

12/30/98

**Census 2000 Redistricting Data  
Program**

**Phase 2**

**Voting District Project**

**Guidelines**

**U.S. Department of Commerce  
Economics and Statistics Administration  
BUREAU OF THE CENSUS**

# Introduction

To comply with Public Law 94-171, the Census Bureau conducts the Census 2000 Redistricting Data Program in 3 phases:

- Phase 1, the Block Boundary Suggestion Project (BBSP)

In Phase 1, the Census Bureau sent BBSP Annotation Maps and TIGER/Line® files to designated liaisons in participating states for them to suggest, in accordance with Census Bureau guidelines, roads, rivers, streets, ridgelines, and other visible features they require as Census 2000 block boundaries. These features will be used by participating states during Phase 2 as the boundaries of their voting districts (VTDs) and, optionally, state legislative districts (SLDs). During the verification phase of the BBSP, the states reviewed the Census Bureau's insertion of this information into the Census TIGER® geographic data base.

- Phase 2, the Voting District Project (VTDP)

In Phase 2, the Census Bureau provides VTDP Annotation Maps and TIGER/Line files to the designated liaison in all participating states. The participating states will outline their VTD and (optionally) SLD boundaries on these maps, or optionally in their GIS (geographic information system) using Census Bureau guidelines. Participants return the VTDP Annotation Maps or polygon-based equivalency files to the Census Bureau for insertion into the TIGER data base. The VTDP will begin in late 1998, include a verification phase in late 1999/early 2000, and continue until mid-2000 with an adjudication phase to ensure VTD conformance, where necessary, with the January 1, 2000 governmental unit boundaries.

- Phase 3, Data Delivery Project

All state legislatures and governors will receive Census 2000 population totals under P. L. 94-171, including counts by race, persons of Hispanic origin, and persons 18 years and older.

All states will receive these data for standard tabulation areas (e.g., American Indian/Alaska Native areas, county or equivalent area, minor civil division (MCD)/census county division, place, census tract, and census block). In addition, states that participate in Phase 2 will receive these data for each VTD and SLD they delineated during the VTDP.

Census maps showing the boundaries of American Indian/Alaska Native areas, counties or equivalent areas, county subdivisions, places, census tracts, blocks, VTDs, and SLDs will accompany these data.

## Workflow

The Census Bureau invited all states (and the District of Columbia and Puerto Rico) to participate in Phase 2, the VTDP. Participation in Phase 1, the BBSP, is not a requirement for participation in Phase 2.

The Census Bureau will provide participating states with these products: VTDP Annotation TIGER/Line files (also called the 1998 TIGER/Line files), up to two sets of VTDP Annotation Maps, the electronic files necessary to reprint the VTDP Annotation Maps on local printers that meet the electronic file print requirements, and a mapsheet cornerpoint file. The data shown in these products will include the results of the 1998 Boundary and Annexation Survey (BAS) and other Census 2000 preparatory activities that have taken place before the production of the materials in the late Fall of 1998.

- The Census Bureau anticipates VTDP products being available to participating states no later than early 1999.

The organization of the VTDP Annotation Maps is by county and includes a map sheet index. The Census Bureau will send the maps rolled in one or more map tubes. Each map sheet is cut. The state can use the same tube to send any required maps back to the appropriate Regional Census Center (RCC).

The Census Bureau geographers in the 12 RCCs are responsible for assisting the participating states in the VTDP. The RCC geographers are the primary technical Census Bureau contact for the state liaison. Attachment A provides the appropriate RCC for each state.

- Participating states will have **six months** after their receipt of the VTDP annotation materials to submit their delineated VTDs and optional SLDs to the appropriate RCC.

The RCC geographer will periodically contact the state to discuss their progress.

The RCC staff reviews the submission, inserts the VTD/SLD boundaries into the TIGER data base, edits the submission, and negotiates any problems with the states.

