

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

**Version 3
December 2008**

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Note: Grey highlighted text indicates updates since Version 2

I. GENERAL INFORMATION

A. BACKGROUND

Under the provisions of Public Law (P.L.) 94–171 (Title 13, 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)

(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)

(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)

(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)

(<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.

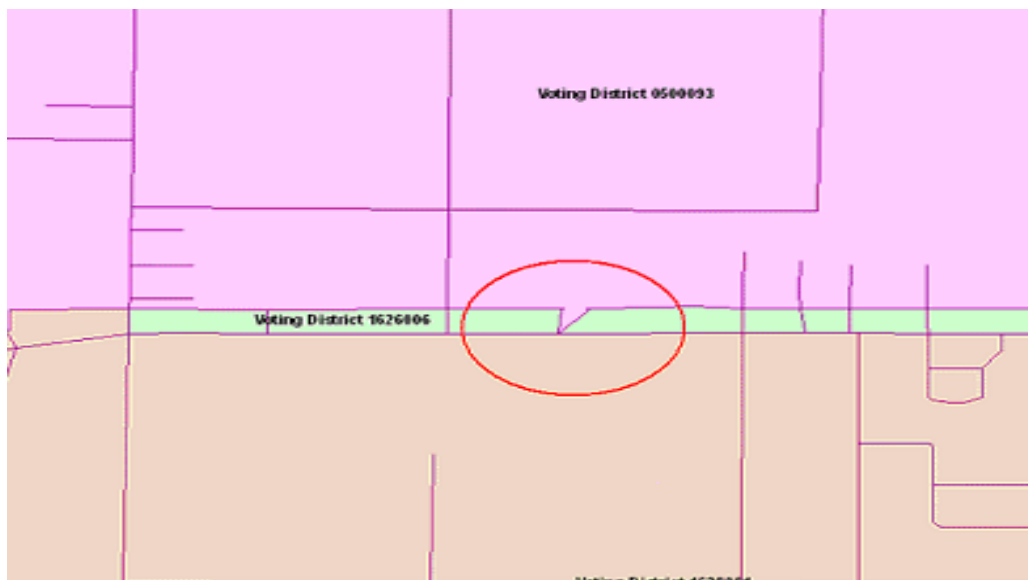
➤ Feature Updates

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 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
- 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) (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.