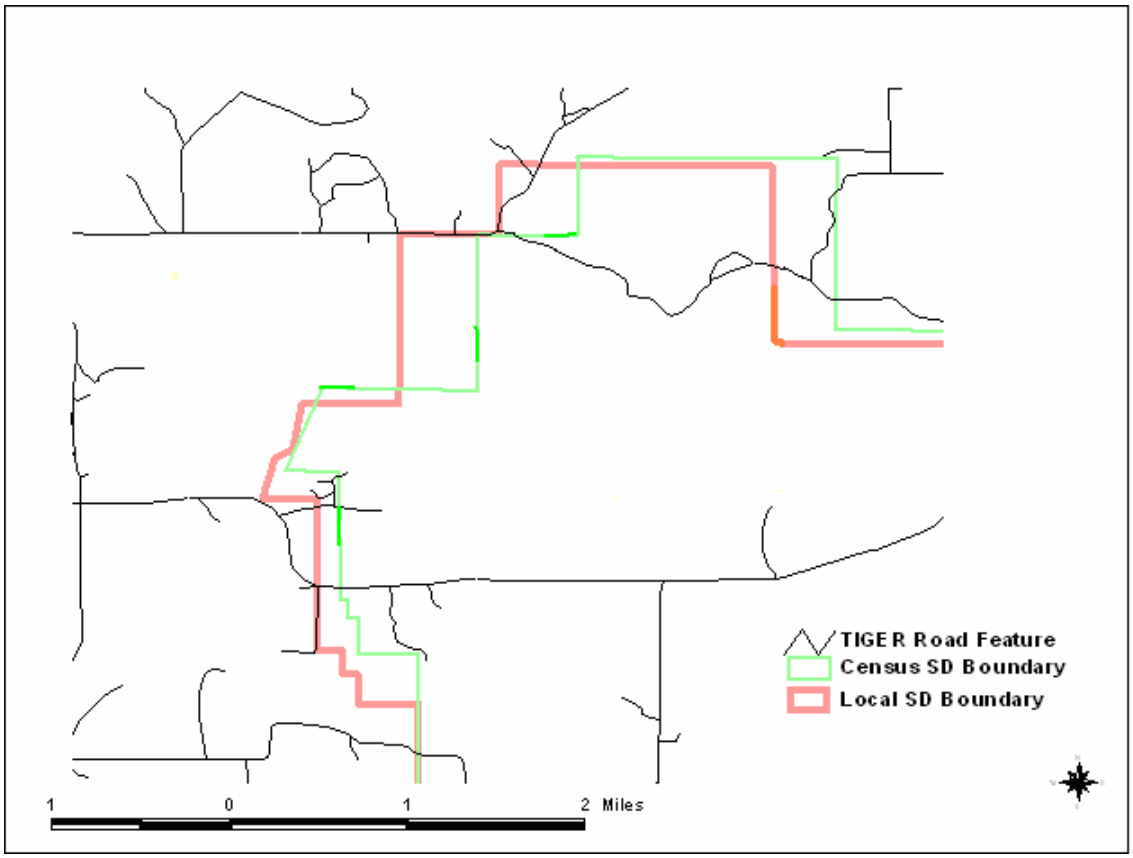
To avoid this problem, it is important to either remove the added local file from the layers before closing the application or be certain to not move the file's location and be sure you have any needed network connections to the file's location when you re-launch the application.

C. If Your State Data Does Not Match Census Bureau Data

Since the data displayed in your imported layer may not align exactly to ours, you may have to cleanup around the edges. For example, if your VTD follows a school district boundary and the location of the school district is different in the two files, you must use our school district boundary location. This situation is demonstrated in the graphic below. If you think the school district boundary is incorrect or is out-of-date, contact the Geography Division by sending an e-mail to GEO.redistricting.list@census.gov. If the boundary needs to be corrected, we will work with our school district mapping coordinator to correct our school district boundaries, and if they agree, the change will be reflected in a later Census Bureau shapefile product.

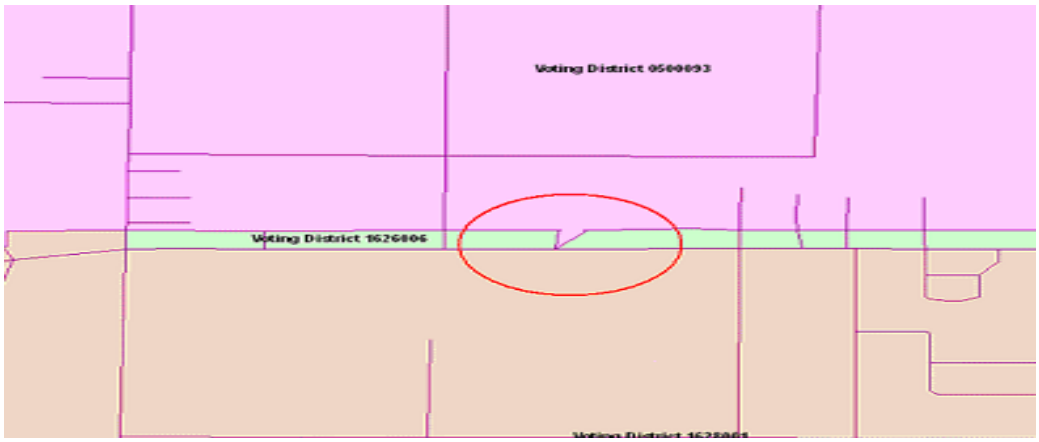
To ensure that the VTD and the school district boundary maintain that relationship, provide relationship information as instructed in **Attachment B**.

Census Bureau and Local School District boundaries have a similar shape but are in different locations.



Boundary Kinks and distortions

Some states are finding that their state boundaries and other boundaries for legal areas within their state have kinks and boundary distortions. Here is an example of what you might find in your data file:



If you can not correctly delineate the boundary for an entity you are updating because the feature you need to follow is incorrectly located, mislabeled or distorted in the Census Bureau's file, we request that you put the boundary on the problematic feature in our file. This will establish for us what feature you want the boundary to follow. In addition, we request that you report the problem area to the Census Bureau (through your regional office contact) by sending information describing the incorrect feature including the TIGER Line Identifier (TLID) and the specific entity boundary affected. This can be done using e-mail with information to describe the problem such as an image file, PDF or other medium showing the appropriate correction.

Legal Boundary Corrections; State/County/MCD/Place

The Census Bureau can not accept city, minor civil division, county, or American Indian Area boundary changes from VTD/BBSP respondents. It is very important that this boundary information be coordinated within the state and come to the Census Bureau through the BAS respondent. In some states the Census Bureau has a state-level BAS agreement and we can provide more information about these agreements upon request.

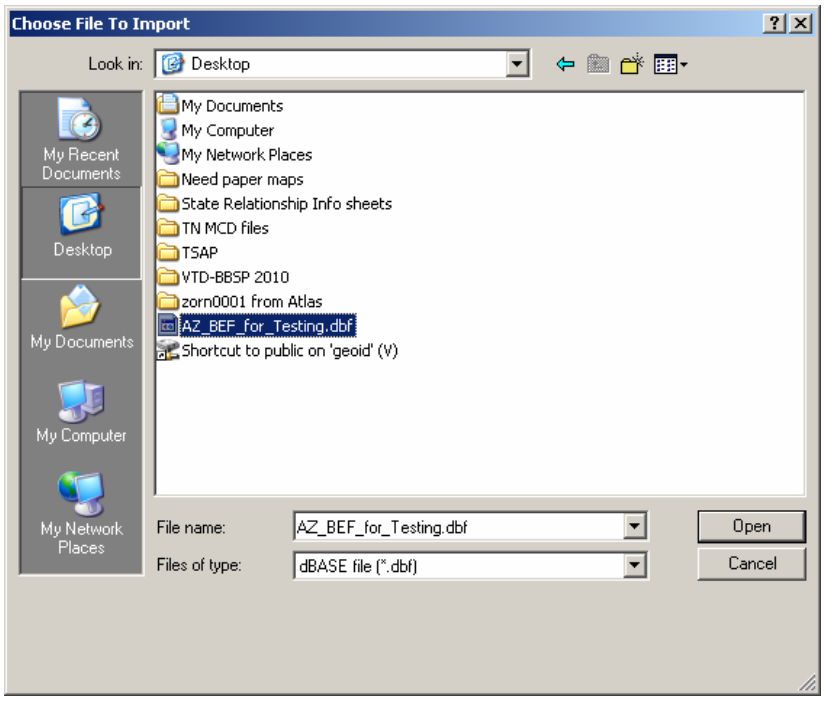
As you are completing the work for VTD/BBSP, you may notice legal boundaries that are not up-to-date. When this occurs, we request that you contact the BAS respondent in your state and encourage them to report all changes to the legal boundary for the governmental unit. To receive the appropriate BAS contact information, submit an e-mail to geo.bas@census.gov. Include in the e-mail, the entity in question, your name, phone number, and if possible an e-mail address.

D. To Create VTDs Using Your Block Equivalency File

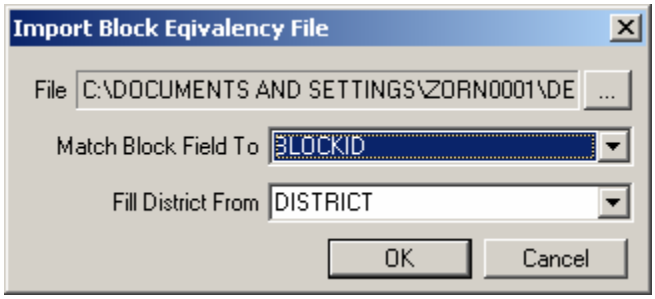
If you decide to use this process, it is important that you use the most current Census blocks to create your file. As the MTDB is updated through various geographic processes, the Census 2000 tabulation blocks begin to be divided into smaller blocks through a process called "block suffixing." For example, a Census 2000 tabulation block number of 1004 may now be divided into smaller blocks that are numbered 1004a, 1004b, and 1004c. If the block in your file is "1004," and does not contain the current suffixes, the MTPS will not associate a VTD code to the suffixed blocks.

If you want to create your VTDs starting with a block equivalency file (BEF) that you have maintained in your own database or GIS application, select "Import Equivalency" from the "**Area Settings: Voting District**" box, when you open the

county in which you want to work. Click OK. The “Choose File to Import” box appears as here:



Choose a file and click Open. MTPS displays the “Import Block Equivalency File” dialog box. Choose a field from your BEF to which to match the block field from the “Match Block Field To” dropdown list and a field from which to fill the district from the “Fill District From” dropdown list, then click OK.



MTPS fills your county with the VTDs included in your file.

Each VTD will appear highlighted in a different color so that you can distinguish adjacent VTDs.

1. Review these VTDs. Make sure that each VTD is following the feature that you want it to follow. Some updates in the MTDB may have caused a feature

to change its location. If you need to modify any of these VTDs, follow the instructions in **Section II. F.** below.

2. Click in the **"VTD Editing"** toolbox to display the "**Attributes**" dialog box if you want to change the codes, names, relationships, or the "Pseudo" assignment. Note that the existing VTD must be selected in the "Target Area" dropdown menu of the "**VTD Editing**" toolbox.

3. If you want to create a new VTD using these VTDs as a starting point (for example, you want to create two new VTDs from one existing VTD), "New District" must be selected in the "Target Area" dropdown menu.

E. To Create VTDs Using Your Census 2000 VTDs

To create VTDs using your Census 2000 VTDs, select "Start with existing features" from the "**Area Settings: Voting District**" box, when you open the county in which you want to work. Each VTD will appear highlighted in a different color so that you can distinguish adjacent VTDs.

1. Review your previous VTDs. Make sure that each VTD is following the feature that you want it to follow. Some updates in the MTDB may have caused a feature to change its location. If you need to modify any of your existing VTDs, follow the instructions in **Section II. F.** below.

2. Click in the **"VTD Editing"** toolbox to display the "**Attributes**" dialog box if you want to change the codes, names, relationships, or the "Pseudo" assignment. Note that the existing VTD must be selected in the "Target Area" dropdown menu of the "**VTD Editing**" toolbox.

3. If you want to create a new VTD using your Census 2000 VTDs as a starting point (for example, you want to create two new VTDs from one existing Census 2000 VTD), "New District" must be selected in the "Target Area" dropdown menu.

F. To Modify a VTD That Has Been Created Using Any of the Above Methods

1. Make sure that "Voting District" is selected from the "Edit Layer" dropdown list in the **"VTD Editing**" toolbox.

2. Choose the existing district from the "Target Area" dropdown list. The VTD that you select will highlight in grey. The "Zoom to Area" tool on the "**VTD Editing**" toolbox is very helpful in locating the area.

3. Choose the source of the areas to select, from the "Source Area" dropdown list. You can choose all areas, unassigned areas, or an existing area.

4. Choose the selection layer from the “Selection layer” dropdown list.

5. Use the  tool to select one or more areas or the  tool to select areas within a shape. If you use the select areas tool when drawing the “fence” or “lasso” around the desired selected area for the new VTD, click at each point and left double-click to complete the “fence.” This selected area is highlighted. When you use the  tool, you can click on one or more areas, or click and drag a rectangle around areas to select them. You can also hold the Ctrl key and click on selected areas to remove them from the selection.

   If you want to remove everything you have selected during this VTD modification, click  .

   Note: You can hover your cursor over any area to find out what VTD is there. A text box will pop up with the VTD code and name.

6. To change the way areas are selected, return to Step 3 to change the source of the areas or Step 4 to change the selection layer.

7. Click  to modify the existing district.

   The MTPS modifies the VTD.

III. Editing your VTDs

To ensure you have completed your VTD delineations and that your VTDs are as you want them to be, the MTPS is designed with built-in edits. There is one for finding unassigned areas and one for finding noncontiguous areas.

A. To Find Unassigned VTD Areas

1. To ensure that no part of a county has been left without an appropriate VTD code, choose "Voting Districts" from the "Edit Layer" dropdown list in the **"VTD Editing"** toolbox.

2. From the top menu, choose **VTD/BBSP→Find Unassigned Areas**. If there are no unassigned areas, the MTPS displays a message and does not display the toolbox. Otherwise, the MTPS displays the **"Find Unassigned Areas"** toolbox. The unassigned areas appear and are sorted by area size; the largest area is first on the list.

3. Make choices as follows:

To do this…	Do this…
Zoom to unassigned areas	Highlight one or more areas in the scroll list and click 
Update the list of unassigned areas	Click 

4. Assign all unassigned area using the steps outlined in **Section II. F**. When all unassigned areas have been assigned, click the refresh icon  and a note box will appear saying there are no unassigned areas. Click "OK."

   The MTPS closes the **"Find Unassigned Areas"** toolbox.

B. To Find Noncontiguous VTDs

1. To ensure that all noncontiguous VTDs are intentional, choose "Voting Districts" from the "Edit Layer" dropdown list in the **"VTD Editing"** toolbox.

2. From the top menu, choose **VTD/BBSP→Find Non-Contiguous Areas.** If there are no noncontiguous areas, the MTPS displays a message and does not display the toolbox. Otherwise, the MTPS displays the **"Find Non-Contiguous Areas"** toolbox.

3. Make choices as follows:

To do this…	Do this…
Zoom to non-contiguous areas	Highlight one or more areas if they are the same VTD in the scroll list and click 
Update the list of non-contiguous areas	Click 

4. If necessary, make any corrections by following steps in **Section II. F**. When you are done with the toolbox, click the close box in the upper right corner.

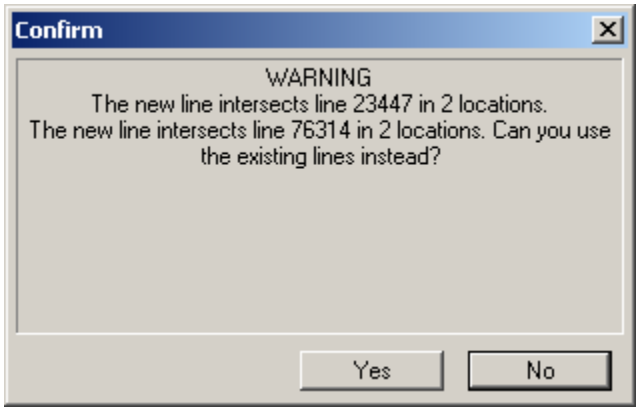
   The MTPS closes the toolbox.

IV. Adding Lines and Providing Imagery

As mentioned in the General Guidelines, the next Census Bureau effort for updating roads will be the Address Canvassing Operation next spring/summer (2009). We will not insert new streets added during the initial VTD/BBSP program because those streets will be added during that operation. If multiple programs add the same roads, we run a significant risk of having duplicates in the file. Add a line during VTD/BBSP to represent a road or other missing feature **only** if that feature serves as a VTD boundary or is needed as a suggested block boundary and we require that you submit imagery to support the added feature. Verification materials will provide you an opportunity to review the roads added as part of our Address Canvassing Operation and add roads that were not picked up.

A. To Add a Line

Any line added too close to existing lines may not be accepted. To avoid this problem, we advise you to always use existing lines, if possible, when delineating your VTDs. If an added line repeatedly intersects or is within 10 meters of another line, the MTPS will ask if you can use the existing line.



The line numbers in the above "Confirm" box are called line IDs. If the line has no name, you will only see the line ID. If you want to review the referenced line, follow these steps:

- Make a note of the numbers in the box.
- Click Yes. (The line you just delineated will not be added to the map)

- Make sure that "All lines" appears in the drop down menu on the "**Standard"** toolbar at the top.
- Click on the "Dataview" Icon 
- Click on "Edit" in the Standard menu at the top
- Click "Find"
- Type in the number in the "Dataview Find" box.
- Click OK.
- Right click on the Record ID.
- Select "Zoom"

MTPS zooms to the line. If you hover your mouse over the line, a box will pop up with the line ID number. You can then determine if the line referenced can be used or is in fact the feature you were trying to add. Lines added within 30 feet of an existing line will likely require interactive work to insert them into our topologically integrated file.

If instead of using the existing line, you choose to use your own added line, the RCC staff may contact you if there is a problem getting the line into MTDB using your updated shapefile submission.

1. Choose from the top menu, **VTD/BBSP→ Line Editing Toolbox**. The MTPS displays the "**Line Editing"** toolbox.

2. Click  to activate the Add Line tool.

3. Click where you want to start the line.

4. Move the cursor and click to create shape points along the new line.

5. Be sure that you are zoomed in sufficiently to see that the end point is connected to another line if you intend to form a closed polygon. If you want to end the digitizing of a line without actually creating the line you have started, hit the Esc key. If you want to finish the line, double-click to end it. You may click at a node (either at an intersection or at the endpoint of a line), on a line, or in space. The MTPS adds the new line and displays the "**All Lines – Editing Attributes dataview"** box. (If the line is too close to, or intersects another line, the MTPS will display the "Confirm" dialog box above. Follow those instructions to review the suggested lines.)

6. In some instances you will have to modify the snapping distance to insert a line. To do this, choose from the top menu, **Edit→ Preferences.** On the **System** tab, change **Snap Tolerence** to the distance and units desired. Click "OK". Once you have inserted the line, restore the snap tolerance back to 50. This will prevent creating gaps when you try to add a feature where snapping tolerance isn't a problem.

Note: In the "**All Lines – Editing Attributes dataview**," only the "MTFCC" (required) and "fullname" fields should be filled out.

7. Double-click the panel to the right of "MTFCC" (MAF/TIGER Feature Classification Code) and select a feature type from the dropdown list.

    - If you are creating the line to be a nonvisible VTD boundary, choose P0001 (Nonvisible legal/statistical boundary).

    - If you are creating a line to be a feature extension, choose P0004 (Other nonvisible bounding Edge (e.g., Census water boundary, boundary of an areal feature). See feature extension criteria in **Section V. A**. on page 43.

8. Click the icon to the right of "FULLNAME" to enter the name. If the feature you added does not have a name (for example, a township and range line or a rear property line), we require that you describe the line being added in the "FULLNAME" field as follows:

    - Right click in the "FULLNAME" field
    - Add comment (Township and range line or rear lot line off Y street)

9. Click  to add the line or  to cancel the added line. You can also go to **Edit→ Undo**, while still in the map window, to cancel any added saved lines.

Also with the "**Line Editing"** tool**,** you can delete, split, and copy lines; edit line attributes; and display names and address ranges. If you delete a line that has been added and saved, it will appear as a red dashed line. For more information on this toolbox, review the **Editing Linear Features** lesson in the CBT. Also, you can highlight the tool and press F1.

To add or delete a physical feature requires providing imagery or a reliable map source to prove that the feature exists or no longer exists. You can do any of the following:

- add imagery from TerraServer USA
- add your own imagery as a layer
- mail or fax an image or map
- provide a URL to display an image or map

Line Attributes on Pre-Existing Features

Pre-existing line attributes, including addresses, are not editable in the Redistricting Data Program version of the MTPS. You can use the "Add a Comment" functionality, as follows. These comments can then be reviewed by the RCC staff when the submission is received.

1. Line edit tool
2. Edit line attribute button
3. Select line
4. Right click in the field you want to update
5. Add comment

Regarding address ranges, when a line is split in the MTPS, both segments retain the original address range. The split line will be digitized and the address ranges will be imputed in MTDB. Currently, there is no mechanism for RDP participants to provide address range information.

B. Importing Digital Imagery from TerraServer USA

Microsoft Corporation maintains TerraServer-USA, an on-line database of high resolution USGS aerial imagery and scanned USGS topographic maps. If you have Internet access, you can use it to get an image to add as a new layer in your map.

The .NET Framework must be installed to use this command; for more information, see Download details: .NET Framework (http://www.microsoft.com/downloads/details.aspx?FamilyID=262d25e3-f589-4842-8157-034d1e7cf3a3&displaylang=en)

To add TerraServer USA imagery, click on **Tools→ Imagery→ TerraServer USA Toolbox**. Click  to retrieve the image.

Note: If you save an image to be included in your submission, choose **"Jpeg"** in the "Files of Type" dropdown menu, in the "**Save As**" dialog box. Be sure to include the state and county FIPS codes as part of the name.

To learn more about adding imagery, see the **Using Images in a Map** lesson in the CBT. Also, when you activate the "**TerraServer-USA Image Tool"** toolbox, press F1 and you will be directed to the on-line help documentation for that toolbox.

C. Adding your own Digital Imagery as a Layer

To add your own digital imagery as a layer, use the "Add a Layer" function as described in **Section II. B**. on page 29. The imagery must be in a geo-referenced format. You must export your image into a format that can be read by the MTPS. These can be seen by using the "Add a Layer" function and then using the File Type pull down. If you submit this imagery to the Census Bureau in support of your feature adds and deletes, be sure to include the state and county FIPS code as part of the name.

D. Mailing or Faxing and Image or Map

If you want to provide an image or a map to show that a feature does or doesn't exist, you can mail or fax it to your RCC office.

To provide information for an added line, when you create your line in the MTPS, add a comment as follows:

1. Line edit tool
2. Edit line attribute button
3. Select line
4. Right click in "FULLNAME" field
5. Add comment
6. Type in the name of the image or map, i.e. "State and County name and FIPS code, Image A."