- After updates from 1999 BAS are in the TIGER data base, the Census Bureau will provide VTDP verification products (VTDP Verification Maps and VTDP Verification TIGER/Line files, also to be called the 1999 TIGER/Line files) to the participating states.
- Each state will have **one month** after they receive their verification products to review the VTDs and SLDs and provide any corrections. This includes adjudication of VTD boundaries that followed 1998 corporate limits or MCD boundaries that have moved based on the 1999 BAS.
- After the updates from the 2000 BAS are in the TIGER data base, the Census Bureau will adjudicate the VTD boundaries to the results from the 2000 BAS. The RCC geographers will work with the state liaison in making any required adjustments.

# Boundary and Annexation Survey

The BAS is an annual survey conducted by the Census Bureau to identify changes in the boundaries of the functioning general-purpose governments. The principle function of the BAS is 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, MCDs, and incorporated places. The Census Bureau obtains this information by sending out survey forms and maps 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 areas. For the VTD boundaries that must maintain a coincident relationship with legal boundaries, it is critical that the Census Bureau have up-to-date information about the boundaries of all governmental units. In the VTDP verification and adjudication phases, the VTD boundaries are edited to ensure they meet Census Bureau requirements that they follow features (including general-purpose governmental unit boundaries) that will be tabulation block boundaries.

**IMPORTANT:** If there are any questions about general-purpose governmental unit boundaries, the states should consult directly with the BAS official. The names and addresses for the last BAS certification official can be found in the BAS Mailout Contacts listed on the Census Bureau Web Site. The URL, user ID and password are in Attachment B. This information provides the certifying official who completed the 1998 BAS.

## Materials Required

The materials required for the VTDP are:

- State and local sources that reflect the boundaries of the VTDs for which they wish to have Census Bureau data tabulated.
- VTDP Annotation Maps provided by the Census Bureau. If requested, the Census Bureau will show the VTD boundaries that were provided by the state for the 1990 census (in 1988-89) on these maps.
- The Census Bureau may ask participants to provide supporting evidence, either in the form of local maps or aerial photography, of any feature updates provided in the VTDP.
- VTDP Annotation TIGER/Line file provided by the Census Bureau.
- VTDP Annotation Mapsheet cornerpoint file provided by the Census Bureau (if required by any software that the state might be using).
- GIS software or other software (if using TIGER/Line files).

- Colored pencils:

orange

yellow

green (if submitting Lower Chamber or House SLD boundaries)

purple (if submitting Upper Chamber or Senate SLD boundaries)

black #2 (for feature updates and/or corrections)

## Procedure for Annotating Maps

All map annotations should be neat and legible. Boundary highlights should be placed as close as possible to the intended feature to avoid any misinterpretation.

### VTD Annotations

If a state chooses to submit their VTD plan to the Census Bureau on maps, the participant should follow the procedures outlined below. The goals of the map annotations are to show:

1. the boundaries for each voting district,
2. the code associated with each voting district, and
3. any relationships between voting districts and legal/administrative areas.

To accomplish these goals participants should:

- Obtain source materials showing the VTDs they wish to represent.
- Compare the VTDP Annotation Maps to the local source maps.
- Determine what features on the VTDP map represent or approximate the boundaries of each VTD.
- Use the ORANGE pencil to highlight any black or blue feature on the VTDP map that serves as the boundary for a VTD.
- Use the ORANGE pencil if a legal boundary is coincident with another feature, such as a street, and the VTD boundary follows the street and not the legal boundary (the VTD should not move if the legal boundary moves).
- Use the YELLOW pencil to highlight any limit of a legal/administrative area that serves as the boundary for a VTD **if, and only if**, the VTD boundary **SHOULD MOVE** with the legal boundary that moves.

If YELLOW is annotated to highlight a VTD boundary on a feature that is coincident with a legal/administrative boundary, and the legal/administrative boundary moves, the VTD boundary will move to the new location of the legal/administrative boundary and will not remain on its existing feature.

**IMPORTANT:** A VTD boundary is not allowed to follow any superseded non-visible legal/administrative area boundary (i.e., the legal/administrative area boundary has moved because of an annexation or detachment or other correction submitted through the BAS). A VTD boundary that does not move to the new legal/administrative boundary cannot remain on the superseded limit unless the superseded legal/administrative area boundary is also a state legislative district boundary that is being submitted under the VTDP. In all other cases, the VTD boundary must be moved to an acceptable feature.

