

**PHASE 1 - 2000 REDISTRICTING DATA PROGRAM
THE BLOCK BOUNDARY SUGGESTION PROJECT
PROCEDURES FOR PARTICIPATING STATES**

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I. Overview

The Census Bureau conducted the first Block Boundary Suggestion Project (BBSP) as Phase 1 of the 1990 Redistricting Data Program. The purpose of the project was to afford participants representing those officers or public bodies responsible for legislative apportionment or districting the opportunity to suggest visible features to the Census Bureau which the Census Bureau would use as 1990 census block boundaries. The block boundaries suggested by state participants would have a greater correlation to subsequent voting districts (VTDs) defined by the states, than census blocks solely defined by the Census Bureau.

The boundaries of many VTDs do not follow standard visible features. The intent of the BBSP is to create the greatest possible correspondence between census block boundaries and whatever features the states are using as VTD boundaries at the time of the census. Thirty-eight states participated in this new project for the 1990 Decennial Census. Later in the decade, 46 states participated in Phase 2 of the 1990 Redistricting Data Program. Phase 2 provided participating states an opportunity to delineate voting districts (VTDs) on census maps which later were included in the P.L. 94-171 data tabulations. When Phase 2 began, many states that had not participated in Phase 1 felt they had missed a great opportunity by not participating in defining their census blocks. For the 2000 Census, 49 states have elected to participate in the BBSP.

Immediately following the completion of the 1990 Redistricting Data Program, (that is, the dissemination of the P.L. 94-171 data), the Census Bureau began working with its participants to determine their successes and failures during the 1990 program. Based upon suggestions reported in the "P.L. 94-171 Redistricting Data from the Year 2000 Census The View From the States", the Census Bureau felt it important to test some of the suggested improvements. The recommendations and the results of the 1994 test are summarized in a report "Results of the 1994 BBSP Test" available upon request.

II. Schedule

The schedule for BBSP- Phase 1 of the 2000 Redistricting Data Program is:

Training Workshop	July 15 1995
Procedures and Materials Delivered to Participating States	February 96-May 1996

State Submissions to the Census Bureau	Within 7 months of the receipt of materials-sooner if possible
Census Bureau Review of Submissions	January 1996-January 1997
Census Bureau Delivery of Review Materials to States	October 1996-March 1997
State Submission of Any Corrections to the Census Bureau	Within 2 months of receipt of review materials

III. Required State Participant Materials

A. The participants will provide the following:

1. Source materials

Source materials are the responsibility of the participants. Suggested source materials include current maps reflecting feature updates and voting district information. When flagging existing features and suggesting additional features as requested 2000 census block boundaries, these materials will prove useful.

2. United States Geological Survey (USGS) topographic quadrangles

Whenever suggesting ridge lines as a census block boundary, the state must provide the latest available United States Geologic Survey (USGS) topographic quadrangle maps (1:24,000 scale). The Census Bureau Regional Offices (ROs) do not have access to these map sheets. In high growth areas, the USGS maps sheets may need to be supplemented by other materials. For further information on ridge lines see Chapter IV. Section G.

3. Supporting materials

The Census Bureau may ask participants to provide supporting evidence of feature updates either in the form of local maps or aerial photography. The occasion may arise when the Census Bureau has no supporting evidence at the RO to use in validating the request.

Aerial photography also may support the use of suggested ridge line boundaries and street extensions where city style address break information is not available.

- B. The Census Bureau will provide the following:
1. Procedures
 - a. Map Annotation Procedures
 - b. Equivalency File (EF) Record Layout
 2. Census Bureau BBSP Annotation Maps (2 sets)
 3. Glossary of Terms (Appendix B)
 4. 1995 BBSP TIGER/Line File Technical documentation (Appendix F)
 5. 1995 BBSP TIGER/Line Files (CD-ROM)
 6. BBSP Verification Materials
 7. MIMs (digital maps) (CD-ROM)

The Census Bureau is providing two methods of participation for the BBSP. Participants may submit their BBSP data on color maps provided by the Census Bureau, or they may choose the Equivalency File (EF) method which requires setting a flag value on existing feature segments (one-cells). If choosing the EF method, participants still must provide feature updates and associated attribute information on the Census Bureau BBSP Annotation Maps. Participants should review the procedures provided to determine which method best suits their capabilities and requirements. Limited attribute data (the provision of names and corrections to names or feature classifications) may be provided via an attribute file. See Chapter V. Section C. 6 for additional information.