To provide information for a deleted line, if the image or map shows that a line no longer exists, when you select the line for deletion, write an explanation in the "Add a Comment" box that pops up and reference the image or map that has been mailed or faxed to the RCC.

Clearly label your image or map including the same information.

E. Providing a URL to Display an Image or Map

To supply a URL to display an image or map, add a comment as described above, but for number 6, type in the URL and the state and county name and FIPS code.

It is necessary, when providing URLs to existing imagery, that you provide the full path to specific imagery that contains a close up of the feature or area being revised or added. This will increase the likelihood that we will accept the identified changes.

V. Performing Block Boundary Suggestion Tasks

The data you will receive as part of Phase 3 of the Redistricting Data Program includes data at the census tabulation block level. Therefore, the Census Bureau gives states the opportunity to suggest visible features for use as 2010 Census tabulation block boundaries. Because we are allowing VTDs to be inserted into our database as nonvisible lines and these lines will automatically become a 2010 Census tabulation block boundary, you do not need to identify these as block boundary suggestions. To identify other linear features that you want us to hold or not hold as 2010 Census tabulation block boundaries, you will use the **"BBSP"** toolbox. You can also create Block Area Groups using this toolbox if it is desirable for several islands to be in a single 2010 Census tabulation block.

All "Hold" block boundary suggestions are contingent upon the lines intersecting to form a closed polygon at the time we create the 2010 Census tabulation blocks, which will be in the fall of 2010. For this reason all block boundary suggestions must form a closed polygon.

A. Feature Extension Criteria

If you want to use an existing feature that doesn't form a closed polygon, you may add a short line to connect the features and close the polygon. The Census Bureau refers to these lines as feature extensions and several requirements pertain. To avoid creating ambiguous Census block boundaries, we require that feature extensions:

- be no longer than 300 feet;
- be straight lines from the end of a road and intersecting a non-road feature (These include all hydrographic features, pipelines, powerlines, and railroads. Highways and freeways are acceptable as long as it is confirmed that there are no housing units on them. This situation has the potential for causing a housing unit to be in the wrong Census 2010 tabulation block.);
- do not intersect a cul-de-sac.

Instructions for viewing Census 2000 feature extensions are found in **Section V. G.** below on page 49.

To create a new feature extension, add the line as described in **Section IV.A** on page 38. Number 6 in that section describes how you should identify the line.

B. Planned 2010 Census Tabulation Block Boundaries

Below is a list of all the feature and boundary types that are currently planned to be held as 2010 Census tabulation block boundaries and therefore do not need

to be suggested as a "Hold." In some instances you may NOT want the line to become a 2010 Census tabulation block boundary. A good example of where you may want to flag a feature with a "Do Not Hold," is where we have roads identified in our files as double lined roads. Due to MTAIP, there are now many more roads in the MTDB classified as double line roads that, in the past, were classified as single line roads. This causes the area in the middle (a median strip for example) to become a long narrow block. If you do not want the polygon formed by the two road edges to be a separate 2010 Census tabulation block, you may want to flag one of the edges with a "Do Not Hold."

Note: If any other program sponsored by the Census Bureau uses that line as a boundary, the Census Bureau will override the "Do Not Hold" status of the line.

Entities: The boundaries, as of January 1, 2010, for each of the entities listed below, are planned 2010 Census tabulation block boundaries and therefore do not have to be selected as part of the BBSP work.

MTFCC	Description
G2120	Hawaiian Home Land
G2130	Alaska Native Village Statistical Area
G2140	Oklahoma Tribal Statistical Area
G2150	State-designated Tribal Statistical Area
G2160	Tribal Designated Statistical Area
G2170	American Indian Joint Use Area
G2200	Alaska Native Regional Corporation
G2300	Tribal Subdivision
G2400	Tribal Census Tract
G2410	Tribal Block Group
G4000	State or State Equivalent
G4020	County or County Equivalent
G4040	County Subdivision
G4060	Sub-Minor Civil Division
G4110	Incorporated Place
G4120	Consolidated City
G4210	Census Designated Place
G5020	Census Tract
G5030	Block Group
G5035	Block Area Grouping
G5200	Congressional District
G5210	State Legislative District (Upper Chamber)
G5220	State Legislative District (Lower Chamber)
G5240	Voting District
G5400	Elementary School District
G5410	Secondary School District
G5420	Unified School District

G5430	Special School Administrative Area
G6320	Traffic Analysis Zone
G6330	Urban Growth Area
K2110	Military Installation
K2181	National Park Service Land

Features: The features listed below will qualify as 2010 Census tabulation block boundaries based on criteria. Those that qualify are shown in red in the MTPS. All others are available for selection except for those shown in blue.

MTFCC	**Description**
S1100	Primary Road
S1200	Secondary Road
S1400	Local Neighborhood Road, Rural Road, City Street
S1500	Vehicular Trail (road passable only by a 4-wheel drive)
R1011	Main Line Railroad Feature
P0002	Perennial Water

Note: Feature extensions and Powerlines are not planned to be held as 2010 Census tabulation block boundaries, but they are eligible to be selected as a "Hold."

To assist you with choosing any features that you may want held or not held, the MTPS displays the following:

- all currently planned 2010 Census tabulation block boundaries as red lines;
- all lines that are currently considered ineligible for selection as a block boundaries as blue lines;
- lines that were selected as Census 2000 BBSP "Must Holds" and were held as Census 2000 tabulation blocks, as **black lines**;
- lines that were selected as Census 2000 BBSP "Do Not Hold" and weren't held as Census 2000 tabulations blocks, as black dashed lines.

Your new 2010 "Holds" and "Do Not Holds" also will be displayed as black and black dashed lines, respectively.

To see a complete list of all MTFCCs (previously referred to as Census Feature Class Codes [CFCCs]), see **Attachment I**.

C. To Review Census 2000 "Must Holds" and "Do Not Holds"

The MTPS is designed to allow you to view the features your state identified as "Must Hold" or "Do Not Hold" during the Census 2000 BBSP. If you are interested in seeing these lines, follow the steps below.

From the Standard menu, select **VTD/BBSP→BBSP Toolbox.**

To review Census 2000 "Must Holds" and "Do Not Holds":

1. Click the "**Display Settings**" icon 

2. Select "2000" from the "Use BBSP display settings for" dropdown menu.

3. Click "OK."

In the "Map Legend," "**2000 Hold Status**" appears.

D. To Review Planned and Ineligible 2010 Census Tabulation Block Boundaries

The lines flagged in our shapefile as planned 2010 Census block boundaries are identified as such based on their MTFCC or their role as a boundary in 2008. We did not run the full block algorithm when we flagged these lines. For this reason, roads that do not form a closed polygon are flagged as planned because of their characteristics as a road; they would still have to form a closed polygon at the time of block numbering in 2010 in order to serve as a block boundary. Also note that although small ponds are flagged as planned block boundaries, these shorelines will not become 2010 blocks if they are surrounded by a single land block.

To review planned and ineligible 2010 Census tabulation block boundaries:

From the Standard menu, select **VTD/BBSP→BBSP Toolbox.**

1. Click the "**Display Settings**" icon 

2. Select "2010" from the "Use BBSP display settings for" dropdown menu.

3. Select what you want displayed on the map and click “OK.”

E. To Make Block Boundary Suggestions

To select features for suggested “Holds” and “Do Not Holds”:

1. Make a choice as follows in the “**BBSP”** toolbox:

To do this…	Do this…
Make Hold suggestions	Click the “**Hold**” radio button
Make Do Not Hold suggestions	Click the “**Do Not Hold**” radio button
Clear suggestions	Click the “**None**” radio button

2. Click  to activate the “Select Feature” tool.

3. Click on one or more line features. The MTPS will display a warning message if a suggestion is not appropriate or if you are clearing a “Hold” or “Do Not Hold” suggestion.

4. If you are making a “Hold” suggestion for a line feature marked “Ineligible,” you must provide imagery to re-classify the feature. You can either attach an imagery file or reference an image on the internet by providing a URL. The MTPS displays the “**Ineligible BBSP Feature**” dialog box. Make choices as follows:

To do this…	Do this…
Leave the line feature unmarked	Click the “**Leave unmarked**” radio button
Enclose an image file	Click the “**Enclose image file**” radio button or click  , and either type a file name or choose an image file, and click OK.
Provide URL	Click the “**Reference image URL**” radio button and type a URL

When applying a "Hold" to a feature extension that is designated as ineligible for selection, enter the word EXTENSION in the URL box when prompted for imagery.

If you want to use a TerraServer USA image, follow the instructions in **Section IV. B.**, on page 41, and save the image to your hard drive. Then “Enclose an image file” as instructed above.

5. If you are making a “Do Not Hold” suggestion for a line feature marked as a “Planned Hold,” the MTPS displays a box saying that. Click “OK.”

Remember that the boundary of each governmental unit or statistical entity will be held as a 2010 Census tabulation block boundary as will most roads. Private roads, trails, and unimproved roads may or may not be held and therefore, are more the target of the "Do Not Hold" tool. Also, water features that are not double-lines with area are good candidates for flagging as a "Do Not Hold."

If you still want us to consider the "Do Not Hold" do this:

- Line edit tool
- Edit line attribute button
- Select line
- Right click (**One click**) 2010 BBSP field (**green box to the right of the header**)
- Add comment (Do Not Hold and a short explanation as to why you do not want the line held)

At this time, in the MTPS display, the line will not appear as a black and white dashed line, as other "Do Not Hold" suggestions appear, and it will be evaluated by the RCC staff.

6. If you want to review comments that you have made to a feature, there are two ways to do so.

   - Go back to the same feature, use the edit line attributes tool in the **"Line Editing"** toolbox, and click on the feature. Right click on the field you had edited before, go to "Add a Comment" and you will see the comment you typed before.

   - Alternatively, you can look at a DBF file that is created during the "report changes" process and is one of the files automatically created in the return zip file. The file would be named like this: RDP_08123_LN_CHANGES_COMMENTS.DBF. There is no "one-stop" location to see a list of all the comments made until this dbf file is created during the "report changes" process described in **Section VI**.

7. If you are trying to suggest a "Hold" on a line that is already a "Planned Hold" (dark red line), the line will not appear as a bold black line, as other "Hold" suggestions do, but you should consider it flagged as a "Hold."

F. To Change the BBSP Display Settings

1. Click  in the **"BBSP"** toolbox to display the BBSP Display Settings dialog box.

2. Make changes as follows:

To do this…	Do this…
Use all of the display settings	Check "**Use BBSP display settings**" and make sure that all of the items are checked
Use some of the display settings	Check "**Use BBSP display settings**" and make sure that the items you want to use are checked
Use none of the display settings	Remove the check from "**Use BBSP display settings**"

3. Click "OK."

   The MTPS redraws the map to use the display settings that you have chosen.

If you want to use the "Info" tool to determine the current BBSP values, the current values are as follows:

- BBSPFLG = 1: Census 2000 Must Holds
- BBSPFLG = 2: Census 2000 Do Not Holds
- CBBFLG = 4: Planned 2010 Census Block Boundary
- CBBFLG = 9: Ineligible 2010 Census Block Boundary
- 2010_BBSP = 1: 2010 Census Participant Hold (filled by participant)
- 2010_BBSP = 2: 2010 Census Participant Do Not Hold (filled by participant)

G. To Find 2000 Feature Extensions

The MAF/TIGER Accuracy Improvement Project spatially corrected the roads in our database. This includes roads that had feature extensions connecting the end of the road to another, usually non-road, feature. As the road moved to its correct new location, the point connecting the extension to the non-road feature did not move. This caused almost all the feature extensions in our database to be at an angle rather than straight. If you still desire a feature extension in these locations, we request that you add a new straight line and flag it as a "Hold."

Note: Because the new MTFCCs don't always match exactly to the old CFCCs, feature extensions are identified based on certain criteria. Therefore, some features identified by this function are not actual feature extensions.

From the Standard menu, select **VTD/BBSP→BBSP Toolbox.**

1. Click the "**Display Settings**" icon 

2. Select "2000" from the "Use BBSP display settings for" dropdown menu.

3. Click "OK."

4. From the top menu, choose **VTD/BBSP→ Find 2000 Feature Extensions**. If there are no 2000 feature extensions, the MTPS displays a message and does not display the toolbox. Otherwise, the MTPS displays the **"Find 2000 Feature Extensions"** toolbox.

5. Make choices as follows:

To do this…	Do this…
Zoom to 2000 feature extensions	Highlight one or more entries in the scroll list and click the "Zoom to" button

Feature extensions are displayed as green lines.

6. When you are done with the toolbox, choose from the top menu **VTD/BBSP→ Find 2000 Feature Extensions** or click the close box in the upper right corner.

The MTPS closes the "**Find 2000 Feature Extensions"** toolbox.

To create a new feature extension, see "**To Add a Line**" section on page 38.

H. To Review Block Boundary Suggestions

1. Make a choice as follows in the **"BBSP"** toolbox:

To do this…	Do this…
Review Hold suggestions	Click the" **Hold**" radio button
Review Do Not Hold suggestions	Click the "**Do Not Hold**" radio button

When the "**BBSP"** toolbox is open, the MTPS shows the count of all suggestions and the position of the current suggestion within that count. The MTPS activates the navigation buttons as appropriate.

2. Use the navigation buttons as follows:

Click…	To zoom to the…
	First suggestion
	Previous suggestion
	Next suggestion
	Last suggestion

The MTPS zooms the map to show the suggestion. You can also click to zoom to the current suggestion.

I. To Move Around the BBSP Map

Use the following buttons in the "**BBSP"** toolbox:

To zoom to…	Do this…
The entire map	Click . The MTPS zooms to show the entire map.
The current suggestion	Click . The MTPS zooms to show the current block boundary suggestion.

You can also use tools in the "**Tools**" toolbox to move around the map.

J. To Create a Block Area Group (Island Grouping)

During the 2010 Census tabulation block delineation, the Census Bureau will automatically group islands to form a single tabulation block if they have no road features and fall within a 5 kilometer radius.

You also may group specific islands for identification as a single 2010 Census tabulation block. These are called Block Area Groups (BAGs). BAGs are exempt from the 5 kilometer radius requirement. To create a BAG:

1. Click in the "**BBSP"** toolbox to activate the "Create Block Area Group" tool.
2. Click at points around a set of islands, making sure not to cross any land areas, and double-click to complete the shape. You cannot cross an existing BAG perimeter, but you can connect a new BAG to the side of an existing one. If it crosses any other tabulation areas, it will be split along that line as well.

The MTPS checks whether the shape is valid. If so, the MTPS creates and shades the BAG. Otherwise, the MTPS displays a message and does not create the BAG.

K. To Delete a Block Area Group That You Have Created

1. Click  in the "**BBSP**" toolbox to activate the "Delete Block Area Group" (BAG) tool.
2. Click in a BAG.

   The MTPS deletes the BAG.

L. Dividing Large Water Blocks

If you want to add a line to divide large water blocks for the BBSP program, add the line and assign an MTFCC of P0002. You must also assign a "Hold" status to the line.

M. Dividing Long Narrow Blocks formed by Medians

Due to MTAIP, there are now many more roads in the MTDB classified as double line roads that, in the past, were classified as single line roads. This causes the area in the middle (a median strip for example) to become a long narrow block. If you want these divided into smaller blocks, you could draw a feature extension from a nearby road or add a feature, such as a powerline, that is missing in the MTDB and flag it as a "Hold." Also, if you do not want the polygon formed by the two road edges to be a separate 2010 Census tabulation block, you may want to flag one of the edges with a "Do Not Hold."

N. To Verify Your VTD/BBSP Work

1. From the top menu choose **VTD/BBSP→Verify**. The MTPS performs the tests. These tests include checking for noncontiguous and unassigned areas and closed polygons for "Hold" selections.
2. If the test fails for noncontiguous or unassigned areas, the MTPS displays an appropriate message. You can review these areas by choosing from the top menu, **VTD/BBSP→ Find non-contiguous areas** or **Find unassigned areas**. You'll get a message to open your "**VTD Editing"** toolbox.

   If the test fails for closed polygons, the MTPS displays the "**List Unclosed Polygons**" dialog box. Make choices as follows:

To do this…	Do this…
Zoom to unclosed polygons	Highlight one or more entries in the scroll list and click  .
Update the list of unclosed polygons	Click  . If there are no more unclosed polygons, the MTPS closes the List Unclosed Polygons dialog box.

Fix your block boundary suggestions.

If you have made corrections and want to run **VTD/BBSP→ Verify** again to make sure you have corrected everything that you intended to correct, be sure to re-open the "**BBSP"** toolbox.

When all of the tests pass, the MTPS displays the message "The verification of VTD/BBSP data was successful." Click "OK" to close the message.

VI. Reporting and Viewing your Submission

A. To Report Your VTD/BBSP Changes

1. From the top menu choose **VTD/BBSP→ Report Changes**. The MTPS displays a "Confirm" dialog box to make sure you want to create a ZIP archive of changes that can be sent to the Census Bureau.

2. Click "Yes." If there are no changes to report, the MTPS displays a message. Click "OK."

   Otherwise, the MTPS creates a ZIP archive called RDP_ssccc_Return.zip (where ssccc is a code based on the state and county FIPS code), puts it in the MTPS Data folder on the hard drive of your computer, and displays a message with the path to the archive. Click "OK" to close the message.

B. To View Your VTD/BBSP Changes After Reporting

1. Use Windows Explorer to navigate to the folder c:\MTPSData <county subfolder> and open RDP_ssccc_Return.zip.

2. Extract all of the files into a folder, such as c:\Temp.

3. In the MTPS choose **File→ Open** or click  on the "**Standard"** toolbar, choose ESRI Shapefile from the "Files of Type" dropdown list, navigate to the folder where you extracted the Shapefiles, choose a "Shapefile," and click "Open." The MTPS displays the ESRI "Shapefile" dialog box, where the settings are correct.

4. Click "OK." The MTPS displays a map with the Shapefile. You can return to Step 3 to open another Shapefile, or you can add one or more Shapefiles to the map by:

   - Choosing, from the top menu, **Map→ Layers** to display the "Layers" dialog box
   - Clicking "Add Layer" to display the "**Layers**" dialog box
   - Choosing ESRI Shapefile from the "Files of Type" dropdown list
   - Highlighting one or more Shapefiles
   - Clicking "Open"; The MTPS displays the "**ESRI Shapefile**" dialog box, where the settings are correct
   - Clicking "OK" for each Shapefile; the MTPS returns to the "**Layers**" dialog box

- Highlighting each added Shapefile, clicking "Style," and choosing a different border color. Click "Apply" and "OK."
- Clicking "Close"; The MTPS displays the map with the added layers

C. Submitting Files Using the Census Bureau's "Send a File Utility"

You can upload your files through Census Bureau's **Send a File Utility** at: http://www2.census.gov/cgi-bin/sendfile. Or, you can go to the Census Bureau's home page at www.census.gov and select:

- Subjects A-Z
- Access Data Tools
- Public file send utility

This utility allows file size up to 500 Mb.

Use the following steps to FTP your files to us:

1. Under **Source Information (Local)**, click on the **Browse** button to navigate to the file that you wish to send. Select the file from the Choose file window by clicking on it. Click **Open**. The **File to Send** field now contains the file name. **Note:** You can send only one file at a time.
2. In the **Target Information (Remote)** section, you **must** enter **/geo/VTD_BBSP/ST##_SS** in the Directory to Receive File, where **##** = your state's two-digit FIPS code and **SS** = your state's two-letter USPS abbreviation.

   ***Examples*:** if you are California, ## = 06 and SS = CA; if you are Iowa, ## = 19 and SS = IA. If you are not sure what your state FIPS code or your USPS state abbreviation is, please click on the following link: http://www.itl.nist.gov/fipspubs/fip5-2.htm
3. Do not make an entry for **New File Name**.
4. Under **Notify by E-mail**, type your e-mail address in the Sender's E-mail Address field. In the Census Bureau Employee's E-Mail Address field, enter **GEO.Redistricting.list@census.gov**.

We are asking you to please send a **separate** e-mail to the same e-mail address using your regular e-mail account, to notify us when you have submitted updates for your state.

5. Then type in the Verification Code that you see (or numbers you hear) in the box on the screen.
6. After filling in all the fields correctly, click on **Upload**. If you find an error, click on **Clear** and repeat the steps.

Important Note!! If you must resubmit a file for any reason, you **must first rename the file**. If not, the utility will produce an error message. Please retain the default naming convention of **RDP_ssccc_Return** when you rename it. For example: RDP_42027_Return_revised.zip or RDP_42027_Return_2.zip.

We encourage you to call your RCC or headquarters staff (GEO or RDO) at anytime with any questions, comments, or concerns. Contact information can be found in **Section I. D**. of the **General Guidelines** for the GEO and RDO staff and in **Attachment C** for the RCC staff.

Attachment E

Digital Instructions for Participants Not Using the MAF/TIGER Partnership Software

Version 2
October 2008

USCENSUSBUREAU

Helping You Make Informed Decisions

Table of Contents

Note: Grey highlighted text indicates updates since Version 1

I. Preface

The MAF/TIGER Partnership Software (MTPS) is the Census Bureau's primary tool for submission and review of Voting Districts and Block Boundary Suggestions. However, this attachment to the General Guidelines provides specific instructions for those participants wishing to use their own Geographic Information System (GIS) software for modifying the Census Bureau supplied shapefiles.

You will find a DVD data disc provided to your state for this project. This DVD includes shapefiles for all the counties in your state.

It is assumed that if you are not using the MTPS, you are skilled in the use of your own GIS software. It is further assumed that you have completed a thorough review of the General Guidelines and accompanying attachments. This document provides:

- Criteria for creating Voting Districts and suggesting Block Boundaries to be held or not to be held.
- Census provided and returned data specifications.
- Procedural instructions for a sample method of processing the provided Census files for the creation of a submission for Phase 2 of the 2010 Census Redistricting Data Program.

II. Performing Voting District (VTD) Tasks

A. Creating VTDs

New for 2010 Census: Nonvisible Voting District Boundaries

The Census Bureau has changed its policy on the acceptance of VTD boundaries. In the past, we required you to modify your VTDs that followed non-visible boundaries, such as section lines or rear lot lines. Although we still believe visible features make better geographic boundaries, we will accept non-visible VTD boundaries. If your state requires the VTDs to follow visible features, the Census Bureau expects the State Liaison to communicate that information to any local officials submitting the VTDs and modify the submission to comply with the state law.

Feature Updates

As mentioned in the General Guidelines, the next Census Bureau effort for updating roads will be the Address Canvassing Operation next spring/summer (2009). We will not insert new streets added during the initial VTD/BBSP program because those streets will be added during that operation. If multiple programs add the same roads, we run a significant risk of having duplicates in the file. Add a line during VTD/BBSP to represent a road or other missing feature **only** if that feature serves as a VTD boundary or is needed as a suggested block boundary and we require that you submit imagery to support the added feature. Verification materials will provide you an opportunity to review the roads added as part of our Address Canvassing Operation and add roads that were not picked up.

Delineating VTDs Prior to Making Block Boundary Suggestions

Because your VTD boundaries will be held as 2010 Census tabulation block boundaries, delineating your VTD boundaries first may preclude your having to suggest as many "Must Holds."