- DO NOT SELECT a feature shown in RED on the VTDP map; these features will NOT be census tabulation block boundaries and, therefore, are not eligible for selection as the boundary of a voting district.
- Provide address break information for any feature that is used as the boundary of a voting district that has a RED marker at a street intersection. A RED marker will appear wherever a road with address ranges in the TIGER data base intersects a nonstandard feature (one that normally is not a tabulation block boundary) that was not requested as a "must hold" block boundary during the BBSP. The current address break information in the TIGER data base for these features was imputed by using mathematical techniques. The Census Bureau must receive an accurate separation of addresses along the road to correctly allocate population along the sides of the nonstandard feature as a census tabulation block boundary. The Census Bureau will continue to use mathematical techniques to determine the address break wherever a state does not provide this information. This imputed address break may or may not accurately reflect ground truth.
- Use ORANGE pencil to annotate the VTD code within the highlighted boundary for each VTD. Only codes should appear on the maps. (The names should be submitted in a VTD names file which is explained in a later section of these procedures.) Numeric, alphabetic, and alphanumeric codes are acceptable as VTD codes. Hyphens and dashes also are acceptable in the code field. Annotate the code only; do not add leading zeros or any other clarifiers such as "VTD." The correct annotation for a voting district numbered 25 is simply a orange-penciled "25."
- For areas where no VTDs are defined, (i.e., portions of a county where no VTDs are being submitted) signify this by annotating "ZZZZZZ" (6 Z's) in ORANGE pencil.

#### Water Area Considerations:

Because the Census Bureau requires a VTD code or ZZZZZZ for the entire coverage of every TIGER county, states should determine how they wish to code the VTDs in large bodies of water such as the oceans or Great Lakes. Along coastal shorelines, the state might prefer to create "water VTDS" or just extend the land VTDs to the edge of TIGER coverage. Because the map sheets may not cover all of the coastal water in the TIGER data base, be sure that your annotations along the coastline are clear how the oceans and similar areas should be coded.

- Provide feature updates **only** if they are required as VTD/SLD boundaries. Use a #2 pencil to annotate any visible feature adds (road, streams, etc.) or corrections. Label all feature adds; for example "road" or "Abbey Road." Use the map legend as a guide for the feature representation. All features must currently exist and all street features update requests for VTD boundaries will be accepted only if they are verified by Census 2000 field operations. All non-street feature requests for VTD boundaries are subject to the concurrence of the Regional Census Center geographer.
- Provide any VTD/SLD boundary lines required through water areas.
- If these visible feature or water boundary additions and/or corrections are small and liable to be missed, circle them in orange so that they are easily identified on the map by the RCC geographer. The RCC geographer may request current aerial photography or satellite imagery to verify new features being requested.

**IMPORTANT:** If a feature shown in RED is a valid feature that meets the requirements for use as a VTD boundary, discuss the situation with the RCC geographer and, with the concurrence of the RCC, annotate in black pencil the feature correction.

### SLD Annotations

Delineating SLDs as a part of the VTDP is optional. If a state chooses to submit an SLD plan to the Census Bureau on maps, the participant should follow the procedures outlined below. The goals of the map annotations are to show the Census Bureau:

1. the boundaries for each SLD, both upper chamber (Senate) and lower chamber (House) (except in Nebraska where the legislative body is unicameral),
2. the code associated with each SLD, and
3. a prefix to the code qualifying whether it's a Senate (S) or a House (H) district.

To accomplish these goals participants should:

- Obtain source materials showing the SLDs they wish to represent.
- Compare the VTDP Annotation Maps to the local source maps.
- Determine what features on the VTDP map represent the boundaries of the SLDs.
- **Annotate the House District boundaries first.**
- Use (lime) **GREEN** pencil to highlight any black or blue feature on the VTDP map that serves as the boundary for a House district. All non-visible SLD boundaries should have been provided as a must-hold feature as part of the BBSP. If the non-visible feature was not added during the BBSP, it cannot be added as part of the VTDP unless the SLD follows a feature that previously appeared on a BBSP map (for example, a superceded 1990 corporate limit) or was otherwise missed during the BBSP.