Participants will submit their electronic files and/or map sheets to the Census Bureau's ROs (Appendix E provides a listing of liaisons and addresses in the ROs) for review and processing by the geographers. The ROs will review and approve/disapprove submissions for insertion into the Census Bureau's geographic support system (the Census TIGER™ data base). Following the insertion of the BBSP data, the Census Bureau will release, for review purposes, a verification TIGER/Line® file and a set of paper verification maps showing the current status of the Census TIGER data

base that should reflect all agreed upon BBSP information. Once the Census Bureau provides verification materials to the participants, the participants will have two months to advise the Census Bureau of any BBSP discrepancies.

IV. General Procedures

Regardless of which method participants choose to submit their BBSP data, certain criteria remain constant. This section provides the guidelines inherent to both methods.

Gathering/Plotting Voting District Boundaries

The first step involves preparatory work prior to the annotation of maps and/or the update of electronic files. The preparatory work is the responsibility of the participant. This work requires expertise in the use of geographic and cartographic source materials and familiarity with census maps and/or census geography.

A. Participants secure local VTD data

Participants should obtain information from the appropriate officials regarding the location of VTD boundaries in their jurisdiction (present or proposed). During this process, the participants need to look for inconsistencies between VTD boundaries and the Census Bureau's visible feature requirement for census block boundaries. Participants should review VTD plans for VTD boundaries following nonvisible map features, and solicit ideas for selecting alternative features that could be used to approximate the location of the VTD boundary.

B. Participants must use features acceptable as census block boundaries

The Census Bureau requires that census block boundaries follow features easily located by census enumerators as well as data users. These boundaries are used for numerous census operations by many census employees when necessary. The employees must be able to locate housing units precisely and consistently in the same location. Therefore, the Census Bureau prefers the use of standard visible features such as named roads to that of non-standard features such as an underground pipeline right-of-way. However, in an effort to satisfy data user requirements while maintaining the integrity of the census operations, the Census Bureau is willing to accept visible non-standard features as census block boundaries on a selective basis. Appendix A provides a listing

of guaranteed and potentially acceptable features for use as census block boundaries.

In addition, to the types of features required as census block boundaries, the Census Bureau also is requiring that at least one boundary of a potential census block include a feature with a Census Feature Class Code (CFCC) provided in Appendix G. Participants must examine the polygon created by their suggestions to ensure that at least one side of the polygon includes a feature from Appendix G. Failure to do so will result in the Census Bureau rejecting a "must hold" suggestion. The Census Bureau will not impose size and shape criteria on polygons resulting from suggested and accepted features through the BBSP. However, the Census Bureau may edit for extremely small polygons now in the TIGER database and delete them from the geographic structure prior to releasing 2000 Census data.

C. Legislative Districts

As an option to the 2000 Redistricting Data Program, states may submit their legislative districts, both House and Senate or in the case of Nebraska, their unicameral districts, as part of Phase 2. During this phase, when the Census Bureau collects voting district names, codes and boundaries, we also will solicit the names, codes and boundaries of the legislative districts. If a state chooses to submit legislative districts during Phase 2, they should review their current or potential legislative districts in the same manner as they are reviewing voting districts. During BBSP, states should flag or highlight any features required as legislative districts as must hold boundaries. If the legislative district follows a non-visible boundary, it must be added to the 1995 BBSP Annotation Map and identified as a legislative district. If the only potential feature the legislative district boundary can intersect is a road, the participant must supply the address break information at the point of intersection in order for the RO geographer to consider it. See Chapter V. Section C.4 for instructions on highlighting legislative districts.

D. Feature Classifications

The Census Bureau will identify on both the 2000 BBSP Annotation maps and the 1995 BBSP TIGER/Line files the features the Census Bureau guarantees to use for 2000 census block boundaries, features available for the states to select as 2000 census block boundaries, and features states may not select as census block boundaries. Contingent census block

boundaries are discernible as visible features intersecting 2000 tabulation boundaries.

The Census Bureau will identify feature classifications on the BBSP Annotation Maps and in the 1995 BBSP TIGER/Line files. The Census Bureau will identify which features are guaranteed for 2000 census block boundaries; these generally include all Census Bureau defined group 1, 2 and 3 roads, all named group 4 roads, and all unnamed group 4 roads within incorporated places. (The group identifier is the first digit after the "A" in the CFCC).

Features not acceptable to the Census Bureau as a census block boundary include 1990 census block boundary segments that no longer correspond to visible features. Some of these features subsequently may be retained where they also are required as 2000 census statistical area boundary purposes. In addition, selected political entity boundaries (incorporated places and Minor Civil Division (MCD) boundaries that do not coincide with visible features) are not available for selection during the BBSP. However, those political entity boundaries which are certified through the Boundary and Annexation Survey (BAS) as of January 1, 2000 are held as tabulation census block boundaries. See Appendix B for the types of county subdivisions recognized by the Census Bureau by State. During Phase 2, states may use the 1998 tabulation boundaries when defining their VTDs. The Census Bureau will work with state participants to identify where a tabulation unit boundary change (occurring between 1998 and 2000) may impact the boundary of a VTD.