VTD Criteria

- **VTD** - VTD codes can range from 1-6 alphanumeric characters. This includes spaces, dashes, dots, or forward slashes. If you want to use a different character, notify the RCC staff. (See **Attachment C** for contact information.)
- **VTD** - When annotating a VTD boundary along a road that is shown as a double-line, you can select the faces along either one of the lines to be the boundary, but be consistent. For some of the hydrographic features, there may be three lines for selection: (1) The left shore, (2) the middle

centerline, or (3) the right shore. You may select any of these, but be consistent throughout the length of the boundary edge.

- **VTD** - VTDs must be contained within a single county. They may not cross county boundaries.

- **VTD** - VTDs are often, but not required to be, named. If a name is not supplied, the Census Bureau will use the VTD code as the name. Names can be up to 100 characters, including spaces, alphanumeric and special characters. Names will appear on the Census Bureau's data website, the American FactFinder, and in the PL 94-171 summary files when the data is released after the 2010 Census.

- **VTD** - Codes and names should be consistent and reviewed for spelling accuracy.

- **VTD** - We request that you code all areas, including water, to a VTD. If you do not code each area, the Census Bureau will assign the code of "ZZZZZZ" to the unassigned areas. This allows us to ensure we have all areas coded to a VTD.

  VTD - VTDs can be identified as "actual" or "pseudo." An "actual" VTD is one that exactly matches the precincts or other election areas in your state. You may choose to identify your submitted VTDs as "actual." Otherwise they will be considered "pseudo" so as not to confuse the data user. For example, states may choose to identify multiple layers of election areas within their VTD framework and may wish to identify them as pseudo. This is an acceptable approach to the submission of the VTD plans.

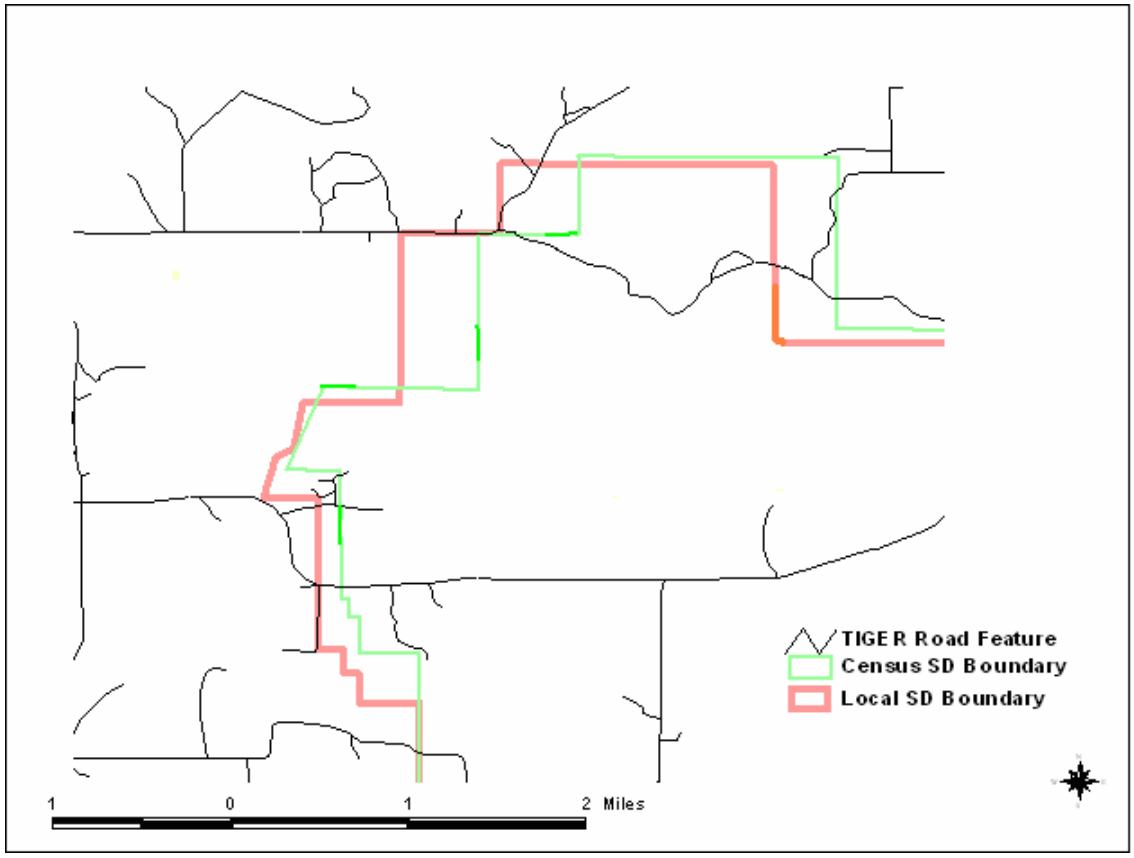
- **VTD** - Adding or deleting a physical feature requires providing imagery or a reliable map source to prove that the feature exists or no longer exists. (See instructions in the "**Including Imagery or Maps**" section on page 19.)

If Your State Data Does not Match Census Bureau Data

Features in your files may appear in a spatially different location from the same features in the Census file. For example, if your VTD follows a school district boundary and the location of the school district is different in the two files, you must use our school district boundary location. This situation is demonstrated in the graphic below. If you think the school district boundary is incorrect or is out-of-date, contact the Geography Division by sending an e-mail to GEO.redistricting.list@census.gov. If the boundary needs to be corrected, we will work with our school district mapping coordinator to correct our school district boundaries, and if they agree, the change will be reflected in a later Census Bureau shapefile product.

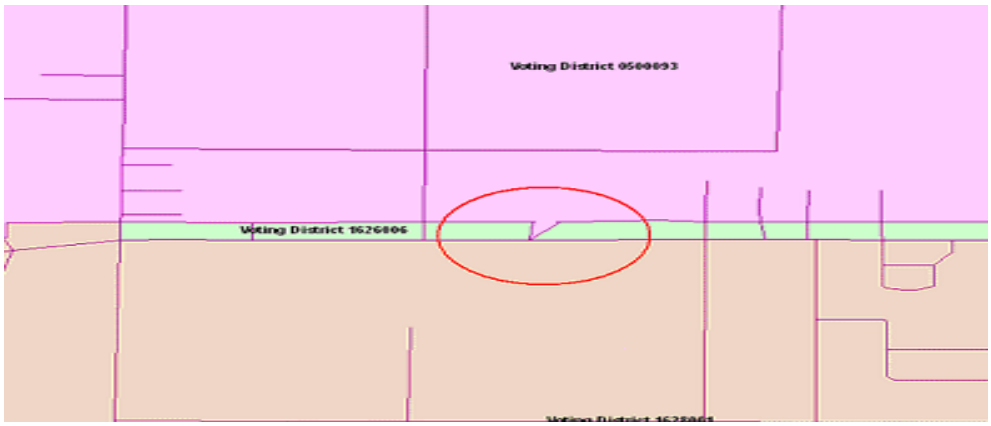
To ensure that the VTD and the school district boundary maintain that relationship, provide relationship information as instructed in **Attachment B**.

Census Bureau and Local School District boundaries have a similar shape but are in different locations.



Boundary Kinks and distortions

Some states are finding that their state boundaries and other boundaries for legal areas within their state have kinks and boundary distortions. Here is an example of what you might find in your data file:



If you can not correctly delineate the boundary for an entity you are updating because the feature you need to follow is incorrectly located, mislabeled or distorted in the Census Bureau's file, we request that you put the boundary on the problematic feature in our file. This will establish for us what feature you want the boundary to follow. In addition, we request that you report the problem area to the Census Bureau (through your regional office contact) by sending information describing the incorrect feature including the TIGER Line Identifier (TLID) and the specific entity boundary affected. This can be done using e-mail with information to describe the problem such as an image file, PDF or other medium showing the appropriate correction.

Legal Boundary Corrections; State/County/MCD/place

The Census Bureau can not accept city, minor civil division, county, or American Indian Area boundary changes from VTD/BBSP respondents. It is very important that this boundary information be coordinated within the state and come to the Census Bureau through the BAS respondent. In some states the Census Bureau has a state-level BAS agreement and we can provide more information about these agreements upon request.

As you are completing the work for VTD/BBSP, you may notice legal boundaries that are not up-to-date. When this occurs, we request that you contact the BAS respondent in your state and encourage them to report all changes to the legal boundary for the governmental unit. To receive the appropriate BAS contact information, submit an e-mail to geo.bas@census.gov. Include in the e-mail, the entity in question, your name, phone number, and if possible an e-mail address.

III. Performing BBSP Tasks

The data you will receive as part of Phase 3 of the Redistricting Data Program includes data at the census tabulation block level. Therefore, the Census Bureau gives states the opportunity to suggest visible features for use as 2010 Census tabulation block boundaries. Because we are allowing VTDs to be inserted into our database as nonvisible lines and these lines will automatically become a 2010 Census tabulation block boundary, you do not need to identify these as block boundary suggestions. To identify other linear features that you want us to hold or not hold as 2010 Census tabulation block boundaries, you will use the **"BBSP"** toolbox. You can also create Block Area Groups using this toolbox if it is desirable for several islands to be in a single 2010 Census tabulation block.

All "Hold" block boundary suggestions are contingent upon the lines intersecting to form a closed polygon at the time we create the 2010 Census tabulation blocks, which will be in the fall of 2010. For this reason all block boundary suggestions must form a closed polygon.

A. Planned 2010 Census Tabulation Block Boundaries

We are providing below, a list of all the feature and boundary types that are currently planned to be held as 2010 Census tabulation block boundaries and therefore would not need to be suggested as a "Hold." In some instances you may not want the line to become a 2010 Census block boundary. These are much less common but it is acceptable to flag a line as a "Do Not Hold."

Note: If any other program sponsored by the Census Bureau uses that line as a boundary, the Census Bureau will override the "Do Not Hold" status of the line.

Entities: The boundaries, as of January 1, 2010 for each of the entities listed below, are planned 2010 Census tabulation block boundaries and therefore do not have to be selected as part of the BBSP work. These boundaries may change between now and January 1, 2010.

MTFCC	Description
G2120	Hawaiian Home Land
G2130	Alaska Native Village Statistical Area
G2140	Oklahoma Tribal Statistical Area
G2150	State-designated Tribal Statistical Area
G2160	Tribal Designated Statistical Area
G2170	American Indian Joint Use Area
G2200	Alaska Native Regional Corporation
G2300	Tribal Subdivision
G2400	Tribal Census Tract
G2410	Tribal Block Group
G4000	State or State Equivalent

G4020	County or State Equivalent
G4040	County Subdivision
G4060	Sub-Minor Civil Division
G4110	Incorporated Place
G4120	Consolidated City
G4210	Census Designated Place
G5020	Census Tract
G5030	Block Group
G5035	Block Area Grouping
G5200	Congressional District
G5210	State Legislative District (Upper Chamber)
G5220	State Legislative District (Lower Chamber)
G5240	Voting District
G5400	Elementary School District
G5410	Secondary School District
G5420	Unified School District
G5430	Special School Administrative Area
G6320	Traffic Analysis Zone
G6330	Urban Growth Area
K2110	Military Installation
K2181	National Park Service Land

Features: The features listed below will qualify as 2010 Census tabulation block boundaries based on criteria. They may need to be selected as "Holds." You must use the values stored in the "CBBFLG" field of the "All Lines" layer to determine if a line is a planned 2010 Census tabulation block. See more details on this in the next section.

MTFCC	**Description**
S1100	Primary Road
S1200	Secondary Road
S1400	Local Neighborhood Road, Rural Road, City Street
S1500	Vehicular Trail (road passable only by a 4 wheel drive)
R1011	Main Line Railroad Feature
P0002	Perennial Water

Note: Feature Extensions and Powerlines are not planned to be held as 2010 Census block boundaries, but they are eligible to be selected as a "Hold."

B. Making Block Boundary Suggestions

To assist you with choosing any features that you may want held or not held, the edges, or lines, layer contains three attributes: The first identifies all currently planned 2010 Census block boundary lines and ineligible lines. A second identifies Census 2000 BBSP "Must Holds" and Census 2000 BBSP "Do Not Holds." A third attribute field is designed to capture your 2010 Census block boundary suggestions.

Block boundary suggestions are made by assigning a value of "1" for Must Hold or "2" for Do Not Hold to the 2010_BBSP field of the lines for which you want to make a suggestion. These lines must be included along with any added or deleted lines in the returned changed lines shapefile. Use CHNG_TYPE = CA for pre-existing lines that are only included in the changed lines shapefile because they have a block boundary suggestion.

Attribute	**Field and Legal Value**
Census 2000 Must Holds	BBSPFLG = 1
Census 2000 Do Not Holds	BBSPFLG = 2
Planned 2010 Census Block Boundary	CBBFLG = 4
Ineligible 2010 Census Block Boundary	CBBFLG = 9
2010 Census Participant Hold	2010_BBSP = 1 (filled by participant)
2010 Census Participant Do Not Hold[+]	2010_BBSP = 2 (filled by participant)
[+]A 2010 Census Participant Do Not Hold will only be implemented as long as no other program requires the line be held	

If you want to suggest a "Hold" on an existing feature that does not form a closed polygon, you may want to add a feature extension, (MAF/TIGER Feature Class Code [MTFCC] P0004). We recommend feature extensions be no longer than 300 feet and as a direct extension of an existing line. Extensions should terminate on a non-road feature.

It is also possible to review some of the Census 2000 feature extensions. They can be located by finding all lines with both attributes of BBSPFLG = 1 and an MTFCC = P0001. Note that these extensions may have been distorted during our MAF/TIGER Accuracy Improvement Project (MTAIP) process. For more information about MTAIP, please refer to the General Guidlines.

C. Block Area Groups (Island Groupings)

During the 2010 Census tabulation block delineation, the Census Bureau will automatically group islands to form a single tabulation block if they have no road features and fall within a 5 kilometer radius.

You also may group specific islands for identification as a single 2010 Census tabulation block. These are called Block Area Groups (BAGs). BAGs are exempt from the 5 kilometer radius requirement. Grouping selected islands to create a unique block identification is done by delineating a polygon around the selected islands. When creating a BAG, digitize the polygon around the set of desired islands making sure not to cross any land areas or an existing BAG perimeter, but you can connect a new BAG to the side of an existing one. If it crosses any other tabulations areas, it will be split along that line as well.

The BAG layer you create should be a simple polygon shapefile named RDP_<SSCCC>_bag.* where the <SSCCC> is the FIPS state and county code for the county whose BAGs you are creating. The shapefile should have two text fields; BAGCE (length of 3), and MTFCC (length of 5). When creating your BAGs provide each with a number in the BAGCE field. Start with 001 and increment by 1 for each BAG created. The MTFCC should always be G5035.

D. Block Boundary and Block Area Group Criteria

- **BBSP** - All participant-provided 2010 Census "Holds" must form closed polygons.
- **BBSP** - 2010 Census planned tabulation block boundaries, or "planned holds," are an indication of what we would plan to use as a 2010 Census tabulation block boundary if they were defined today. The "planned holds" may change if the criteria changes, or if the attributes are updated through other Census programs.
- **BBSP** - Participant provided 2010 Census "Do Not Holds" will not be accepted if the line they are placed on needs to be held for other purposes. (ex. If a "Do Not Hold" were placed on a city limit, that would not be accepted, as the city limit is needed as a tabulation block boundary.)
- **BBSP** - Adding or deleting a physical feature requires providing imagery or some other source to prove that the feature exists or no longer exists. (See instructions in the "**Including Imagery or Maps**" section on page 19.)
- **BBSP** - Try to use existing lines if possible. Features in your files may appear in a spatially different location from the same features in the Census file. When this occurs, it is important to use the existing Census feature rather than try to add a duplicate based on the location in your file. This will help us maintain the topological relationships that are crucial to correctly allocating population.
- **BAGS** - The perimeter of a Block Area Grouping (BAG) must be entirely over water.

- **BAGS** - BAGs can not overlap.
- **BAGS** – BAGs will be split if they cross the boundary of other tabulation geographies.

IV. Census Provided Data and Returned Data Specifications

A. Type and Projection

The Census Bureau is providing all digital participants with entity layers in ESRI shapefile[1] format. The data provided will include a series of polygon-based shapefiles, a single linear shapefile, and several relational .dbf tables for each county. It is recommended that participants re-project their data files to match those provided by the Census Bureau to ensure correct alignment of the data. However, returned shapefiles may be in any projection as long as the projection information and the *.prj file are provided. A complete data dictionary is provided at the end of this attachment.

All shapefiles provided by the Census Bureau are in the following unprojected geographic based coordinate system:

- GCS_NAD83
- Angular Unit: Degree (0.0174532925199433299)
- Prime Meridian: Greenwich (0.000000000000000000)
- Datum: D_North_American_1983
- Spheroid: GRS_1980
- Semi-major Axis: 6378137.000000000000000
- Semi-minor Axis: 6356752.314140356100000000
- Inverse Flattening: 298.257222101000020000

B. Provided Files

The Census Bureau is providing a large number of files in support of this program. There are both state level and county level files as part of the data delivery. The naming conventions for the files are as follows:

File Naming Convention – County-based Files

County-Based Redistricting Data Program (RDP) Shapefile Naming Convention = RDP_<XXXX>_<YYYY>_<ST><COU>.<ZZZ>
Where <XXXX> = start year of the RDP program.
Where <YYYY> = the <layer>
Where <ST> = FIPS State Code
Where <COU> = FIPS County Code
Where <ZZZ> = three letter file extension (shp, shx, dbf, prj)
Example: Maricopa County, Arizona All Lines shapefiles would be RDP_2007_edges_04013.shp

[1] The use of brand names does not represent an endorsement of a company or its products by the U.S. government. Due to the wide use of ESRI products by our partners in the GIS community, and the ubiquitous use of the shapefile format as a medium for GIS data exchange, the Census Bureau is providing this data in shapefile format. You should encounter no problems when importing these shapefiles into your local GIS software. However, if you are using GIS software that does not contain a shapefile translator, please contact the Census Bureau for further instructions (301-763-1099) or e-mail redistricting@geo.census.gov.

File Naming Convention – State-based Files

RDP_<XXXX>_<YYYY>_<ST>.<ZZZ>
Where <XXXX> = start year of the RDP program.
Where <YYYY> = the <layer>
Where <ST> = FIPS State Code
Where <ZZZ> = three letter file extension (shp, shx, dbf, prj)
Example: Arizona American Indian Areas (AIA) - Legal shapefile would be RDP_2007_aial_04.shp

File Naming Convention – Layer Key

Shapefile Layer	**Geographic Level**	**<layer> Name**
Alaska Native Regional Corporations (ANRC)	County	Anrc
Alaska Native Regional Corporations (ANRC)	State	Anrc
American Indian Areas (AIA) - Legal	County	Aial
American Indian Areas (AIA) - Legal	State	Aial
American Indian / Alaska Native Areas (AIANA) – Statistical	County	Aias
American Indian / Alaska Native Areas (AIANA) – Statistical	State	Aias
American Indian Tribal Subdivisions (AITS) - Legal	County	Aitsl
American Indian Tribal Subdivisions (AITS) - Legal	State	Aitsl
American Indian Tribal Subdivisions (AITS) – Statistical	County	Aitss
American Indian Tribal Subdivisions (AITS) – Statistical	State	Aitss
Congressional Districts (CD)	County	Cd
Congressional Districts (CD)	State	Cd
Hawaiian Home Lands (HHL)	County	Hhl
Hawaiian Home Lands (HHL)	State	Hhl
School Districts (Elementary) (ELSD)	County	Elsd
School Districts (Elementary) (ELSD)	State	Elsd
School Districts (Secondary) (SCSD)	County	Scsd
School Districts (Secondary) (SCSD)	State	Scsd
School Districts (Unified) (UNSD)	County	Unsd
School Districts (Unified) (UNSD)	State	Unsd
State Legislative Districts (Upper/Senate) (SLDU)	County	Sldu
State Legislative Districts (Upper/Senate) (SLDU)	State	Sldu
State Legislative Districts (Lower/House) (SLDL)	County	Sldl
State Legislative Districts (Lower/House) (SLDL)	State	Sldl
Urban Growth Areas (UGA)	County	Uga
Voting Districts – Census 2000 (VTD2000)	County	vtd2000
Voting Districts – Census 2000 (VTD2000)	State	vtd2000

Census Block Groups	County	Bg
Census Blocks – Current	County	Tabblock
Census Blocks – Census 2000	County	tabblock2000
Census Tracts	County	Curtracts
Census Designated Places (CDP)	County	Cdp
Census Designated Places (CDP)	State	Cdp
Consolidated Cities	County	Concity
Counties and Equivalent Areas	County	County
Counties and Equivalent Areas	State	County
County Subdivisions – Legal	County	Mcd
County Subdivisions – Statistical	County	Ccd
County Subdivisions	State	Mcd
Incorporated Places	County	Place
Incorporated Places	State	Place
States and Equivalent Areas	State	State
Subbarrios	County	Submcd
All Lines	County	Edges
Area Landmark	County	Arealm
Hydrography – Area	County	Water
Point Landmarks	County	Pointlm
RELATIONSHIP TABLES		
Topological Faces (Listing of faces with all geocodes)	County	Faces
Topological Faces - Area Landmark Relationship	County	Areafaces
Topological Faces - Area Hydrography Relationship	County	Hydrofaces
Address Ranges	County	Addr
Linear Feature Names	County	Allnames

C. Returned Files

The Census Bureau requires that the returned shapefiles have specific attributes and characteristics in order for us to accept and process them.

- All VTD returned shapefiles need to be county based and provide full coverage for that county.

- All State Legislative District Lower (SLDL), State Legislative District Upper (SLDU), and Congressional District (CD) returned shapefiles need to be county based and provide the full (within that county) coverage of any SLDL, SLDU, or CD that has changes.

- All returned VTD shapefiles should follow the naming structure detailed below.

File Naming Convention – Returned VTD County-based Files

County-Based RDP Shapefile Naming Convention =
RDP_<ST><COU>_VTD_WholeEntity.<ZZZ>
Where <ST> = FIPS State Code
Where <COU> = FIPS County Code
Where <ZZZ> = three letter file extension (shp, shx, dbf, prj)
Example: Maricopa County, Arizona's new VTD submission shapefile would be
RDP_04013_VTD_WholeEntity.shp
RDP_04013_VTD_ WholeEntity.shx
RDP_04013_VTD_ WholeEntity.dbf
RDP_04013_VTD_ WholeEntity .prj

- All returned SLDL, SLDU, or CD shapefiles should follow the naming structure detailed below.

File Naming Convention – Returned SLDL, SLDU, or CD County-based Files

County-Based RDP Shapefile Naming Convention =
RDP_<ST><COU>_<YYYY>_Changes.<ZZZ>
Where <ST> = FIPS State Code
Where <COU> = FIPS County Code
Where <YYYY> = the <layer>
Where <ZZZ> = three letter file extension (shp, shx, dbf, prj)
Example: Maricopa County, Arizona's modified SLDL shapefile would be
RDP_04013_SLDL_Changes.shp
RDP_04013_SLDL_Changes.shx
RDP_04013_SLDL_Changes.dbf
RDP_04013_SLDL_Changes.prj

- In addition to the area coverages (VTDs, SLDLs, SLDUs, and CDs) returned for each county, a single line (edge) shapefile must also be returned. This shapefile should contain all new lines, any pre-existing lines to be deleted, and any lines, new or pre-existing, with a 2010 Census Block Boundary Suggestion Project designation.

- All returned Line (Edges) shapefiles should follow the naming structure detailed below.

File Naming Convention – Returned Line (Edge) County-based Files

County-Based RDP Shapefile Naming Convention =
RDP_<ST><COU>_Ln_Changes.<ZZZ>
Where <ST> = FIPS State Code
Where <COU> = FIPS County Code
Where <ZZZ> = three letter file extension (shp, shx, dbf, prj)
Example: Maricopa County, Arizona's modified lines shapefile would be
RDP_04013_Ln_Changes.shp
RDP_04013_Ln_Changes.shx
RDP_04013_Ln_Changes.dbf
RDP_04013_Ln_Changes.prj

- All area coverages must conform to Census supplied geography wherever possible. In order to preserve the topology of the Census Bureau's MAF/TIGER database (MTDP), participants must conflate their geographies to the existing Census supplied geographies. Sample methodology is supplied later in this document.

- All required attribute fields must be populated in the returned (VTD, SLDL, SLDU, CD, and Ln (edges)) shapefiles. The required fields are in bold in the data dictionary at the end of this attachment.

- It is not required, but is highly desirable, for you to include your local coverage files. These can be very useful when questions arise and will speed up the disposition of any problems.

D. Including Imagery or Maps

To add or delete a physical feature requires providing imagery or a reliable map source to prove that the feature exists or no longer exists. You can add your own imagery as a layer, mail, or fax an image or map, or provide a URL to display an image or map.

- Digital Imagery must be in a geo-referenced format (.jpeg world file or .tiff image with associated .tiff world file, etc). If you also submit the imagery to the Census Bureau in support of your feature adds and deletes, be sure to include the state and county FIPS as part of the name.

- If you want to provide a paper image or a map, you can mail or fax it to your RCC office. (See RCC contact information in **Attachment C**.) Clearly label your image or map with the shape IDs of the line or lines it describes.

- To supply a URL to display an image or map, include it in a table with the associated shape IDs it describes.

V. Sample Methodology for Creating VTDs and Doing Block Boundary Suggestions Using Your Own Shapefile as the Source

A. Adding and Preparing Data

1. Start a project by bringing in and symbolizing the edges layer by type (road, rail, hydrography, etc.). Later in the VTD creation process, this will provide you with a feature reference for deciding which VTD a polygon should be assigned to if your file and the Census provided files do not exactly align. It is suggested that you symbolize the edges layer based on the MTFCC codes. A description of specific MTFCC codes can be found in Attachment I. The basic groupings of the MTFCC codes are as follows: Sxxxx = Roads; Rxxxx = Railroads; Pxxxx = Invisible Features; Lxxxx = Other Linear Features; and Hxxxx = Hydrography.

2. Once the edges are symbolized, bring in the provided VTD2000 shapefile.

3. Finally, bring in your own VTD shapefile (also known as the local VTD file). It is highly suggested that the local VTD file be re-projected to match that of the Census provided files prior to adding it to your project.

4. For definitions of key terms (e.g. faces = polygons, edges = line segments, etc.) used in the remaining instructions, please refer to Attachment H.

5. As with all computerized editing operations it is imperative that you save your work frequently.

B. VTD Creation Sample Methodology

1. Convert the edges shapefile to a polygon shapefile which these instructions will call the “primitive faces” shapefile. This layer in combination with the Census VTD2000 layer will enable the user to select polygons for inclusion in a particular voting district. It is important to note that the returned shapefile must have the same field structure as the VTD 2000 layer which is found in Section VI, Data Dictionary.

2. Delete all attribute fields from the “primitive faces” shapefile except those that provide the shapefile’s geometry. Note: There may or may not be additional fields to delete.

3. Perform a union between the primitive faces shapefile and the provided VTD2000 shapefile to create the “primitive VTD faces” shapefile. This creates a layer showing the individual polygons that comprise the Census provided VTD2000 layer.

4. Delete any attribute fields from the “primitive VTD faces” shapefile not found in the provided VTD2000 shapefile. A table listing the fields of the VTD2000 shapefile can be found in the Data Dictionary at the end of this attachment.

5. Select one of your local VTDs.

6. Use the “select by location” tool to select all “primitive VTD faces” that fall completely within the selected local VTD.

7. Open the attribute table of the “primitive VTD faces” shapefile.

8. For the selected polygons, calculate the following fields for each district you are trying to create: STATEFP00; COUNTYFP00; NEW_CODE; NEW_NAME; VTDI (A for actual, P for pseudo). Also, calculate the CHNG_TYPE for these records to be an “E” (new entity). This can be done by calculating these values for the selected polygons of the “primitive VTD faces” shapefile.

9. For the selected polygons, delete the values contained in the following fields: VTDST00; NAMELSAD; LSAD; EFF_DATE; NAME; VINTAGE; and FUNCSTAT.

10. Repeat for each local VTD until each district from your local file has been assigned. Some faces, if they are not completely within a single local VTD, will still not be assigned at this time. We will address these faces in the next step.

11. Review each remaining unassigned polygon in relation to the features in the edges shapefile and the local VTD file to determine which VTD it should belong to. It is very important at this stage to assign the faces based on equivalent bounding features between the edges shapefile and the local VTD shapefile. Simply basing these decisions on the spatial accuracy of the local file will cause the topological relationships between features and the VTDs to be broken and may result in misallocation of population. If a new boundary line must be added to split the primitive VTD face, use the editing functions to digitize the split and then assign each piece of the polygon to its appropriate VTD. Also, remember to populate the required attributes in the primitive VTD face shapefile for each piece that gets assigned.

12. If there are old VTDs in the “primitive VTD faces” shapefile that you want to keep, select them by their VTD code and then copy the NAME and VTDST00 fields into the NEW_NAME and NEW_CODE fields respectively. Also, calculate the VTDI and CHNG_TYPE fields as done previously.

13. Once you have copied the field values, delete the values contained in the following fields: VTDST00; NAMELSAD; LSAD; EFF_DATE; NAME; VINTAGE; and FUNCSTAT.

14. Check for unassigned polygons by screening for polygons with no value in the NEW_CODE field.

15. Once all the polygons have been assigned to VTDs, perform a dissolve on the "primitive VTD faces" shapefile using all of the fields as listed in the VTD2000 shapefile. This will dissolve the VTDs into single polygons while preserving all of the fields.

16. Check for discontiguous districts. If necessary, make corrections to the "primitive VTD faces" layer and re-perform the dissolve.

17. You now have your VTD coverage. Name this output shapefile RDP_<ssccc>_VTD_WholeEntity.* where the <ssccc> is the state and county FIPS code.

C. SLDL, SLDU, and CD Corrections Sample Methodology

1. The same methodology can be used to create SLDL, SLDU, and CD shapefiles for submitting corrections to those geographies to the Census Bureau. When submitting corrections to these geographies, remember they are only supposed to be changes to correct drafting errors. New plans or official changes should be coordinated through the Redistricting Data Office of the U.S. Census Bureau.

http://www.census.gov/rdo/about_the_program/009946.html)

2. SLDL, SLDU, and CD corrections should all get a CHNG_TYPE code of "B."

3. In any returned SLDL, SLDU, or CD shapefile, only include the districts that have lost or gained area. If a district has not changed, it should not be included in the returned file. The naming of these returned files is covered in the "**Returned Files"** section on page 17.

D. Creation of the "Changed Lines" Coverage

1. Make a copy of the edges shapefile for you to edit. This will be referred to as the edges shapefile copy.

2. If it is necessary to add linear features, digitize them into the edges shapefile copy. Provide each feature with a CHNG_TYPE of "AL" and an

MTFCC. See Attachment I for a list of MTFCC codes. Names may also be provided at this time.

3. If it is necessary to delete Census provided linear features, attribute each feature in the edges shapefile copy you want deleted with a CHNG_TYPE of "DL." **Do not actually delete the line.** It needs to be marked with a code, but not deleted, in order for it to be removed from the MTDB.

- **Adding Block Boundary Suggestions**

4. Once completing steps 1 through 3, change the symbology of the edges shapefile copy to differentiate between:

    - 2010 Census planned tabulation block boundaries (CBBFLG = 4)
    - Ineligible as 2010 Census tabulation block boundaries (CBBFLG = 9)
    - No designation (CBBFLG = null).

5. Provide block boundary suggestions by selecting features and coding as follows:

    - Must holds: 2010_BBSP = 1 and CHNG_TYPE = CA
    - Do not holds: 2010_BBSP = 2 and CHNG_TYPE = CA

6. Once all block boundaries are suggested, select by attribute to select all lines that have a value in the CHNG_TYPE field. Export the selected set of edges as the returned lines shapefile called RDP_<ssccc>_LN_Changes.* where the <ssccc> is the state and county FIPS code.

7. Convert the polygon coverage (RDP_<ssccc>_VTD_WholeEntity.*) to a line file. This file is for temporary use so can be named accordingly.

8. Perform an Erase on this temporary line file using the original edges shapefile. This leaves just the new lines that were added during the RDP_<ssccc>_VTD_WholeEntity.* shapefile's creation.

9. Use the editing tools to add the remaining lines from the temporary lines file to the RDP_<ssccc>_LN_Changes.* shapefile making sure to keep the attribute fields from the RDP_<ssccc>_LN_Changes.* shapefile.

10. Attribute these lines with the appropriate MTFCC (P0001 if it's an invisible legal/statistical boundary) code and the CHNG_TYPE = AL. Once this is completed, the RDP_<ssccc>_LN_Changes.* shapefile is ready for submission.

E. Submitting Files Using the Census Bureau's "Send a File Utility"

You can upload your files through Census Bureau's **Send a File Utility** at: http://www2.census.gov/cgi-bin/sendfile. Or, you can go to the Census Bureau's home page at www.census.gov and select:

- Subjects A-Z
- Access Data Tools
- Public file send utility

This utility allows file size up to 500 Mb. Your file should be a .zip file containing all the relevant county files you want to submit. If you do not have a .zip utility, zip creation software is included on your first data disc as fbzpack.exe. The zipped file should be named RDP_**SSCCC**_Return.zip where the **SS** is your state's two-digit FIPS code and **CCC** is the county's FIPS code for the county you are submitting.

Use the following steps to FTP your files to us:

1. Under **Source Information (Local)**, click on the **Browse** button to navigate to the file that you wish to send. Select the file from the Choose file window by clicking on it. Click **Open**. The **File to Send** field now contains the file name. **Note:** You can send only one file at a time.
2. In the **Target Information (Remote)** section, enter /**geo/VTD_BBSP/ST##_SS** in the Directory to Receive File, where ## = your state's two-digit FIPS code and **SS** = your state's two-letter USPS abbreviation.

   ***Examples*:** if you are California, ## = 06 and SS = CA; if you are Iowa, ## = 19 and SS = IA. If you are not sure what your state FIPS code or your USPS state abbreviation is, please click on the following link: http://www.itl.nist.gov/fipspubs/fip5-2.htm
3. Do not make an entry for **New File Name**.
4. Under **Notify by E-mail**, type your e-mail address in the Sender's E-mail Address field. In the Census Bureau Employee's E-Mail Address field, enter **GEO.Redistricting.list@census.gov**.

We are asking you to please send a **separate** e-mail to the same e-mail address using your regular e-mail account, to notify us when you have submitted updates for your state.

5. Then type in the Verification Code that you see (or numbers you hear) in the box on the screen.
6. After filling in all the fields correctly, click on **Upload**. If you find an error, click on **Clear** and repeat the steps.

Important Note!! If you must resubmit a file for any reason, you **must first rename the file**. If not, the utility will produce an error message. Please retain the default naming convention of **RDP_ssccc_Return** when you rename it. For example: RDP_42027_Return_revised.zip or RDP_42027_Return_2.zip.

We encourage you to call your RCC or headquarters staff (GEO or RDO) at anytime with any questions, comments, or concerns. Contact information can be found in **Section I. D**. of the **General Guidelines** for GEO and RDO staff, and in **Attachment C** for the RCC staff.

VI. Data Dictionary

Attribute Fields denoted by an asterix (*) are only present in the county level file and not the state level file.

Attribute Fields denoted in **bold** are the only fields that require updating for a returned shapefile, but all fields must be present and in order for a successful submission. (VTD, SLDL, SLDU, CD, and EDGES shapefiles)

-Alaska Native Regional Corporations (Alaska Only)-			
ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
STATEFP	2	String	FIPS State Code
COUNTYFP*	3	String	FIPS County Code
ANRCFP	5	String	FIPS ANRC Code (State Based)
ANRCCE	2	String	Current Census ANRC Code
NAMELSAD	100	String	Name with translated LSAD
LSAD	2	String	Legal/Statistical Area Description
AIANNHNS	8	String	ANSI numeric identifier for AIANNH Areas
FUNCSTAT	1	String	Functional Status
CLASSFP	2	String	FIPS55 class code describing entity
PARTFLG*	1	String	Part Flag Indicator
CHNG_TYPE	2	String	Type of area update
EFF_DATE	8	String	Effective Date or Vintage
DOCU	120	String	Supporting documentation
FORM_ID	4	String	Record ID for any boundary update
AREA	10	Numeric (3 decimal places)	Acreage of area update
RELATE	120	String	Relationship description
NAME	100	String	Name
VINTAGE	2	String	Vintage updated with returned data

-Alaska Native Regional Corporations (Alaska Only)-			
AIANHFSR	1	String	Flag indicating level of recognition of an American Indian, Alaska Native, or Native Hawaiian tribe or group.

-American Indian Areas – Legal -			
ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
STATEFP	2	String	FIPS State Code
COUNTYFP*	3	String	FIPS County Code
AIANNHCE	4	String	Census AIANNH Code
COMPTYP	1	String	Indicates if reservation (or equivalent) or off-reservation trust land is present, or both
AIANNHFSR	1	String	Flag indicating level of recognition of an American Indian, Alaska Native, or Native Hawaiian tribe or group.
NAMELSAD	100	String	Name with translated LSAD
AIANNHNS	8	String	ANSI numeric identifier for AIANNH Areas
LSAD	2	String	Legal/Statistical Area Description
FUNCSTAT	1	String	Functional Status
CLASSFP	2	String	FIPS55 class code describing entity
PARTFLG*	1	String	Part Flag Indicator
CHNG_TYPE	2	String	Type of area update
EFF_DATE	8	String	Effective Date or Vintage
DOCU	120	String	Supporting documentation
FORM_ID	4	String	Record ID for any boundary update
AREA	10	Numeric (3 decimal places)	Acreage of area update
RELATE	120	String	Relationship description
NAME	100	String	Name
VINTAGE	2	String	Vintage updated with returned data

-American Indian / Alaska Native Areas – Statistical-			
ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
STATEFP	2	String	FIPS State Code
COUNTYFP*	3	String	FIPS County Code
AIANNHCE	4	String	Census AIANNH Code
COMPTYP	1	String	Indicates if reservation (or equivalent) or off-reservation trust land is present, or both
AIANNHFSR	1	String	Flag indicating level of recognition of an American Indian, Alaska Native, or Native Hawaiian tribe or group.
NAMELSAD	100	String	Name with translated LSAD
AIANNHNS	8	String	ANSI numeric identifier for AIANNH Areas
LSAD	2	String	Legal/Statistical Area Description
FUNCSTAT	1	String	Functional Status
CLASSFP	2	String	FIPS55 class code describing entity
PARTFLG*	1	String	Part Flag Indicator
CHNG_TYPE	2	String	Type of area update
EFF_DATE	8	String	Effective Date or Vintage
RELATE	120	String	Relationship description
VINTAGE	2	String	Vintage updated with returned data
NAME	100	String	Name

-American Indian Tribal Subdivisions - Legal-			
ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
STATEFP	2	String	FIPS State Code
COUNTYFP*	3	String	FIPS County Code
AIANNHCE	4	String	Census AIANNH Code
TRIBSUBCE	1	String	Census Tribal subdivision
NAMELSAD	100	String	Name with translated LSAD
AIANNHNS	8	String	ANSI numeric identifier for AIANNH Areas
LSAD	2	String	Legal/Statistical Area Description

-American Indian Tribal Subdivisions - Legal-			
FUNCSTAT	1	String	Functional Status
CLASSFP	2	String	FIPS55 class code describing entity
PARTFLG*	1	String	Part Flag Indicator
CHNG_TYPE	2	String	Type of area update
EFF_DATE	8	String	Effective Date or Vintage
DOCU	120	String	Supporting documentation
FORM_ID	4	String	Record ID for any boundary update
AREA	10	Numeric (3 decimal places)	Acreage of area update
RELATE	120	String	Relationship description
NAME	100	String	Name
VINTAGE	2	String	Vintage updated with returned data
AIANNHFSR	1	String	Flag indicating level of recognition of an American Indian, Alaska Native, or Native Hawaiian tribe or group.

-American Indian Tribal Subdivisions - Statistical-			
ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
STATEFP	2	String	FIPS State Code
COUNTYFP*	3	String	FIPS County Code
AIANNHCE	4	String	Census AIANNH Code
TRIBSUBCE	1	String	Census Tribal subdivision
NAMELSAD	100	String	Name with translated LSAD
AIANNHNS	8	String	ANSI numeric identifier for AIANNH Areas
LSAD	2	String	Legal/Statistical Area Description
FUNCSTAT	1	String	Functional Status
CLASSFP	2	String	FIPS55 class code describing entity

-American Indian Tribal Subdivisions - Statistical-			
PARTFLG*	1	String	Part Flag Indicator
CHNG_TYPE	2	String	Type of area update
EFF_DATE	8	String	Effective Date or Vintage
DOCU	120	String	Supporting documentation
FORM_ID	4	String	Record ID for any boundary update
AREA	10	Numeric (3 decimal places)	Acreage of area update
RELATE	120	String	Relationship description
NAME	100	String	Name
VINTAGE	2	String	Vintage updated with returned data
AIANNHFSR	1	String	Flag indicating level of recognition of an American Indian, Alaska Native, or Native Hawaiian tribe or group.

-Congressional Districts-			
ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
STATEFP	**2**	**String**	**FIPS State Code**
COUNTYFP*	**3**	**String**	**FIPS County Code**
CDFP	**2**	**String**	**Congressional District Code**
CDTYP	1	String	Congressional District Type
NAMELSAD	100	String	Name with translated LSAD
LSAD	2	String	Legal/Statistical Area Description
CHNG_TYPE	**2**	**String**	**Type of Area Update**
EFF_DATE	8	String	Effective date or vintage
NEW_CODE	**2**	**String**	**New Congressional District Code**
RELTYPE1	2	String	Relationship Type 1
RELTYPE2	2	String	Relationship Type 2
RELTYPE3	2	String	Relationship Type 3
RELTYPE4	2	String	Relationship Type 4

-Congressional Districts-			
RELTYPE5	2	String	Relationship Type 5
REL_ENT1	8	String	Relationship Entity 1
REL_ENT2	8	String	Relationship Entity 2
REL_ENT3	8	String	Relationship Entity 3
REL_ENT4	8	String	Relationship Entity 4
REL_ENT5	8	String	Relationship Entity 5
RELATE	120	String	Relationship Description
CDSESSN	**3**	**String**	**Congressional District Session Code**
NAME	100	String	Name
VINTAGE	2	String	Vintage updated with returned data
FUNCSTAT	1	String	Functional Status

-Hawaiian Home Lands (Hawaii Only)-			
ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
STATEFP	2	String	FIPS State Code
COUNTYFP*	3	String	FIPS County Code
AIANNHCE	4	String	Census AIANNH Code
COMPTYP	1	String	Indicates if reservation (or equivalent) or off-reservation trust land is present, or both
NAMELSAD	100	String	Name with translated LSAD
AIANNHNS	8	String	ANSI numeric identifier for AIANNH Areas
LSAD	2	String	Legal/Statistical Area Description
FUNCSTAT	1	String	Functional Status
CLASSFP	2	String	FIPS55 class code describing entity
PARTFLG*	1	String	Part Flag Indicator
CHNG_TYPE	2	String	Type of area update
EFF_DATE	8	String	Effective Date or Vintage

-Hawaiian Home Lands (Hawaii Only)-			
DOCU	120	String	Supporting documentation
FORM_ID	4	String	Record ID for any boundary update
AREA	10	Numeric (3 decimal places)	Acreage of area update
RELATE	120	String	Relationship description
VINTAGE	2	String	Vintage updated with returned data
AIANNHFSR	1	String	Flag indicating level of recognition of an American Indian, Alaska Native, or Native Hawaiian tribe or group.
NAME	100	String	Name

-School Districts (Elementary, Secondary, Unified)-			
ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
STATEFP	2	String	FIPS State Code
COUNTYFP*	3	String	FIPS County Code
SDLEA	5	String	Current Local Education Agency Code
NAME	100	String	Name of School District
LSAD	2	Integer	Legal/Statistical Area Description
HIGRADE	2	String	Highest grade for which the district is financially responsible
LOGRADE	2	String	Lowest grade for which the district is financially responsible
PARTFLG*	1	String	Part Flag Indicator
POLYID	4	String	Record ID for each update polygon for linking back to the submission log
CHNG_TYPE	1	String	Type of area update
EFF_DATE	8	String	Effective Date or Vintage
RELATE	120	String	Relationship description
FUNCSTAT	3	String	Functional Status
VINTAGE	2	String	Vintage updated with returned data

-State Legislative Districts (Upper/Senate)-			
ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
STATEFP	**2**	**String**	**FIPS State Code**
COUNTYFP*	**3**	**String**	**FIPS County Code**
SLDUST	**3**	**String**	**SLD Upper Chamber Code**
NAMELSAD	100	String	Name with translated LSAD
LSAD	2	String	Legal/Statistical Area Description
PARTFLG*	1	String	Part Flag Indicator
CHNG_TYPE	**2**	**String**	**Type of area update**
EFF_DATE	8	String	Effective Date or Vintage
NEW_NAME	**100**	**String**	**New SLDU Name**
NEW_CODE	**3**	**String**	**New SLDU Code**
RELTYPE1	2	String	Relationship Type 1
RELTYPE2	2	String	Relationship Type 2
RELTYPE3	2	String	Relationship Type 3
RELTYPE4	2	String	Relationship Type 4
RELTYPE5	2	String	Relationship Type 5
REL_ENT1	8	String	Relationship Entity 1
REL_ENT2	8	String	Relationship Entity 2
REL_ENT3	8	String	Relationship Entity 3
REL_ENT4	8	String	Relationship Entity 4
REL_ENT5	8	String	Relationship Entity 5
RELATE	120	String	Relationship Description
LSY	**4**	**String**	**Legislative Session Year**
NAME	**100**	**String**	**Name**
VINTAGE	2	String	Vintage updated with returned data
FUNCSTAT	1	String	Functional Status