Visible features which form a closed polygon only when they intersect with an acceptable political entity boundary may be flagged as a contingent 2000 census block boundary. At the time the final 2000 tabulation geography is defined (using the January 1, 2000 legal/administrative boundaries of governmental entities), the Census Bureau will hold those boundaries flagged as contingent, which intersect the governmental entity boundary as 2000 Census tabulation census blocks. Where the flagged feature does not intersect the 2000 legal/administrative unit, the Census Bureau will not select it as a census block boundary. In addition, the resulting polygon must include one boundary identified in Appendix G. See Chapter V. Section B. 3. for more information on contingent census block boundaries.

E. Feature Extensions

In some areas it may be desirable to extend a visible feature to serve as a block boundary where no alternative visible feature is available. A feature extension is an imaginary line (straight line continuation) drawn from the end of a visible feature to either an addressable feature (with the provision of an address break) or where there is no existing development. If the feature extension is less than 300 feet in length and extends to a non-addressable (i.e., no residential structures) feature (such as a creek), it may be used as a census block boundary by the Census Bureau. In areas with city style addresses, participants should provide the address break information at the point of intersection with an addressable feature if it is not already in the TIGER/Line files. If the address break information is not provided, the Census Bureau will consider its use as a census block boundary and may require aerial photography or other supportive documentation to support the request. In more rural areas, a feature extension of over 300 feet may be acceptable, at the discretion of the RO geographer. States may provide supporting evidence to make their case relative to the use of the extension. An extension always ends at the first feature it intersects: for example, a feature extension may not cross a railroad track to a road on the other side; the intersection must terminate at the railroad. Census enumerators must be able to locate feature extensions during the course of the 2000 Decennial Census. Refer to Appendix G when suggesting internal features to ensure at least one boundary includes a feature from this listing. Participants must follow the annotation procedures if they suggest an extension as a census block boundary. See Chapter V, Section C.2 for further information on the use of feature extensions.

F. Landmarks

Most landmarks, such as the property lines for churches, schools, golf courses, airports and cemeteries, are not suitable as block boundaries because they are usually not permanent visible features. Where a landmark is bounded by a visible feature, such as a permanent fence, that clearly indicates it is the boundary for the specified feature, it may be an acceptable census block boundary. Participants may wish to provide supporting evidence of the "visibility" of a suggested landmark feature; an enumerator will be able to adequately locate the feature without supplemental information. RO geographers will review this supporting evidence when determining whether to allow a landmark boundary be used as a census block boundary.

G. Ridge lines

For Census purposes a ridge line is a line connecting the points of highest elevation along the divide between the drainage areas of two streams or stream systems. A ridge line must be drawn so that elevation decreases when moving away from either side of the line. By definition, a ridge line cannot traverse streams. Do not suggest ridge lines where adjacent roads exist. If a road exists on the top of a ridge, use the road as the suggested feature to be held.

Wherever possible, the ridge should intersect a non-street feature such as a power line, visible pipeline, or stream and extensions from stream source to the ridge. Ridge lines are not distinct features and cannot always be located precisely. Transportation features are acceptable as intersecting features if development does not exist or is not likely to be found in the area. Acceptable minor transportation features include jeep and hiking trails, logging or mining roads, and forestry roads, such as those leading to fire towers. Ski lifts are acceptable as well. If the only potential feature the ridge line can intersect is a road, the participant must supply the address break information at the point of intersection in order for the RO geographer to consider it. Census enumerators must be able to locate the point where a ridge intersects a road. Without address break information, the Census Bureau will not accept the suggested ridge line as a census block boundary unless the RO geographer believes that an enumerator can clearly identify the ridge line in the field.

H. Feature Updates

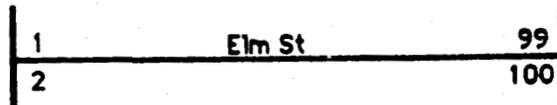
As part of the BBSP, participants may add, delete or correct features illustrated on the maps. If participants wish to submit feature updates, this information must be provided on the Census Bureau's 1995 BBSP Annotation Maps. It is important to note, that if you want a feature update guaranteed as a 2000 census block boundary, you should add the feature during the BBSP.

I. Providing Address Breaks

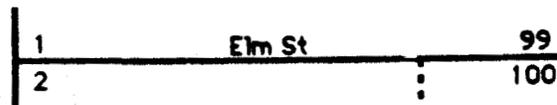
If the participant adds a feature or a street extension, or suggests the use of an existing feature such as a ridge line as a census block boundary, and that feature intersects or "crosses" a street with addresses (thereby splitting the address range), the participant must annotate the address range split. If the

new feature intersects (splits) the addressed street only on one side, then the participant annotates the address range split on that side. If the new feature "crosses" the addressed street feature, the participant annotates the split on both sides. See the illustration on the next page.