-State Legislative Districts (Lower/Senate)-			
ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
STATEFP	**2**	**String**	**FIPS State Code**
COUNTYFP*	**3**	**String**	**FIPS County Code**
SLDLST	**3**	**String**	**SLD Lower Chamber Code**
NAMELSAD	100	String	Name with translated LSAD
LSAD	2	String	Legal/Statistical Area Description
PARTFLG*	1	String	Part Flag Indicator
CHNG_TYPE	**2**	**String**	**Type of area update**
EFF_DATE	8	String	Effective Date or Vintage
NEW_NAME	**100**	**String**	**New SLDL Name**
NEW_CODE	**3**	**String**	**New SLDL Code**
RELTYPE1	2	String	Relationship Type 1
RELTYPE2	2	String	Relationship Type 2
RELTYPE3	2	String	Relationship Type 3
RELTYPE4	2	String	Relationship Type 4
RELTYPE5	2	String	Relationship Type 5
REL_ENT1	8	String	Relationship Entity 1
REL_ENT2	8	String	Relationship Entity 2
REL_ENT3	8	String	Relationship Entity 3
REL_ENT4	8	String	Relationship Entity 4
REL_ENT5	8	String	Relationship Entity 5
RELATE	120	String	Relationship Description
LSY	**4**	**String**	**Legislative Session Year**
NAME	100	String	Name
VINTAGE	2	String	Vintage updated with returned data
FUNCSTAT	1	String	Functional Status

-Urban Growth Areas (Washington Only)-			
ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
STATEFP	2	String	FIPS State Code
COUNTYFP	3	String	FIPS County Code
UGACE	5	String	Urban Growth Area Code
UGATYP	1	String	Urban Growth Area Type
NAMELSAD	100	String	Name with translated LSAD
LSAD	2	String	Legal/Statistical Area Description
PARTFLG	1	String	Part Flag Indicator
CHNG_TYPE	1	String	Type of Area Update
EFF_DATE	8	String	Effective Date or Vintage
AREA	10	Double	Acreage of Update
RELATE	120	String	Relationship Description
VINTAGE	2	String	Vintage updated with returned data
NAME	100	String	Name

-Voting Districts – Census 2000-			
ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
STATEFP00	**2**	**String**	**FIPS 2000 State Code**
COUNTYFP00	**3**	**String**	**FIPS 2000 County Code**
VTDST00	6	String	Voting District Code
NAMELSAD	100	String	Name with translated LSAD
VTDI	**1**	**String**	**Voting District Indicator**
LSAD	2	String	Legal/Statistical Area Description
CHNG_TYPE	**2**	**String**	**Type of area update**
EFF_DATE	8	String	Effective Date or Vintage
NEW_NAME	**100**	**String**	**New VTD Name**
NEW_CODE	**6**	**String**	**New VTD Code**

-Voting Districts – Census 2000-			
RELTYPE1	2	String	Relationship Type 1
RELTYPE2	2	String	Relationship Type 2
RELTYPE3	2	String	Relationship Type 3
RELTYPE4	2	String	Relationship Type 4
RELTYPE5	2	String	Relationship Type 5
REL_ENT1	8	String	Relationship Entity 1
REL_ENT2	8	String	Relationship Entity 2
REL_ENT3	8	String	Relationship Entity 3
REL_ENT4	8	String	Relationship Entity 4
REL_ENT5	8	String	Relationship Entity 5
RELATE	120	String	Relationship Description
NAME	100	String	Name
VINTAGE	2	String	Vintage updated with returned data
FUNCSTAT	1	String	Functional Status

-Census Block Groups-			
ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
STATEFP	2	String	FIPS State Code
COUNTYFP	3	String	FIPS County Code
TRACTCE	6	String	Census Tract Code
BLKGRPCE	1	String	Block Group Code
BLKGRPID	12	String	FIPS State Code, FIPS County Code, Census Tract Code, Block Group Code
CHNG_TYPE	2	String	Type of Area Update
EFF_DATE	8	String	Effective Date or Vintage
BGTYP	1	String	Block Group Characteristic Flag
RELATE	120	String	Relationship Description
VINTAGE	2	String	Vintage updated with returned data

-Census Blocks – Current-			
ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
STATEFP	2	String	FIPS State Code
COUNTYFP	3	String	FIPS County Code
STATEFP00	2	String	FIPS 2000 State Code
COUNTYFP00	3	String	FIPS 2000 County Code
TRACTCE00	6	String	Census Tract Code
BLOCKCE	4	String	Tabulation Block Number
SUFFIX1CE	2	String	Census Block Suffix 1
SUFFIX2CE	2	String	Census Block Suffix 2
BLOCKID	19	String	FIPS State Code, FIPS County Code, Census Tract Code, Tabulation Block Number, Census Block Suffix 1, Census Block Suffix 2

-Census Blocks – Census 2000-			
ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
STATEFP00	2	String	FIPS 2000 State Code
COUNTYFP00	3	String	FIPS 2000 County Code
TRACTCE00	6	String	Census Tract Code
BLOCKCE	4	String	Tabulation Block Number
BLOCKID00	15	String	FIPS State Code, FIPS County Code, Census Tract Code, Tabulation Block Number
PARTFLG	1	String	Part Flag Indicator
HOUSING00	9	Integer	2000 Housing
POP00	9	Integer	Census 2000 population count

-Census Tracts-			
ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
STATEFP	2	String	FIPS State Code
COUNTYFP	3	String	FIPS County Code
TRACTCE	6	String	Census Tract Code
NAME	100	String	Name

-Census Tracts-			
TRACTID	11	String	FIPS State Code, FIPS County Code, Census Tract Code
CHNG_TYPE	2	String	Type of area update
EFF_DATE	8	String	Effective Date or Vintage
TRACTTYP	1	String	Tract Characteristic Flag
RELATE	120	String	Relationship Description
TRACTLABEL	7	String	Tract number used for LUCA geocoding
VINTAGE	2	String	Vintage updated with returned data

-Census Designated Places-			
ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
STATEFP	2	String	FIPS State Code
COUNTYFP*	3	String	FIPS County Code
PLACEFP	5	String	FIPS 55 Place Code
PLACENS	5	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 an entity
PARTFLG	1	String	Part Flag Indicator
CHNG_TYPE	1	String	Type of Area Update
EFF_DATE	8	String	Effective Date or Vintage
RELATE	120	String	Relationship Description
NAME	100	String	Name
VINTAGE	2	String	Vintage updated with returned data

-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
CONCITYCE	4	String	Census Consolidated City 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
CHNG_TYPE	1	String	Type of Area Update
EFF_DATE	8	String	Effective Date or Vintage
DOCU	120	String	Supporting Documentation
FORM_ID	4	String	(MTPS and Web BAS only)
AREA	10	Double	Acreage of Update
RELATE	120	String	Relationship Description

-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

-County and Equivalent Areas Shapefile-			
FUNCSTAT	1	String	Functional Status
CLASSFP	2	String	FIPS 55 Class Code describing an entity
CHNG_TYPE	1	String	Type of area update
EFF_DATE	8	String	Effective Date or Vintage
DOCU	120	String	Supporting Documentation
FORM_ID	4	String	(MTPS / Web BAS only)
AREA	10	Double	Acreage of Area Update
RELATE	120	String	Relationship description

-County Subdivisions Shapefile – Legal (MCD)-			
ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
STATEFP	2	String	FIPS State Code
COUNTYFP	3	String	FIPS County Code
COUSUBFP	5	String	FIPS 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	1	String	Type of Area Update
EFF_DATE	8	String	Effective Date or Vintage
DOCU	120	String	Supporting Documentation
FORM_ID	4	String	(MTPS and Web BAS only)
AREA	10	Double	Acreage of Update
RELATE	120	String	Relationship Description
NAME	100	String	Name

-County Subdivisions Shapefile – Legal (MCD)-			
VINTAGE	2	String	Vintage updated with returned data

-County Subdivisions Shapefile –Statistical (CCD)-			
ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
STATEFP	2	String	FIPS State Code
COUNTYFP	3	String	FIPS County Code
COUSUBFP	5	String	FIPS 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	1	String	Type of Area Update
RELATE	120	String	Relationship Description
NAME	100	String	Name
VINTAGE	2	String	Vintage updated with returned data

-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 an entity

-Incorporated Place Shapefile-			
PARTFLG	1	String	Part Flag Indicator
CHNG_TYPE	1	String	Type of Area Update
EFF_DATE	8	String	Effective Date or Vintage
DOCU	120	String	Supporting Documentation
FORM_ID	4	String	(MTPS and Web BAS only)
AREA	10	Double	Acreage of Update
RELATE	120	String	Relationship Description
NAME	100	String	Name
VINTAGE	2	String	Vintage updated with returned data

-States and Equivalent Areas-			
ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
STATEFP	2	String	FIPS State Code
STATEUSPS	3	String	USPS State Abbreviation
NAME	10	Integer	Name
LSAD	5	String	Legal/Statistical Area Description
STATENS	120	String	ANSI feature code for the state

-Subbarrios-			
ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
STATEFP	2	String	FIPS State Code
COUNTYFP	3	String	FIPS County Code
COUSUBFP	5	String	FIPS County Subdivision Code
SUBMCDFP	5	String	FIPS Sub-minor Civil Division Code
NAMELSAD	100	String	Name with translated LSAD

-Subbarrios-			
SUBMCDNS	8	String	ANSI feature code for the sub-minor civil division
LSAD	2	String	Legal/Statistical Area Description
CHNG_TYPE	1	String	Type of Area Update
EFF_DATE	8	String	Effective Date or Vintage
AREA	10	Double	Acreage of Update
RELATE	120	String	Relationship Description
FORM_ID	4	String	(MTPS and Web BAS only)
NAME	100	String	Name
VINTAGE	2	String	Vintage updated with returned data
FUNCSTAT	1	String	Functional Status

-Edges (All Lines) Shapefile-			
ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
STATEFP	**2**	**String**	**State FIPS Code**
COUNTYFP	**3**	**String**	**County FIPS Code**
TLID	10	Integer	Permanent Edge ID
TFIDL	10	Integer	Permanent Face ID (Left)
TFIDR	10	Integer	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	120	String	Prefix qualifier code, prefix direction code, prefix type code, base name, suffix type code, suffix qualifier code
SMID	22	String	Spatial Tmeta ID
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
2010_BBSP	1	String	New BBSP flag

-Edges (All Lines) Shapefile-			
CHNG_TYPE	**2**	**String**	**Type of linear update**
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 Zip Code
ZIPR	5	String	Right Zip Code

-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	Prefix direction code, prefix type code, base name, suffix type code, suffix direction code
AREAID	10	Integer	Landmark identification number
ANSICODE	8	String	ANSI code for area landmarks
CHNG_TYPE	1	String	Type of Area Landmark update
EFF_DATE	8	String	Effective Date or Vintage
RELATE	120	String	Relationship description
BAG	3	String	Block Area Grouping

-Hydrography Area Shapefile-			
ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
STATEFP	2	String	FIPS State Code
COUNTYFP	3	String	FIPS County Code

-Hydrography Area Shapefile-			
ANSICODE	8	String	ANSI code for hydrography area
MTFCC	5	String	MAF/TIGER Feature Class Code
FULLNAME	120	String	Prefix direction code, prefix type code, base name, suffix type, suffix type code, suffix direction code
CHNG_TYPE	1	String	Type of Area Update
HYDROID	10	String	Hydrography Identification Number

-Point Landmarks Shapefile-			
ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
STATEFP	2	String	FIPS State Code
COUNTYFP	3	String	FIPS County Code
POINTID	10	Integer	Point Landmark Identification Number
MTFCC	5	String	MAF/TIGER Feature Class Code
FULLNAME	120	String	Prefix type code, base name, suffix type code
CHNG_TYPE	1	String	Type of Area Update

-Topological Faces – Geographic Entity Relationships Table-			
ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
TFID	20	Integer	Permanent Face ID
STATEFP	2	String	FIPS State Code
COUNTYFP	3	String	FIPS County Code
TRIBSUBCE	3	String	Census Tribal Subdivision
TTRACTCE	6	String	Tribal Census Tract Code
TBLKGRPCE	1	String	Tribal Census Block Group Code
AIANNHCE	4	String	Census AIANNH Code
COMPTYP	1	String	Indicates if reservation (or equivalent) or off-reservation trust land is present, or both
ANRCCE	5	String	FIPS ANRC Code
SLDUST	3	String	SLD Upper Chamber Code

-Topological Faces – Geographic Entity Relationships Table-			
SLDLST	3	String	SLD Lower Chamber Code
ELSD	5	String	Current ELSD Local Education Agency (LEA) Code
SCSD	5	String	Current SCSD Local Education Agency (LEA) Code
UNSD	5	String	Current UNSD Local Education Agency (LEA) Code
CDFP	2	String	Congressional District Code
TRACTCE	6	String	Census Tract Code
UACE	5	String	Census Urban Area Code
BLKGRPCE	1	String	Census Block Group Code
BLOCKCE	4	String	Tabulation Block Number
SUFFIX1CE	2	String	Census Block Suffix 1
SUFFIX2CE	2	String	Census Block Suffix 2
TAZCE	6	String	Traffic Analysis Zone Code
SUBMCDFP	5	String	FIPS 55 Sub-minor Civil Division Code
UGACE	5	String	Urban Growth Area Code
VTDST00	6	String	2000 Voting District Code
STATEFP00	2	String	FIPS 2000 State Code
COUNTYFP00	3	String	FIPS 2000 County Code
TRACTCE00	6	String	Census 2000 Tract Code
PLACEFP	5	String	FIPS 55 Place Code
COUSUBFP	5	String	FIPS 55 County Subdivision Code
CONCITYFP	5	String	FIPS 55 Place Code
LWFLG	1	String	Land/Water Flag

-Topological Faces – Area Landmark Relationships Table-			
ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
TFID	20	Integer	Permanent Face ID
AREAID	22	Integer	Object ID

-Topological Faces – Hydrography Area Relationships Table-			
ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
TFID	20	Integer	Permanent Face ID
HYDROID	22	Integer	Object ID

-Address Ranges Table -			
ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
TLID	22	Integer	TIGER Line 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 Indicator Flag
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

-Linear Feature Names Table -			
ATTRIBUTE FIELD	LENGTH	TYPE	DESCRIPTION
OID	22	Integer	Object ID
STATEFP	2	String	FIPS State Code
COUNTYFP	3	String	FIPS County Code
NAME	100	String	Name
PREDIR	2	String	Prefix Direction code component of feature name
PRETYP	3	String	Prefix Type code component of feature name
PREQUAL	2	String	Prefix Qualifier code component of feature name
SUFDIR	2	String	Suffix Direction code component of feature name
SUFTYP	3	String	Suffix Type code component of feature name
SUFQUAL	2	String	Suffix Qualifier code component of feature name
MTFCC	5	String	MAF/TIGER Feature Class Code
PAFLAG	1	String	Primary/Alternate flag

Attachment F

Reviewing Voting Districts in the American FactFinder

Version 1
February 2008

USCENSUSBUREAU

Helping You Make Informed Decisions

Reviewing Voting Districts in the American FactFinder

As part of Phase 2 of the 2000 Census Redistricting Data Program, the Census Bureau collected voting districts from participating states. As part of Phase 2 states could either submit voting districts, state legislative districts, or both. Forty-four states submitted voting districts. These districts were in effect during the 1998 election cycle. (See Figure 5)

Data and maps for these voting districts are available for review on the Census Bureau's American FactFinder (AFF). Within the AFF, the option to select voting districts will appear only if the state submitted boundaries during Phase 2 of the 2000 Census Redistricting Data Program.

To access the voting district information:

1. Go to the Census Bureau homepage at www.census.gov.
2. Select American FactFinder.
3. Select Data Sets – Decennial Census.
4. Scroll down. Select Census 2000 Redistricting Data (P.L 94-171) Summary File.
5. Select Detailed Tables, Quick Tables or Reference Maps.

Detailed Tables

Detailed tables provide the most detailed Census 2000 data for voting districts.

a. From the Select Geography Window (see Figure 1):
   - Select a geographic type: Voting District/Remainder
   - Select a state
   - Select a county
   - Select one or more voting districts (a selection will appear only if the state submitted voting districts during Phase 2 of the 2000 Census Redistricting Data Program)
   - Click Map It to view a map of the selection (optional)(see Figure 2)
   - Add the selection to the current geography selections box
   - Click Next

b. Next, from the Select Tables Window (see Figure 3):
   - Select a table of interest

- Add the selection to the current table selections box
- Click Show Result

Data for the selected detailed table will appear.

Quick Tables

Quick tables provide the most frequently requested Census 2000 data for voting districts.

a. From the Select Geography Window (see Figure 1):
    - Select a geographic type: Voting District/Remainder
    - Select a state
    - Select a county
    - Select one or more voting districts (a selection will appear only if the state submitted voting districts during Phase 2 of the 2000 Census Redistricting Data Program)
    - Click Map It to view a map of the selection (optional)(see Figure 2)
    - Add the selection to the current geography selections box
    - Click Next
b. From the Select Tables Window:
    - Select QT-PL. Race, Hispanic or Latino, and Age: 2000
    - Add the selection to the current table selections box
    - Click Show Result

Data for the Quick Table will appear.

Reference Maps

Reference maps illustrate the geographic boundaries and features of selected voting districts.

a. From the Reference Maps Window (see Figure 4):
    - Zoom into a state and then to the county or city containing the voting district
    - Change boundaries and features by clicking on the link in the upper left hand corner
    - Update the list by placing checks by the following boundaries: State, County, Place, 2000 Voting Districts

- Update the list by placing checks by the following labels: 2000 Voting Districts
- Click on the Features tab
- Update the list by placing checks by the following features: Major Roads, Streets, Streams
- Update the list by placing checks by the following labels: Streets
- Click Update
- Zoom in until you see the voting district of interest

Figure 1: Select Geography Window

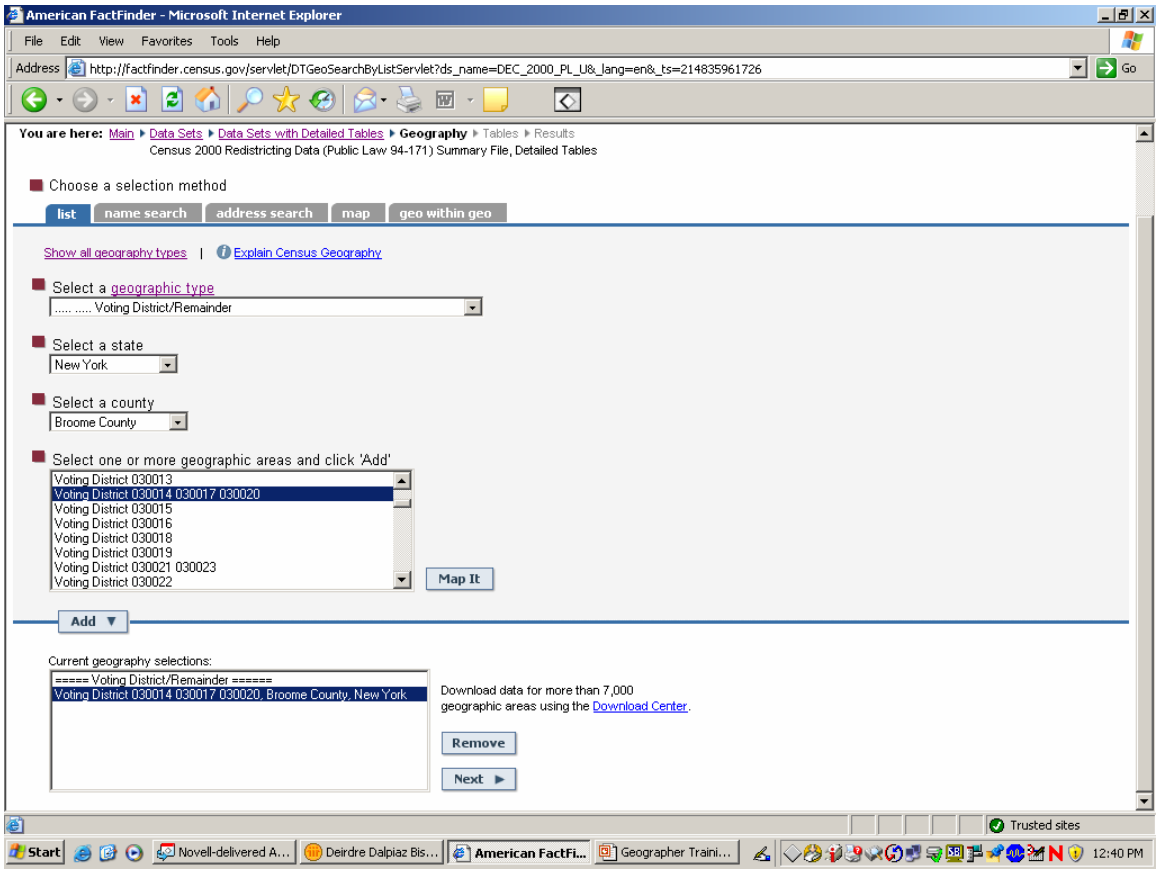


Figure 2: Map It Window

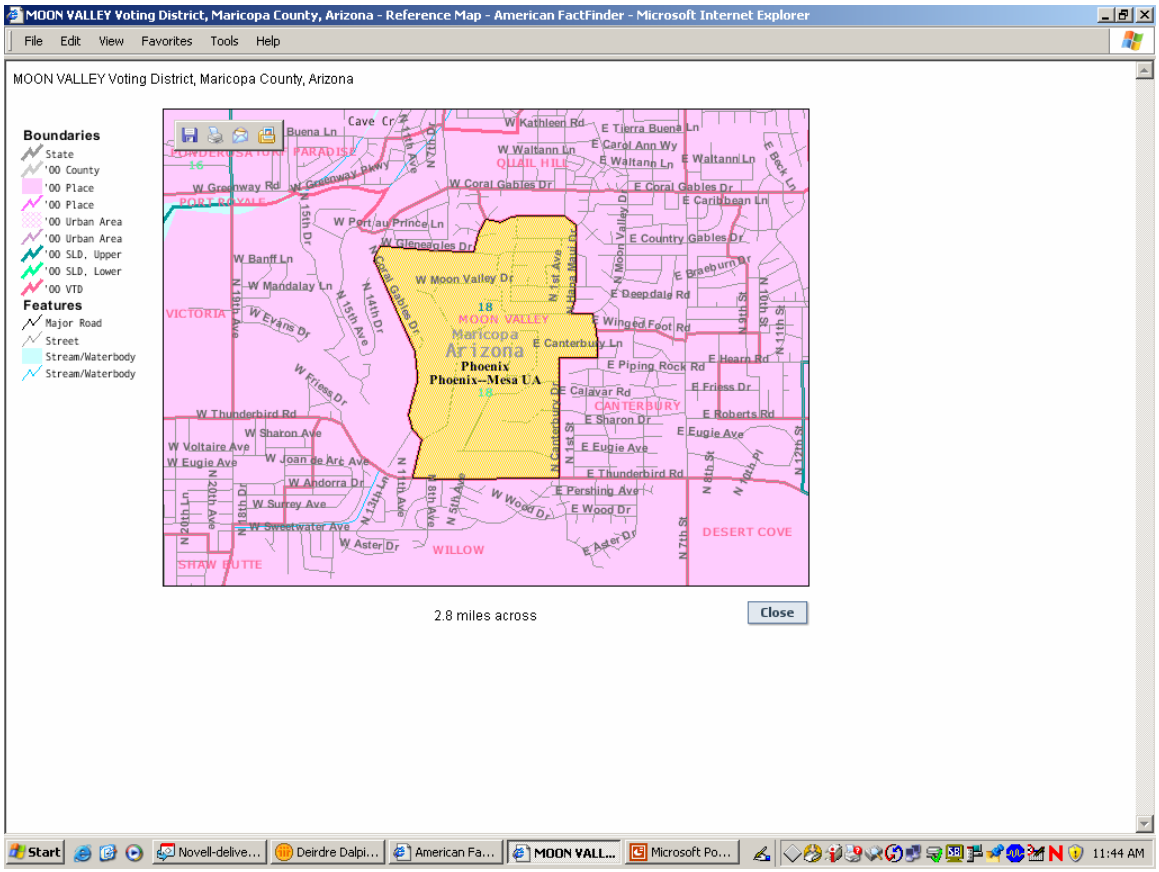


Figure 3: Select Tables Window

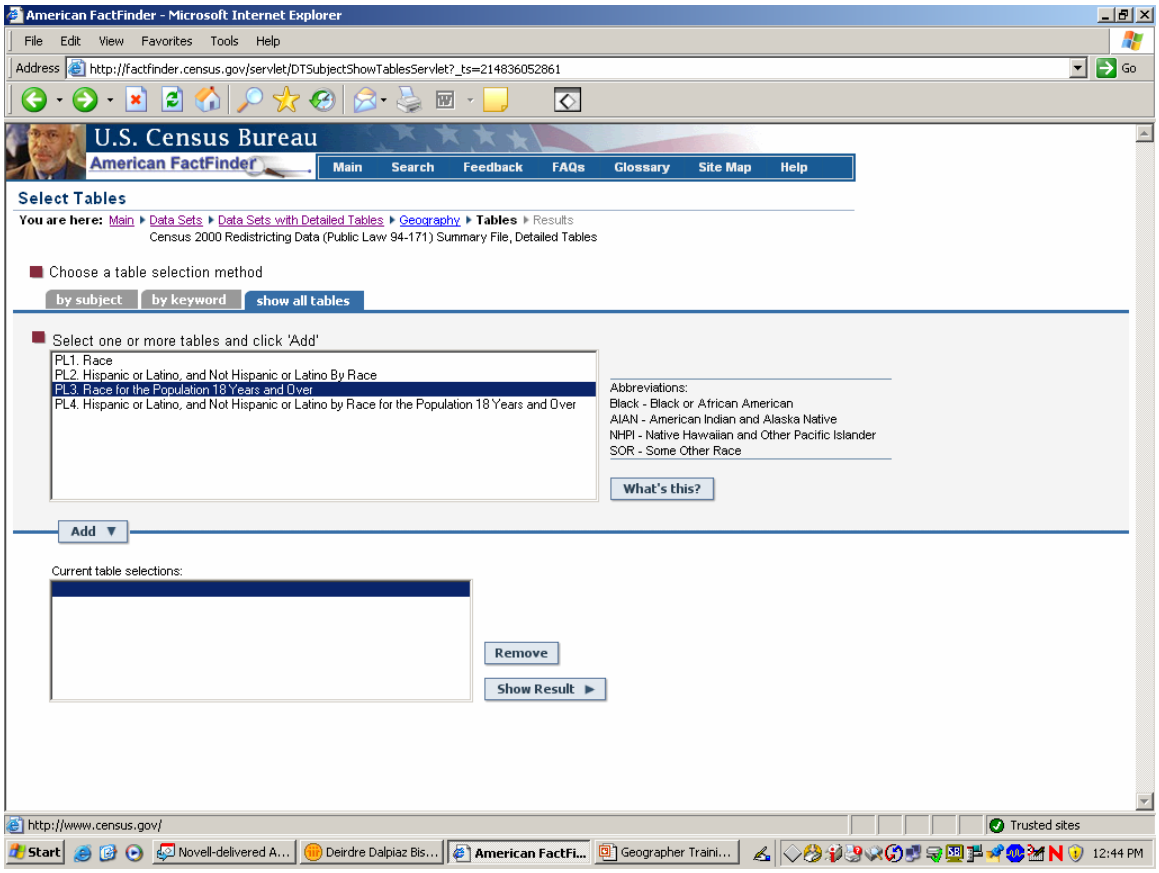


Figure 4: Reference Maps Window

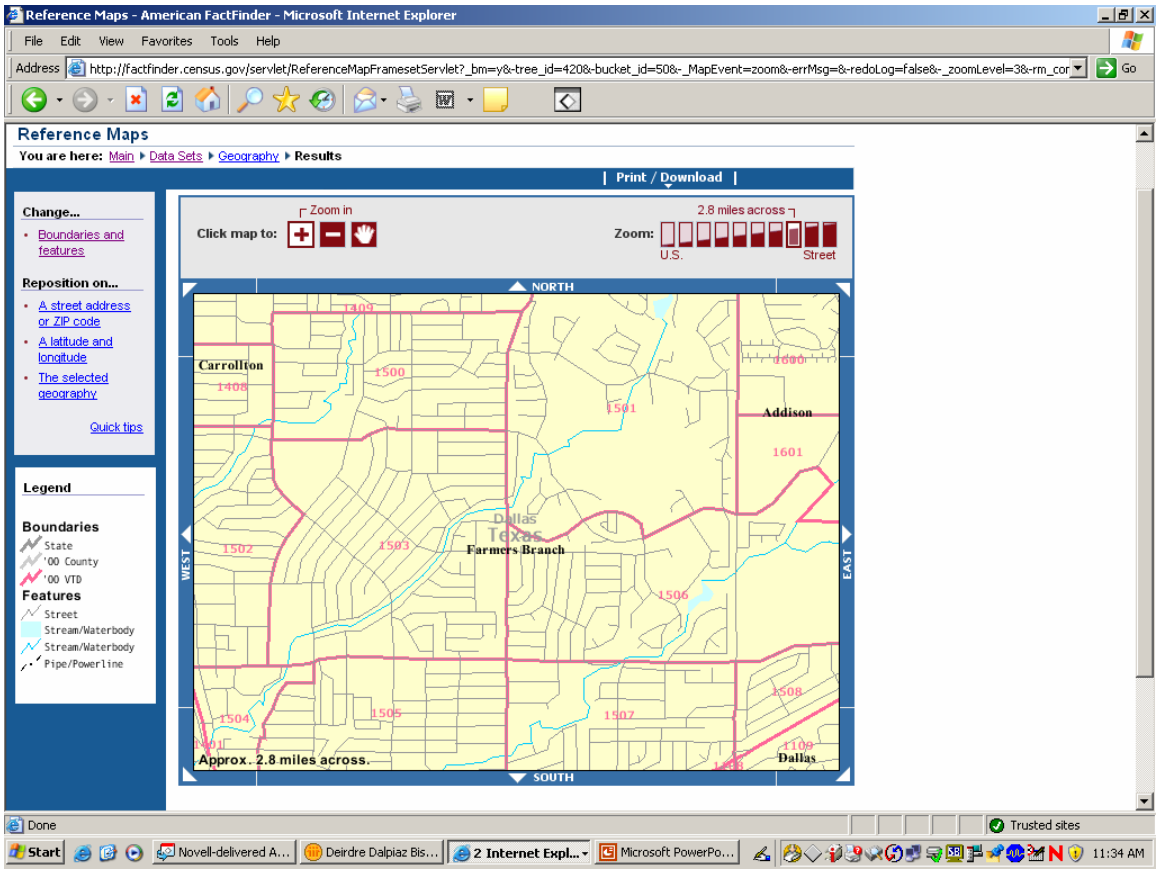


Figure 5:

Census 2000 Redistricting Data Program

State	Phase 1	Phase 2
X = State submitted all counties for this phase of the program P = State did not submit all counties for this phase of the program VTD = Voting District SLD = State Legislative District		
Alabama	X	X (VTD and SLD)
Alaska	X	X (VTD and SLD)
Arizona	**P**	**P** (VTD and SLD)
Arkansas	**P**	X (VTD only)
California	**P**	Did not participate
Colorado	X	X (VTD and SLD)
Connecticut	X	X (VTD and SLD)
Delaware	X	X (VTD and SLD)
District of Columbia	X	X (VTD only)
Florida	Did not participate	Did not participate
Georgia	X	X (VTD and SLD)
Hawaii	**P**	X (VTD only)
Idaho	**P**	X (VTD and SLD)
Illinois	X	X (VTD and SLD)
Indiana	X	X (VTD and SLD)
Iowa	X	X (VTD and SLD)
Kansas	X	X (VTD and SLD)
Kentucky	X	Did not participate
Louisiana	X	X (VTD and SLD)
Maine	**P**	X (VTD only)
Maryland	X	X (VTD only)
Massachusetts	**P**	X (VTD and SLD)
Michigan	X	X (VTD and SLD)
Minnesota	X	X (VTD only)
Mississippi	X	X (VTD and SLD)
Missouri	X	X (VTD and SLD)
Montana	**P**	Did not participate
Nebraska	X	X (VTD and SLD Unicameral)
Nevada	X	X (VTD and SLD)
New Hampshire	**P**	X (VTD and SLD Senate only)
New Jersey	X	X (VTD and SLD)
New Mexico	X	X (VTD and SLD)
New York	**P**	X (VTD and SLD)
North Carolina	**P**	X (VTD and SLD)
North Dakota	Did not participate	X (SLD only)
Ohio	X	X (SLD only)
Oklahoma	X	X (VTD and SLD)
Oregon	**P**	X (SLD only)
Pennsylvania	**P**	X (VTD and SLD)
Rhode Island	Did not participate	X (VTD and SLD)
South Carolina	X	X (VTD and SLD)
South Dakota	Did not participate	X (VTD and SLD)
Tennessee	**P**	X (VTD and SLD)
Texas	X	X (VTD only)
Utah	X	X (VTD and SLD)
Vermont	**P**	X (VTD and SLD)
Virginia	**P**	X (VTD and SLD)
Washington	**P**	X (VTD and SLD)
West Virginia	**P**	X (VTD and SLD)
Wisconsin	**P**	X (SLD only)
Wyoming	X	X (VTD and SLD)
Puerto Rico	**P**	X (VTD only)

Phase 1, the Block Boundary Suggestion Project (BBSP)
States assist in designing census blocks to correspond closely with local voting districts.

Phase 2, the Voting District Project (VTDP)
States submit voting district and state legislative district boundaries and associated information such as codes and names in order to receive Census 2000 data tabulations for these areas.

Attachment G

Web Viewer Instructions (Under development)

Version 1
February 2008

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Attachment H

Glossary of Key Terms

Version 1
February 2008

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2010 Census tabulation blocks Blocks determined in late 2010 that will be used to tabulate the data provided as part of the PL 94-171 data set. Bounded on all sides by visible and non-visible features and shown on Census Bureau maps and spatial data files, tabulation blocks are the lowest geographic level at which the Census Bureau tabulates short form data.

American Community Survey The American Community Survey is a new survey conducted by the Census Bureau. This survey uses a series of monthly samples to produce annually updated data for the same small areas (census tracts and block groups) as the decennial census long-form sample formerly surveyed.

American FactFinder The Census Bureau's data website and search tool located at www.census.gov (click on “American FactFinder” in the left menu).

American Indian off-reservation trust lands American Indian trust lands are areas for which the United States holds title in trust for the benefit of an American Indian tribe or for an individual American Indian. Trust land may be located on or off a reservation; however, the Census Bureau recognizes and tabulates data only for off-reservation trust land. Census data always associate off-reservation trust land with a specific federally recognized reservation and/or tribal government.

American Indian reservation A federal American Indian reservation is an area that has been set aside by the United States for the use of one or more federally recognized American Indian tribes. Its boundary is defined by tribal treaty, agreement, executive or secretarial order, federal statute, or judicial determination. The Census Bureau recognizes a federal reservation as territory over which a tribe(s) has primary governmental authority. A state American Indian reservation is an area that a state government has allocated to a tribe recognized by that state, but not by the federal government. American Indian reservations are known as colonies, communities, Indian communities, Indian villages, pueblos, rancherias, ranches, reservations, reserves, and villages.

Block area group (BAG) Islands grouped together for identification as a single 2010 Census tabulation block.

Boundary and Annexation Survey (BAS) An annual survey conducted by the Census Bureau to collect and maintain information on the inventory, status, boundaries, and names of all governmental units.

Congressional District (CD) Areas from which people are elected to the U.S. House of Representatives.

Edge Linear features.

Face Areal (polygon) features.

Feature A group of connected line segments with the same primary name and classification.

Feature extension A nonvisible line from the end of a road that extends at an angle of 180 degrees and is no longer than 300 feet in length and connects the road to a non-road feature.

Federal Information Processing Standards (FIPS) code Codes that are assigned for a variety of geographic entities, including American Indian area, Alaska Native area, Hawaiian home land, congressional district, county, county subdivision, metropolitan area, place, and state. The objective of FIPS codes is to improve the ability to use the data resources of the federal government and avoid unnecessary duplication and incompatibilities in the collection, processing, and dissemination of data.

Geographic Areas Branch (GAB) The branch in the Census Bureau's Geography Division responsible for supporting the geographic components of the Redistricting Data Program.

Geographic Information System (GIS) A collection of computer hardware, software, and geographic data for capturing, managing, analyzing, and displaying all forms of geographically referenced information

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 specific governmental services for a concentration of people within legally prescribed boundaries.

MAF/TIGER Accuracy Improvement Project (MTAIP) A Census Bureau project, conducted from 2003 to 2008, designed to improve the spatial quality of road features within the MAF/TIGER data base.

MAF/TIGER database (MTDB) Master Address File/Topologically Integrated Geographic Encoding and Referencing database, developed by the Census Bureau to support mapping and related geographic activities.

MAF/TIGER feature classification codes (MTFCC) A 5-digit code intended to classify and describe geographic objects or features.

MAF/TIGER Partnership Software (MTPS) Software developed under contract for the Census Bureau to support geographic update activities including the Phase 2 portion of the 2010 Census Redistricting Data Program—Voting District Project/Block Boundary Suggestion Project. Software will be distributed to all

participants. Census Bureau staff will train participants on the use of this software package.

Minor civil division (MCD) The primary governmental or administrative division of a county in many states.

MTPS Web Viewer A Module of the MTPS that allows participants to view Census Bureau and participant shapefiles on the WEB.

Node The end point of a line segment.

Noncontiguous Geographic areas that are not adjacent to one another and do not share a common boundary.

Nonvisible boundary Boundaries, such as city, town, township, and property lines that do not follow a physical feature.

PL 94-171 (Public Law 94–171 (Title 13, United States Code (U.S.C.), Section 141(c) Public law requiring the Director of the Census Bureau to provide the states with the opportunity to specify geographic areas, such as voting districts and state legislative districts, for which they wish to receive decennial census population totals.

Regional Census Center (RCC) Temporary offices set up approximately two years prior to the decennial census. The geographic staff from the permanent Regional Offices are assigned to the RCCs.

Redistricting Data Office (RDO) Census Bureau office responsible for the overall management of the Census Redistricting Data Program which include 5 phases. For more information go to; http://www.census.gov/rdo/

Redistricting Data Program (RDP) Census Bureau program designed to comply with the requirements of Public Law (P.L.) 94-171. The 2010 Census Redistricting Data Program will provide states the opportunity to delineate voting and state legislative districts and to suggest census block boundaries for use in the 2010 Census redistricting data tabulations (Public Law 94-171 Redistricting Data File).

The program also will ensure continued dialogue with the states in regard to 2010 Census planning, thereby allowing states ample time for planning, response, and participation.

Relationship (geographic) A geographic area that shares a boundary with one or more other geographic areas.

Shapefiles An ArcView GIS data set used to represent a set of geographic features such as streets, hospital locations, trade areas, and ZIP Code boundaries. Shapefiles can represent point, line, or area features. Each feature in a shapefile represents a single geographic feature and its attributes.

State legislative district (SLD) The areas from which members are elected to state legislatures. The SLDs embody the upper and lower chambers of the state legislature, most frequently referred to as senate and house respectively.

State liaison Person designated by the governor of each state to work with the Census Bureau on the Redistricting Data Program.

TerraServer-USA An on-line database of high resolution USGS aerial imagery and scanned USGS topographic maps maintained by Microsoft Corporation.

TIGER/Line spatial files TIGER spatial data in shapefile format.

Topology The mathematical relationship between points, lines, and areas in a spatial network.

Voting District/Block Boundary Suggestion Project (VTD/BBSP) Phase 2 of the Redistricting Data Program.

Attachment I
MAF/TIGER Feature Classification Codes (MTFCC)

CFCC (Legacy TIGER)	CFCC Description	MTFCC	MTFCC Description	Comments
A11	Primary road with limited access or interstate highway, unseparated	**S1100**	Primary Road	
A12	Primary road with limited access or interstate highway, unseparated, in tunnel	**S1100**	Primary Road	
A13	Primary road with limited access or interstate highway, unseparated, underpassing	**S1100**	Primary Road	
A14	Primary road with limited access or interstate highway, unseparated, with rail line in center	**S1100**	Primary Road	
A14	Primary road with limited access or interstate highway, unseparated, with rail line in center	**R1051**	Carline, Streetcar Track, Monorail, Other Mass Transit Rail — various forms of rail transport that have one or more than one track on which monorails or streetcars run. These tracks are typically in urban areas.	
A15	Primary road with limited access or interstate highway, separated	**S1100**	Primary Road	
A16	Primary road with limited access or interstate highway, separated, in tunnel	**S1100**	Primary Road	
A17	Primary road with limited access or interstate highway, separated, underpassing	**S1100**	Primary Road	
A18	Primary road with limited access or interstate highway, separated, with rail line in center	**S1100**	Primary Road	
A18	Primary road without limited access, US highways, unseparated, with rail line in center	**R1015**	Carline, Streetcar Track, Monorail, Other Mass Transit Rail — various forms of rail transport that have one or more than one track on which monorails or streetcars run. These tracks are typically in urban areas.	
A19	Primary road with limited access or interstate highway, bridge	**S1100**	Primary Road	
A21	Primary road without limited access, US highways, unseparated	**S1200**	Secondary Road	

CFCC (Legacy TIGER)	CFCC Description	MTFCC	MTFCC Description	Comments
A22	Primary road without limited access, US highways, unseparated, in tunnel	**S1200**	Secondary Road	
A23	Primary road without limited access, US highways, unseparated, underpassing	**S1200**	Secondary Road	
A24	Primary road without limited access, US highways, unseparated, with rail line in center	**S1200**	Secondary Road	
A24	Primary road without limited access, US highways, unseparated, with rail line in center	**R1015**	Carline, Streetcar Track, Monorail, Other Mass Transit Rail — various forms of rail transport that have one or more than one track on which monorails or streetcars run. These tracks are typically in urban areas.	
A25	Primary road without limited access, US highways, separated	**S1200**	Secondary Road	
A26	Primary road without limited access, US highways, separated, in tunnel	**S1200**	Secondary Road	
A27	Primary road without limited access, US highways, separated, underpassing	**S1200**	Secondary Road	
A28	Primary road without limited access, US highways, separated, with rail line in center	**S1200**	Secondary Road	
A28	Primary road without limited access, US highways, unseparated, with rail line in center	**R1015**	Carline, Streetcar Track, Monorail, Other Mass Transit Rail — various forms of rail transport that have one or more than one track on which monorails or streetcars run. These tracks are typically in urban areas.	
A29	Primary road without limited access, US highways, bridge	**S1200**	Secondary Road	
A31	Secondary and connecting road, state and county highways, unseparated	**S1200**	Secondary Road	
A32	Secondary and connecting road, state and county highways, unseparated, in tunnel	**S1200**	Secondary Road	
A33	Secondary and connecting road, state and county highways, unseparated, underpassing	**S1200**	Secondary Road	
A34	Secondary and connecting road, state and county highways, unseparated, with rail line in center	**S1200**	Secondary Road	

CFCC (Legacy TIGER)	CFCC Description	MTFCC	MTFCC Description	Comments
A34	Secondary and connecting road, state and county highways, unseparated, with rail line in center	**R1015**	Carline, Streetcar Track, Monorail, Other Mass Transit Rail — various forms of rail transport that have one or more than one track on which monorails or streetcars run. These tracks are typically in urban areas.	
A35	Secondary and connecting road, state and county highways, separated	**S1200**	Secondary Road	
A36	Secondary and connecting road, state and county highways, separated, in tunnel	**S1200**	Secondary Road	
A37	Secondary and connecting road, state and county highways, separated, underpassing	**S1200**	Secondary Road	
A38	Secondary and connecting road, state and county highways, separated, with rail line in center	**S1200**	Secondary Road	
A38	Secondary and connecting road, state and county highways, separated, with rail line in center	**R1015**	Carline, Streetcar Track, Monorail, Other Mass Transit Rail — various forms of rail transport that have one or more than one track on which monorails or streetcars run. These tracks are typically in urban areas.	
A39	Secondary and connecting road, state and county highways, bridge	**S1200**	Secondary Road	
A41	Local, neighborhood, and rural road, city street, unseparated	**S1400**	Local Neighborhood Road, Rural Road, City Street	
A42	Local, neighborhood, and rural road, city street, unseparated, in tunnel	**S1400**	Local Neighborhood Road, Rural Road, City Street	
A43	Local, neighborhood, and rural road, city street, unseparated, underpassing	**S1400**	Local Neighborhood Road, Rural Road, City Street	
A44	Local, neighborhood, and rural road, city street, unseparated, with rail line in center	**S1400**	Local Neighborhood Road, Rural Road, City Street	
A44	Local, neighborhood, and rural road, city street, unseparated, with rail line in center	**R1015**	Carline, Streetcar Track, Monorail, Other Mass Transit Rail — various forms of rail transport that have one or more than one track on which monorails or streetcars run. These tracks are typically in urban areas.	

CFCC (Legacy TIGER)	CFCC Description	MTFCC	MTFCC Description	Comments
A45	Local, neighborhood, and rural road, city street, separated	**S1400**	Local Neighborhood Road, Rural Road, City Street	
A46	Local, neighborhood, and rural road, city street, separated, in tunnel	**S1400**	Local Neighborhood Road, Rural Road, City Street	
A47	Local, neighborhood, and rural road, city street, separated, underpassing	**S1400**	Local Neighborhood Road, Rural Road, City Street	
A48	Local, neighborhood, and rural road, city street, separated, with rail line in center	**S1400**	Local Neighborhood Road, Rural Road, City Street	
A48	Local, neighborhood, and rural road, city street, separated, with rail line in center	**R1015**	Carline, Streetcar Track, Monorail, Other Mass Transit Rail — various forms of rail transport that have one or more than one track on which monorails or streetcars run. These tracks are typically in urban areas.	
A49	Local, neighborhood, and rural road, city street, bridge	**S1400**	Local Neighborhood Road, Rural Road, City Street	
A51	Vehicular trail, road passable only by 4WD vehicle, unseparated	**S1500**	Vehicular Trail (4WD)	
A52	Vehicular trail, road passable only by 4WD vehicle, unseparated, in tunnel	**S1500**	Vehicular Trail (4WD)	
A53	Vehicular trail, road passable only by 4WD vehicle, unseparated, underpassing	**S1500**	Vehicular Trail (4WD)	
A61	Cul-de-sac, the closed end of a road that forms a loop or turn-around	**C3061**	Cul de sac — A street that is closed at one end with a circular turnaround area and only one outlet	
A62	Traffic circle, the portion of a road or intersection of roads forming a roundabout	**C3062**	Traffic Circle — A circular intersection allowing for continuous movement of traffic at the meeting of roadways	
A63	Access ramp, the portion of a road that forms a cloverleaf or limited access interchange	**S1630**	Ramp	
A64	Service drive, the road or portion of a road that provides access to businesses, facilities, and rest areas along a limited-access highway; this frontage road may intersect other roads and be named	**S1640**	Service Drive usually along a limited access highway	

CFCC (Legacy TIGER)	CFCC Description	MTFCC	MTFCC Description	Comments
A65	Ferry crossing, the representation of a route over water that connects roads on opposite shores; used by ships carrying automobiles or people	**L4165**	Ferry Crossing	
A66	Gated barrier to travel (short definition is "gate")	**C3066**	Gate — A movable barrier across a road	
A67	Toll booth barrier to travel (short definition is "toll booth")	**C3067**	Toll booth — A structure or barrier where a fee is collected for using a road	
A70	Other thoroughfare, major category used when the minor category could not be determined	**S1710**	Walkway/Pedestrian Trail	
A71	Walkway or trail for pedestrians, usually unnamed	**S1710**	Walkway/Pedestrian Trail	
A72	Stairway, stepped road for pedestrians, usually unnamed	**S1720**	Stairway	
A73	Alley, road for service vehicles, usually unnamed, located at the rear of buildings and property	**S1730**	Alley	
A74	Private road or drive for service vehicles, usually privately owned and unnamed. Primary type of use is for logging or access to oil rigs, farms, or ranches	**S1740**	Private Road for service vehicles (logging, oil fields, ranches, etc.)	
B11	Railroad main track, not in tunnel or underpassing	**R1011**	Railroad Feature (Main, Spur, or Yard) — Rail feature refers to a line of fixed rails or tracks that form railways or railroads, spurs, and rail yards. They are used for the transport of passengers and goods.	
B12	Railroad main track, in tunnel	**R1011**	Railroad Feature (Main, Spur, or Yard)	
B13	Railroad main track, underpassing	**R1011**	Railroad Feature (Main, Spur, or Yard)	
B14	Abandoned/inactive rail line with tracks present	**R1011**	Railroad Feature (Main, Spur, or Yard)	
B15	Abandoned rail line with grade, but no tracks	**R1011**	Railroad Feature (Main, Spur, or Yard)	
B16	Abandoned rail line with track and grade information unknown	**R1011**	Railroad Feature (Main, Spur, or Yard)	
B19	Railroad main track, bridge	**R1011**	Railroad Feature (Main, Spur, or Yard)	
B21	Railroad spur track, not in tunnel or underpassing	**R1011**	Railroad Feature (Main, Spur, or Yard)	
B22	Railroad spur track, in tunnel	**R1011**	Railroad Feature (Main, Spur, or Yard)	
B23	Railroad spur track, underpassing	**R1011**	Railroad Feature (Main, Spur, or Yard)	

CFCC (Legacy TIGER)	CFCC Description	MTFCC	MTFCC Description	Comments
B29	Railroad spur track, bridge	**R1011**	Railroad Feature (Main, Spur, or Yard)	
B31	Railroad yard track, not in tunnel or underpassing	**R1011**	Railroad Feature (Main, Spur, or Yard)	
B32	Railroad yard track, in tunnel	**R1011**	Railroad Feature (Main, Spur, or Yard)	
B33	Railroad yard track, underpassing	**R1011**	Railroad Feature (Main, Spur, or Yard)	
B39	Railroad yard track, bridge	**R1011**	Railroad Feature (Main, Spur, or Yard)	
B40	Railroad ferry crossing, the representation of a route over water used by ships carrying train cars to connecting railroads on opposite shores. These are primarily located on the Great Lakes	**L4165**	Ferry Crossing	
B51	Carline, a track for streetcars, trolleys, and other mass transit rail systems; used when the carline is not part of the road right-of-way	**R1051**	Carline, Streetcar Track, Monorail, Other Mass Transit Rail — various forms of rail transport that have one or more than one track on which monorails or streetcars run. These tracks are typically in urban areas.	
B52	Cog railroad, incline railway, or logging tram	**R1052**	Cog Rail Line, Incline Rail Line, Tram — railways with a special toothed rack rail or rack mounted on the railroad ties between the running rails. The trains are fitted with one or more cog wheels that mesh with this rack rail. This allows the trains to operate on steeply inclined slopes. A Tram is a cable car, especially one suspended from an overhead cable, or a wheeled vehicle that runs on rails and is propelled by electricity.	
C10	Pipeline; major category used alone	**L4010**	Pipeline	
C20	Power transmission line; major category used alone	**L4020**	Powerline	
C31	Aerial tramway, monorail, or ski lift	**L4031**	Aerial Tramway/Ski Lift	'Monorail' split apart from 'Aerial Tramway' and 'Ski Lift'

CFCC (Legacy TIGER)	CFCC Description	MTFCC	MTFCC Description	Comments
		R1051	Carline, Streetcar Track, Monorail, Other Mass Transit Rail — Carline, Streetcar Track, Monorail, and other mass transit refer to various forms of rail transport that have one or more than one track on which monorails or streetcars run. These tracks are typically in urban areas.	
C32	Pier/dock a platform built out from the shore into the water and supported by piles; provides access to ships and boats	**K2432**	Pier/Dock	
D10	Military installation or reservation; major category used alone	**K2110**	Military Installation — This feature represents areas owned and/or occupied by the Department of Defense for use by a branch of the armed forces, including the Army, Navy, Air Force, Marines, Coast Guard, and includes state owned areas for the use of the National Guard.	
D21	Apartment building or complex	**K1121**	Apartment Building or Complex	
D22	Rooming or boarding house	**K1122**	Rooming or Boarding House	
D23	Trailer court or mobile home park	**K1223**	Trailer Court or Mobile Home Park	
D24	Marina	**K2424**	Marina	
D25	Crew-of-vessel area	**K1225**	Crew-of-Vessel Location	
D26	Housing facility for workers	**K1226**	Housing Facility/Dormitory for Workers	
D27	Hotel, motel, resort, spa, hostel, YMCA, or YWCA	**K1227**	Hotel, Motel, Resort, Spa, Hostel, YMCA, or YWCA	
D28	Campground	**K1228**	Campground	
D29	Shelter or mission	**K1229**	Shelter or Mission	
D31	Hospital, urgent care facility, clinic	**K1231**	Hospital/Hospice/Urgent Care Facility -- One or more structures where the sick or injured may receive medical or surgical attention (infirmary)	
D32	Halfway house	**K1232**	Halfway House/Group Home	
D33	Nursing home, retirement home, or home for the aged	**K1233**	Nursing Home, Retirement Home, or Home for the Aged	
D34	County home or poor farm	**K1234**	County Home or Poor Farm	

CFCC (Legacy TIGER)	CFCC Description	MTFCC	MTFCC Description	Comments
D35	Orphanage	**K1235**	Juvenile Institution	
D36	Jail or detention center	**K1236**	Local Jail or Detention Center	
D37	Federal penitentiary, state prison, or prison farm	**K1237**	Federal Penitentiary, State Prison, or Prison Farm	
D41	Sorority or fraternity	**K1241**	Sorority, Fraternity, or College Dormitory	
D42	Convent or monastery	**K1239**	Convent, Monastery, Rectory, Other Religious Group Quarters	
D43	Educational institution, including academy, school, college, and university	**K2543**	School or Academy — A building or group of buildings used as an institution for study, teaching, and learning (elementary school, high school)	'Educational Institution' split into two separate MTFCCs
		K2540	University or College — A building or group of buildings used as an institution for post-secondary study, teaching, and learning (seminary)	
D44	Religious institution including church, synagogue, seminary, temple, and mosque	**K2540**	University or College — A building or group of buildings used as an institution for post-secondary study, teaching, and learning (seminary)	'Seminaries' now belong with 'University or College'
		K3544	Place of Worship	
D45	Museum including visitor center, cultural center, or tourist attraction	**K2545**	Museum, Visitor Center, Cultural Center, or Tourist Attraction	
D46	Community Center	**K2146**	Community Center	
D50	Transportation terminal; major category used alone when the minor category could not be determined	**K2400**	Transportation Terminal	
D51	Airport or airfield	**K2451**	Airport or Airfield — A manmade facility maintained for the use of aircraft (airfield, airstrip, landing field, landing strip)	
D52	Train station including trolley and mass transit rail station	**K2452**	Train Station, Trolley or Mass Transit Rail Station	
D53	Bus terminal	**K2453**	Bus Terminal	
D54	Marine terminal	**K2454**	Marine Terminal	
D55	Seaplane anchorage	**K2455**	Seaplane Anchorage	

CFCC (Legacy TIGER)	CFCC Description	MTFCC	MTFCC Description	Comments
D56	Airport Intermodal Transportation Hub/Terminal site that allows switching of differing modes of transportation in the same facility	**K2456**	Airport - Intermodal Transportation Hub/Terminal	
D57	Airport – Statistical Representation used as part of urban area delineation where major airports are contiguous with urban areas	**K2457**	Airport - Statistical Representation	
D58	Park and ride facility/parking lot. A Park and Ride facility is designed to intercept automobiles at outlying locations along transit corridors (e.g., bus routes)	**K2458**	Park and Ride Facility /Parking Lot	
D60	Employment center; major category used alone when the minor category could not be determined	**K2300**	Commercial Workplace	
D61	Shopping center or major retail center	**K2361**	Shopping Center or Major Retail Center	
D62	Industrial building or industrial park including public and commercial storage, but excluding tank farms	**K2362**	Industrial Building or Industrial Park	
D63	Office building or office park	**K2363**	Office Building or Office Park	
D64	Amusement center including arena, auditorium, stadium, coliseum, race course, theme park, or shooting range	**K2564**	Amusement Center	
D65	Government center	**K2165**	Government Center	
D66	Other employment center	**K2366**	Other Employment Center	
D67	Convention Center	**K2167**	Convention Center	
D70	Towers, monuments and other vertical structures; major category used alone when minor category could not be determined	**C3070**	Tower/beacon — A manmade structure, higher than its diameter, generally used for observation, storage, or electronic transmission	
D71	Lookout tower	**C3071**	Lookout Tower — A manmade structure, higher than its diameter used for observation	
D72	Transmission tower including cell, radio and TV	**C3072**	Transmission Tower including cell, radio and TV -- A manmade structure, higher than its diameter used for electronic transmission	

CFCC (Legacy TIGER)	CFCC Description	MTFCC	MTFCC Description	Comments
D73	Water tower	**C3073**	Water Tower — A manmade structure, higher than its diameter used for water storage	
D74	Lighthouse beacon	**C3074**	Lighthouse Beacon — A manmade structure, higher than its diameter used for transmission of light generally to aid in navigation	
D75	Tank/tank farm with a number of liquid (petroleum, natural gas, etc.) tanks that are operated together as a depot for storage and distribution activities	**C3075**	Tank/Tank Farm — A manmade structure(s), higher than its diameter used for liquid (other than water) or gas storage	
D76	Windmill farm	**C3076**	Windmill Farm — A manmade structure(s) used to generate power from the wind	
D77	Solar farm	**C3077**	Solar Farm — A manmade structure(s) used to generate power from the sun	
D78	Monument or memorial	**C3078**	Monument or Memorial — A manmade structure to educate, commemorate, or memorialize an event, person, or feature	
D79	Survey or boundary monument	**C3079**	Boundary Monument Point — Material object placed on or near a boundary line to preserve and identify the location of the boundary line on the ground	
D80	Open space; major category used alone when the minor category could not be determined	**K2180**	Park — This feature represents parklands defined and administered by Federal, State and Local governments.	
D81	Golf course	**K2561**	Golf Course	
D82	Cemetery	**K2582**	Cemetery — A place or area for burying the dead (burial, burying ground, grave, memorial garden)	
D83	National Park Service land	**K2181**	National Park Service Land	
D84	National forest or other Federal land	**K2182**	National Forest or Other Federal Land	
D85	State or local park or forest	**K2183**	Tribal Park, Forest, or Recreation Area	'State or local park or forest' split into several separate MTFCCs
		K2184	State Park, Forest, or Recreation Area	

CFCC (Legacy TIGER)	CFCC Description	MTFCC	MTFCC Description	Comments
		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.)	
D86	Zoo	**K2586**	Zoo	
D87	Vineyard, winery, orchard or other agricultural or horticultural establishment	**K2364**	Farm/Vineyard/Winery/Orchard	
D88	Landfill, incinerator, dump, spoil, or other location for refuse (can be unnamed)	**C3088**	Landfill — A disposal facility at which solid waste is placed on or in the land	
E10	Fence line locating a visible and permanent fence between separately identified property	**L4110**	Fence Line	
E21	Ridge line, the line of highest elevation of a linear mountain	**L4121**	Ridge Line	
E22	Mountain peak, the point of highest elevation of a mountain	**C3022**	Mountain Peak or Summit — Prominent elevation rising above the surrounding level of the Earth's surface	
E23	Island, identified by name	**C3023**	Island — Area of dry or relatively dry land surrounded by water or low wetland (archipelago, atoll, cay, hammock, hummock, isla, isle, key, moku, rock)	
E24	Levee, an embankment, as of earth or concrete, used to prevent a river or other body of water from overflowing	**C3024**	Levee — Natural or manmade embankment flanking a stream (bank, berm)	
E25	Marsh/Swamp	**H2025**	Swamp/Marsh — A poorly drained wetland, fresh or saltwater, wooded or grassy, possibly covered with open water (bog, cienega, marais, marsh, pocosin)	

CFCC (Legacy TIGER)	CFCC Description	MTFCC	MTFCC Description	Comments
E26	Quarry (not water-filled), open pit mine or mine is a site where raw materials have been mined, and is generally unsuitable for residential use	**C3026**	Quarry (not water-filled), Open Pit Mine or Mine — Place or area from which commercial minerals are or were removed from the Earth; not including oilfield	
E27	Dam	**C3027**	Dam — Water barrier or embankment built across the course of a stream or into a body of water to control and (or) impound the flow of water (breakwater, dike, jetty)	
F10	Nonvisible jurisdictional boundary of a legal or administrative entity	**P0001**	Nonvisible Linear Legal/Statistical Boundary	
F11	Offset boundary of a legal entity	**P0001**	Nonvisible Linear Legal/Statistical Boundary	
F12	Corridor boundary of a legal entity	**P0001**	Nonvisible Linear Legal/Statistical Boundary	
F13	Nonvisible superseded 2000 legal boundary	**P0001**	Nonvisible Linear Legal/Statistical Boundary	
F14	Nonvisible superseded 1990 legal boundary	**P0001**	Nonvisible Linear Legal/Statistical Boundary	
F15	Nonvisible superseded 1990 legal boundary, corrected through post census process	**P0001**	Nonvisible Linear Legal/Statistical Boundary	
F16	Nonvisible superseded legal boundary, current at the time of the 1997 Economic Census	**P0001**	Nonvisible Linear Legal/Statistical Boundary	
F17	Nonvisible State Legislative District boundary	**P0001**	Nonvisible Linear Legal/Statistical Boundary	
F18	Nonvisible Congressional District boundary	**P0001**	Nonvisible Linear Legal/Statistical Boundary	
F19	Nonvisible corrected 2000 legal boundary	**P0001**	Nonvisible Linear Legal/Statistical Boundary	
F20	Nonvisible feature for database topology; major category used when the minor category could not be determined	**P0004**	Other non-visible bounding Edge (e.g., Census water boundary, boundary of an areal feature)	
F21	Automated feature extension to lengthen existing physical feature	**P0004**	Other non-visible bounding Edge (e.g., Census water boundary, boundary of an areal feature)	

CFCC (Legacy TIGER)	CFCC Description	MTFCC	MTFCC Description	Comments
F22	Irregular feature extension, determined manually, to lengthen existing physical feature	**P0004**	Other non-visible bounding Edge (e.g., Census water boundary, boundary of an areal feature)	
F23	Closure extension to complete database topological closure between extremely close features (used to close small gaps between complete chains and create polygons to improve block labeling on cartographic products)	**P0004**	Other non-visible bounding Edge (e.g., Census water boundary, boundary of an areal feature)	
F24	Nonvisible separation line used with offset and corridor boundaries	**P0004**	Other non-visible bounding Edge (e.g., Census water boundary, boundary of an areal feature)	
F25	Nonvisible centerline of area enclosed by corridor boundary	**P0004**	Other non-visible bounding Edge (e.g., Census water boundary, boundary of an areal feature)	
F30	Point-to-point line, follows a line of sight and should not cross any visible feature; for example, from the end of a road to a mountain peak	**L4130**	Point-to-Point Line	
F40	Property line, nonvisible boundary of either public or private lands, e.g., a park boundary	**L4140**	Property/Parcel Line (Including PLSS)	
F41	Public Land Survey System or equivalent survey line (not used as a boundary)	**L4140**	Property/Parcel Line (Including PLSS)	
F50	ZIP Code® tabulation area (ZCTA™) boundary, used in delineating ZCTAs™	**P0001**	Nonvisible Linear Legal/Statistical Boundary	
F70	Statistical boundary; major category used when the minor category could not be determined	**P0001**	Nonvisible Linear Legal/Statistical Boundary	
F71	1980 statistical boundary	**P0001**	Nonvisible Linear Legal/Statistical Boundary	
F72	1990 statistical boundary; used to hold 1990 collection and tabulation census block boundaries not represented by existing physical features	**P0001**	Nonvisible Linear Legal/Statistical Boundary	
F74	1990 statistical boundary; used to hold a 1990 tabulation census block boundary not represented by an existing physical feature	**P0001**	Nonvisible Linear Legal/Statistical Boundary	

CFCC (Legacy TIGER)	CFCC Description	MTFCC	MTFCC Description	Comments
F80	Nonvisible other tabulation boundary; major category used when the minor category could not be determined	**P0001**	Nonvisible Linear Legal/Statistical Boundary	
F81	School district boundary	**P0001**	Nonvisible Linear Legal/Statistical Boundary	
F83	Census 2000 collection block boundary; used to hold Census 2000 collection block boundaries not represented by existing physical features	**P0001**	Nonvisible Linear Legal/Statistical Boundary	
F84	Census 2000 statistical area boundary; used to hold Census 2000 statistical area boundaries not represented by existing physical features	**P0001**	Nonvisible Linear Legal/Statistical Boundary	
F85	Census 2000 tabulation block boundary; used to hold Census 2000 tabulation block boundaries not represented by existing physical features	**P0001**	Nonvisible Linear Legal/Statistical Boundary	
F87	Oregon urban growth area boundary	**P0001**	Nonvisible Linear Legal/Statistical Boundary	
F88	Current statistical area boundary	**P0001**	Nonvisible Linear Legal/Statistical Boundary	
H01	Shoreline of perennial water feature	**P0002**	Perennial Shoreline	
H02	Shoreline of intermittent water feature	**P0003**	Intermittent Shoreline	
H10	Stream or river; major category used when the minor category could not be determined	**H3010**	Stream/River — A linear body of water flowing on the Earth's surface (anabranch, awawa, bayou, branch, brook, creek, distributary, fork, kill, pup, rio, river, run, slough)	
H11	Perennial stream or river	**H3010**	Stream/River — A linear body of water flowing on the Earth's surface (anabranch, awawa, bayou, branch, brook, creek, distributary, fork, kill, pup, rio, river, run, slough)	
H12	Intermittent stream, river, or wash	**H3010**	Stream/River — A linear body of water flowing on the Earth's surface (anabranch, awawa, bayou, branch, brook, creek, distributary, fork, kill, pup, rio, river, run, slough)	

CFCC (Legacy TIGER)	CFCC Description	MTFCC	MTFCC Description	Comments
H13	Braided stream or river	**H3013**	Braided Stream — A body of water flowing on the Earth's surface that is separated into multiple channels	
H20	Canal, ditch, or aqueduct; major category used when the minor category could not be determined	**H3020**	Canal, Ditch or Aqueduct — A manmade waterway used by watercraft or for drainage, irrigation, mining, or water power (ditch, lateral)	
H21	Perennial canal, ditch, or aqueduct	**H3020**	Canal, Ditch or Aqueduct — A manmade waterway used by watercraft or for drainage, irrigation, mining, or water power (ditch, lateral)	
H22	Intermittent canal, ditch, or aqueduct	**H3020**	Canal, Ditch or Aqueduct — A manmade waterway used by watercraft or for drainage, irrigation, mining, or water power (ditch, lateral)	
H30	Lake or pond; major category used when the minor category could not be determined	**H2030**	Lake/Pond — A natural body of inland water (backwater, lac, lagoon, laguna, pond, pool, resaca, waterhole)	
H31	Perennial lake or pond	**H2030**	Lake/Pond — A natural body of inland water (backwater, lac, lagoon, laguna, pond, pool, resaca, waterhole)	
H32	Intermittent lake or pond	**H2030**	Lake/Pond — A natural body of inland water (backwater, lac, lagoon, laguna, pond, pool, resaca, waterhole)	
H40	Reservoir; major category used when the minor category could not be determined	**H2040**	Reservoir — An artificially impounded body of water (lake, tank)	
H41	Perennial reservoir	**H2040**	Reservoir — An artificially impounded body of water (lake, tank)	
H42	Intermittent reservoir	**H2040**	Reservoir — An artificially impounded body of water (lake, tank)	
H43	Treatment pond	**H2041**	Treatment Pond — An artificial body of water built to treat fouled water	
H51	Bay, estuary, gulf, or sound	**H2051**	Bay/Estuary/Gulf/Sound — A body of water partly surrounded by land (arm, bight, cove, inlet)	

CFCC (Legacy TIGER)	CFCC Description	MTFCC	MTFCC Description	Comments
H53	Sea or ocean	**H2053**	Ocean/Sea — Large body of salt water (gulf, ocean)	
H60	Gravel pit or quarry filled with water	**H2060**	Gravel Pit/Quarry filled with water —	
H70	Nonvisible water area definition boundary; used to separate named water areas and as the major category when the minor category could not be determined	**P0004**	Other non-visible bounding Edge (e.g., Census water boundary, boundary of an areal feature)	
H74	Census water boundary separating inland from coastal or Great Lakes; used as an area measurement line	**P0004**	Other non-visible bounding Edge (e.g., Census water boundary, boundary of an areal feature)	
H75	Census water boundary separating coastal water from territorial sea at the 3-mile limit; used as an area measurement line	**P0004**	Other non-visible bounding Edge (e.g., Census water boundary, boundary of an areal feature)	
H76	Artificial path through double line hydrography, from the US Geological Survey feature in the National Hydrography Dataset (NHD)	**H1100**	Connector — A known, but nonspecific, hydrographic connection between two nonadjacent water features.	Features that previously would have received an 'H76' CFCC will now typically be assigned the MTFCC of a connecting non-Artificial Path linear water feature.
		H3010	Stream/River — A linear body of water flowing on the Earth's surface (anabranch, awawa, bayou, branch, brook, creek, distributary, fork, kill, pup, rio, river, run, slough)	
		H3013	Braided Stream — A body of water flowing on the Earth's surface that is separated into multiple channels	
		H3020	Canal, Ditch or Aqueduct — A manmade waterway used by watercraft or for drainage, irrigation, mining, or water power (ditch, lateral)	

CFCC (Legacy TIGER)	CFCC Description	MTFCC	MTFCC Description	Comments
H77	Artificial path through double line hydrography, from any source OTHER than the US Geological Survey, National Hydrography Dataset	**H1100**	Connector — A known, but nonspecific, hydrographic connection between two nonadjacent water features.	Features that previously would have received an 'H77' CFCC will now typically be assigned the MTFCC of a connecting non-Artificial Path linear water feature.
		H3010	Stream/River — A linear body of water flowing on the Earth's surface (anabranch, awawa, bayou, branch, brook, creek, distributary, fork, kill, pup, rio, river, run, slough)	
		H3013	Braided Stream — A body of water flowing on the Earth's surface that is separated into multiple channels	
		H3020	Canal, Ditch or Aqueduct — A manmade waterway used by watercraft or for drainage, irrigation, mining, or water power (ditch, lateral)	
H81	Glacier	**H2081**	Glacier — an area of relatively permanent snow or ice on the top or side of a mountain or mountainous area (ice field, ice patch, snow patch)	
N/A		**C3080**	Survey Control Point — Point on the ground whose position (horizontal or vertical) is known and can be used as a base for additional survey work	
N/A		**C3081**	Locality Point — Points that identify locations and names of unbounded localities e.g., crossroads, community names, names from the Geographic Names Information System (GNIS).	
N/A		**K1238**	Other Correctional Institution	
N/A		**K2100**	Governmental	
N/A		**K2459**	Runway/Taxiway	

CFCC (Legacy TIGER)	CFCC Description	MTFCC	MTFCC Description	Comments
N/A		**K2460**	Helicopter Landing Pad	
N/A		**L4040**	Conveyor	
N/A		**L4125**	Cliff/Escarpment — A very steep or vertical slope (bluff, crag, head, headland, nose, palisades, precipice, promontory, rim, rimrock)	
N/A		**S1780**	Parking Lot Road	
N/A		**S1820**	Bike Path or Trail	
N/A		**S1830**	Bridle Path	
N/A		**S2000**	Road Median	

Special Cases #1-----These include situations where a CFCC corresponds to multiple MTFCCs simultaneously. So a former CFCC of A14 would now be represented as both S1100 and R1051 MTFCCs.

Special Cases #2-----These include situations where a CFCC corresponds to one MTFCC, but the MTFCC may differ depending on the situation. The CFCC does not correspond to multiple MTFCCs simultaneously. See Comments field.

Attachment J

Installing MTPS and County Data on to Local Network Server

Version 1
October 2008

USCENSUSBUREAU

Helping You Make Informed Decisions

A. Install MTPS on to Local Network Server

To install the MTPS on to a local network server for a designated PC, follow the steps below. Note that only one designated PC can access the local network server at any particular time.

1) Create a state Destination Folder (MTPS directory) named STXX_MTPS on a selected local network server. (XX = FIPS state code)

2) Place the MTPS installation disc in the drive of the respective designated PC that connects to the network.

3) When installing MTPS, select the radio button for "Install/MAF/TIGER Partnership Software and Data for a Single User"

4) Install the MTPS software to the default destination; C\Program Files\MAF – TIGER Partnership Software.

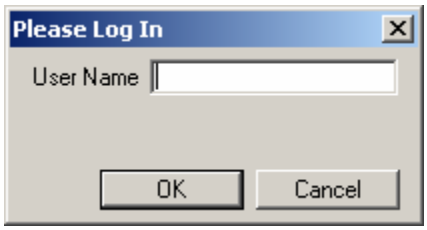
5) Install the "MTPSData" browsing to the Destination Folder recently created on the selected local network server.

6) Start the installation to the selected Destination Folder on the local network server.

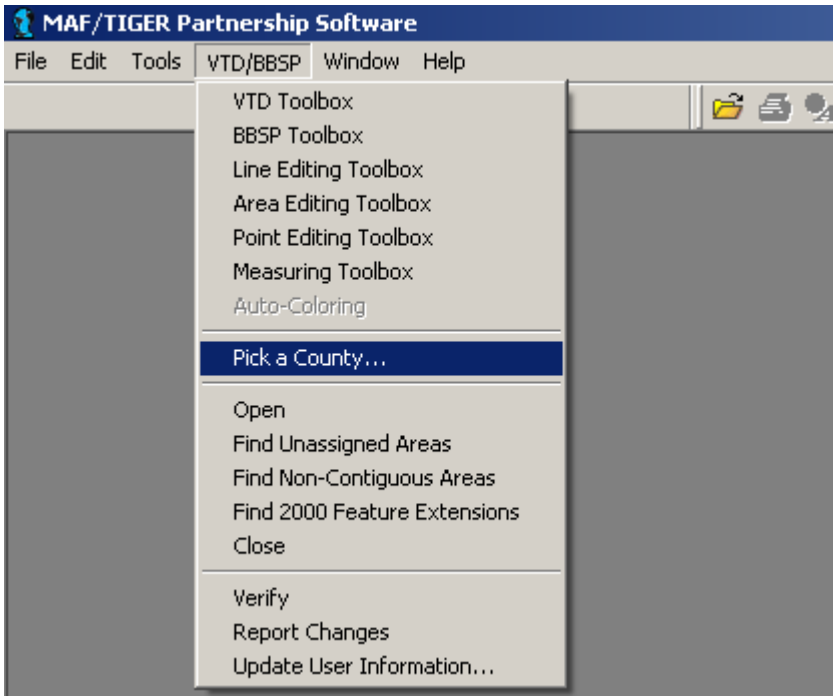
B. Importing the State Submitted File into the MTPS on the Local Network Server

To import the state working submission file into the MTPS on the local network server for a designated PC, follow the steps below.

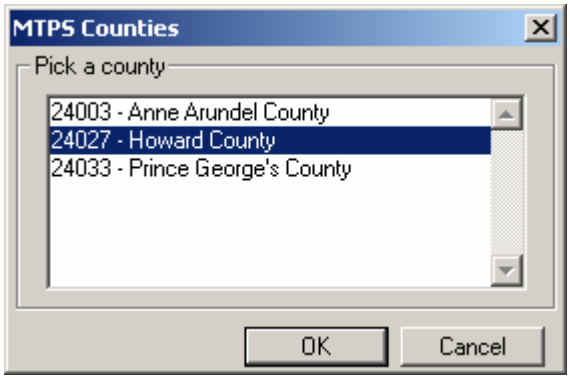
1) Create a fresh import to the MTPS of the county to work. If the county has never been opened on the PC, open and log-in to the MTPS.



2) Use the “VTD/BBSP” pull down menu to select the “Pick a County” command.



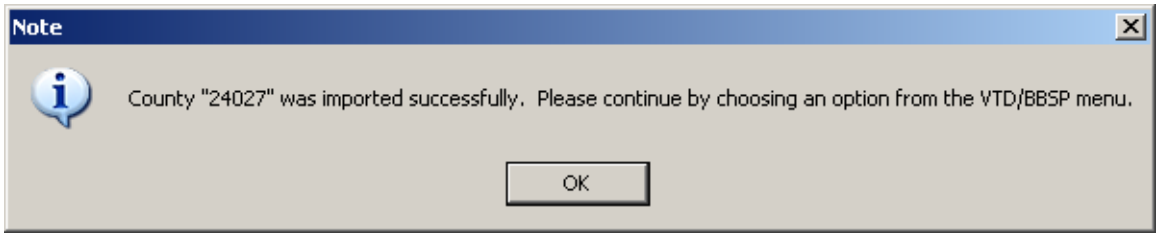
3) In the “Pick a County” window that opens, choose the county to work.



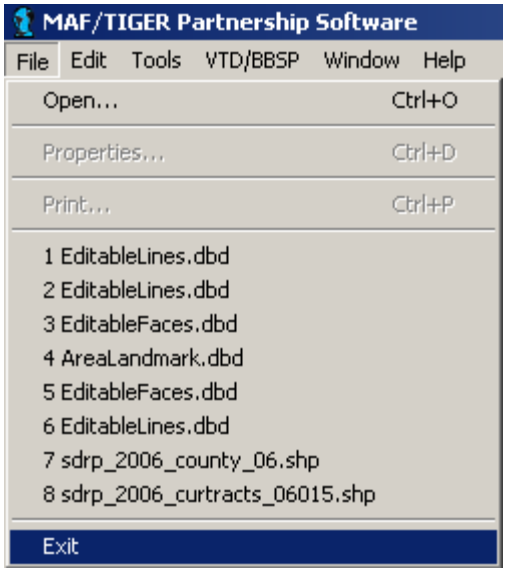
4) Since this county has not been “worked”, the MTPS has to import the county to create the editable files and map layout. The MTPS warns about being slowed by resident anti-virus software. It is not necessary to turn off any anti-virus software. Click “OK” to allow the import to proceed.

5) The software imports the county to work review.

6) Once the county's import is complete, click "OK" to close the import window.

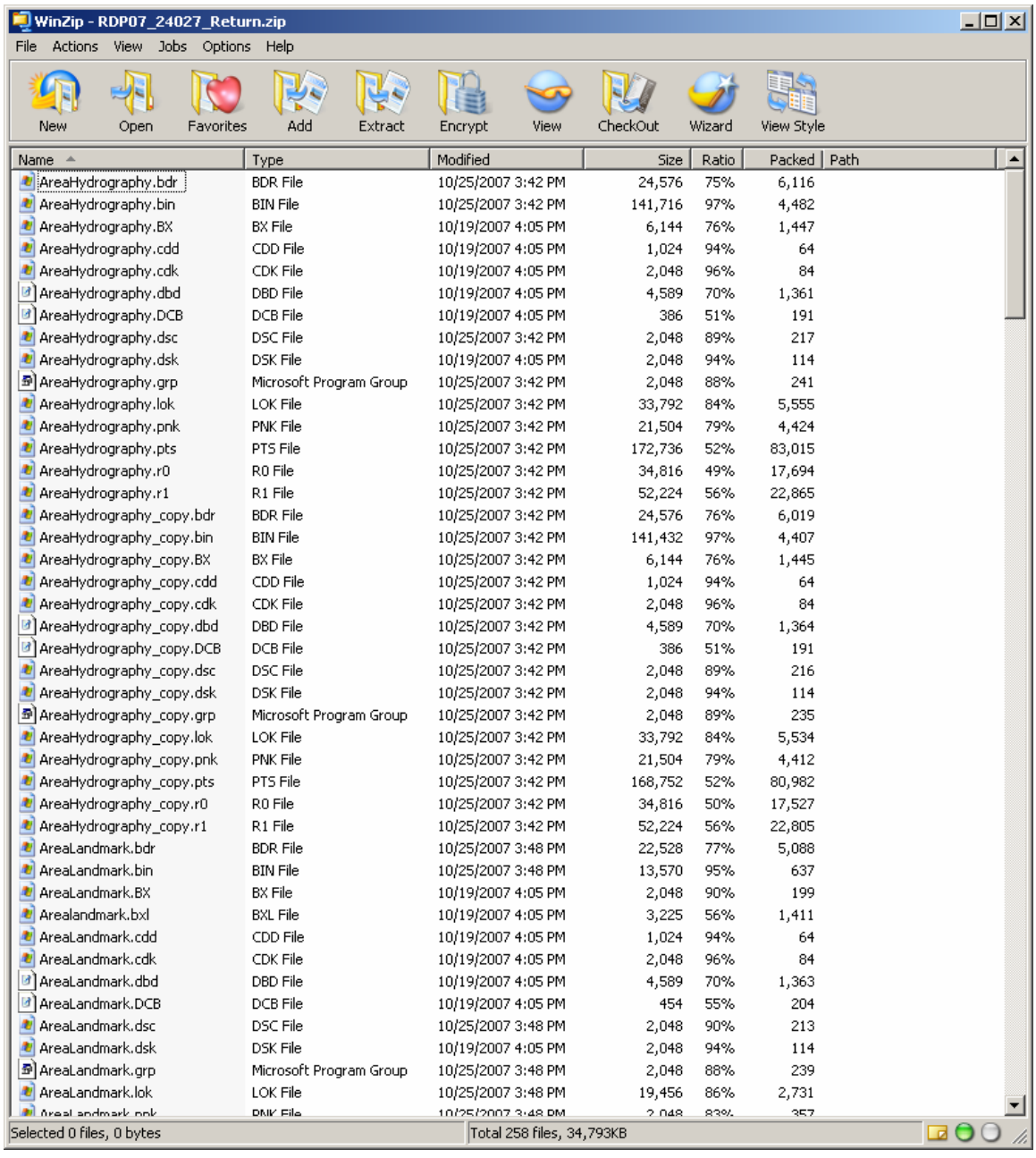


7) Now close the MTPS completely by choosing "Exit" from the "File" pull down menu.

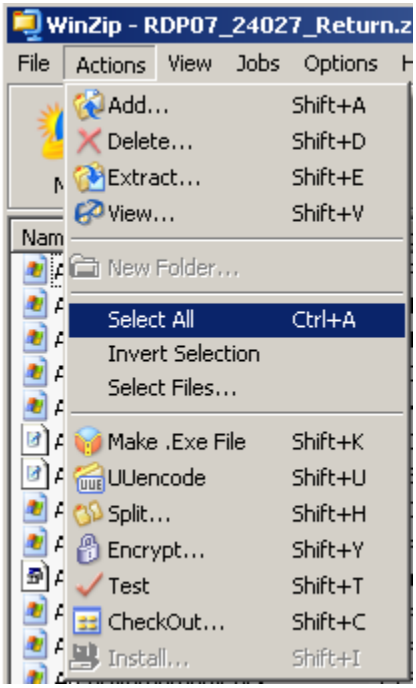


8) "Navigate to the RDP_ssccc_Return.zip file you copied from the PC you are transferring the already started submission file from and open the .zip file. The file directory displays.

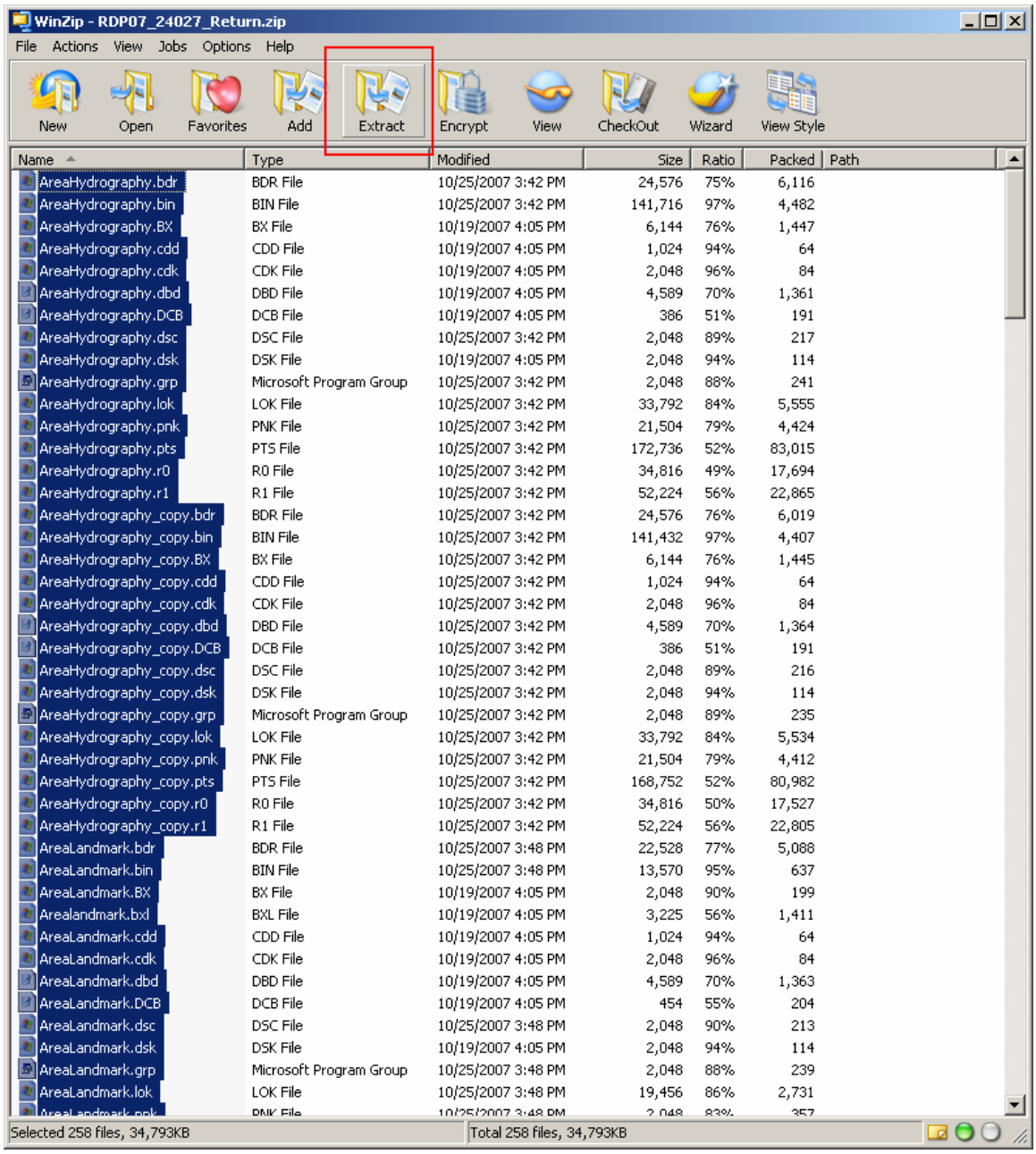
Note: These steps and screenshots assume you are using WinZip as your file zipping software. Other software you may be using should work in a similar manner.



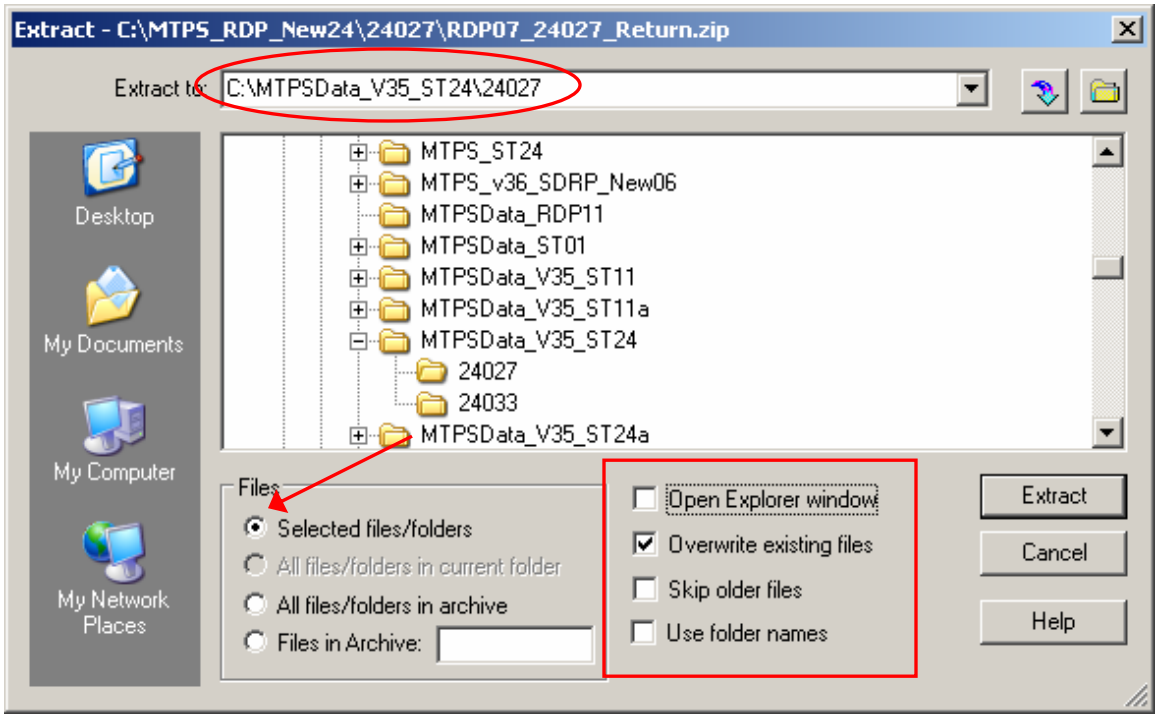
9) Select all the files in the RDP_ssccc_Return.zip file by using the “Actions” pull down menu and choosing “Select All”.



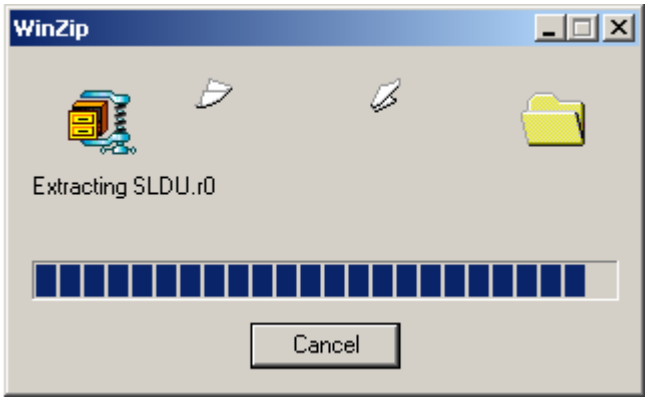
10) With all of the files selected, click the “Extract” button.



11) Using the “Extract” window that opens, navigate to the folder you recently created on the local network server that contains the state submission file to review. Also, make sure that the “Selected files/folders” radio button is active and the “Overwrite existing files” checkbox is checked. All the other checkboxes should be unchecked. See “example below.

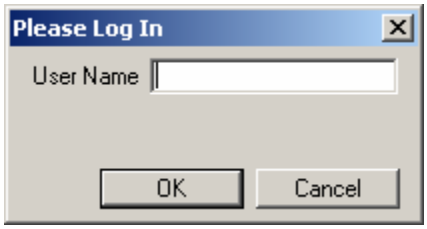


12) Once these parameters are set, click the “Extract” button to unload all of the contents of the RDP07_ssccc_Return.zip file into the county sub-folder of the state annotation data.



13) Close the *WinZipZIP* software as soon as the process is complete.

14) Open and log-in to the MTPS again.



15) Use the “VTD/BBSP” pull down menu to select “Open”. This will open the county selected earlier. The county will look and perform exactly as it did on the state participant’s computer just prior to them using the MTPS “Report Changes” command.