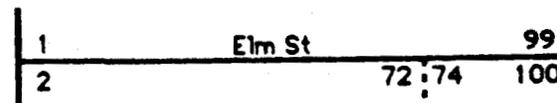
Illustration: Provision of Address Break Information



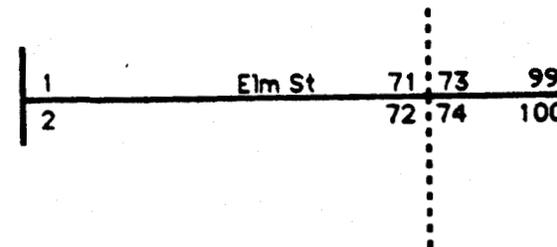
Elm Street with address ranges
1-99 and 2-100



Elm Street now intersected (split)
on one side (2-100) by new feature
(dashed line)



The correct address range split
of 72-74 is annotated at the split



If the new feature (dashed line)
"crosses" the addressed street, then
annotate the split on both sides

Annotate address range information on the map using an orange pencil. We have found that hard lead pencils give a sharp line that resists smudging on paper.

J. Boundary and Annexation Survey (BAS)

The Census Bureau is providing a listing of BAS entities to all BBSP participants (See Appendix H.) This listing, includes the name, title, and telephone number of the respondent in the last BAS. For each entity (all actively functioning counties or their statistical equivalent, MCDs, consolidated cities, and incorporated places) the list also shows the last year in which the entity was included in the BAS and the next year in which the Census Bureau plans to include the entity in the BAS.

The list of BAS entities and respondents contains all actively functioning counties or their statistical equivalents, MCDs, consolidated cities, and incorporated places. The data for counties and their statistical equivalents is fairly up to date as the Census Bureau surveys these entities on a yearly basis. The Census Bureau has not surveyed over one-half of the incorporated places, and all of the MCDs (except in Connecticut and Rhode Island), since 1990. In addition, the Census Bureau has not surveyed an additional 15 percent of all places since 1992. It is important to emphasize that not every entity is surveyed every year. The Census Bureau canceled the 1996 BAS because of delays caused by government wide shutdowns. This listing was completed prior to the cancellation of the 1996 BAS. The 1997 BAS will include all incorporated places with a population of 2,500 or more. Please review the listing to determine if an entity in question is scheduled for an this upcoming survey. When there is an entity in question, participants should:

1. Contact the BAS respondent and discuss the situation.
2. Upon resolution for the entity in question, report the action decided upon to Ms. Cathy McCully either in writing or via e-mail address to cmccully@census.gov.
3. The BAS respondent will submit any potential changes through their normal channels. BAS respondents should call 1-800-972-5651 for further instructions.
4. The Census Bureau will make every effort to reflect potential changes in the next product scheduled for the 2000 Redistricting Data Program.

K. Water Areas

All water polygons are identified as water in the TIGER/Line files. (See record type S, position 26.) For the 2000 Census, the Census Bureau will identify water polygons with a unique code except when

the water is completely surrounded by the same land census block such as in areas with many small lakes. The Census Bureau currently plans to identify these "internal" water areas with the surrounding land census block number.

The Census Bureau will hold as unique collection blocks the shorelines of double line drainage (rivers), lake shorelines not internal to a land census block (large lakes), and the shorelines of all islands that contain road features.

If participants require a boundary in water as a VTD or legislative district boundary, use a black lead pencil to annotate the boundary from the shoreline to the desired location and highlight the segment as a "must hold" in orange. Please note, if this boundary is not used during the next phase of this program, the Census Bureau may choose not to hold it as a block boundary for 2000.

L. Islands

The Census Bureau automatically will group islands to form a unique tabulation block if they have no road features and are below a certain land area or are within a certain distance of other islands.

Within the BBSP, participants may group selected islands for unique block identification by adding a line around the selected islands on the 1995 BBSP Annotation Maps. Use a black lead pencil to annotate these lines in water.

Where an isolated island does not have a road feature, the Census Bureau may choose to identify it as a unique block rather than fishhook it to an adjacent land block.

V. Procedures for Submitting Annotated BBSP Annotation Maps

A. BBSP Annotation Map Explanation

1. Organization

The BBSP Annotation Maps are organized by county. They are approximately 36" by 42" in dimension. The number of map sheets varies by county and should be fewer in number than the map sheets produced as the County Block Map (1990) series. The legend is provided on a separate map sheet. Five sheets, with 12 legends each, are provided to each state. If you need more, please contact your BBSP liaison in the RO. In the lower right hand corner is the Key to Adjacent Sheets which highlights that map sheet in yellow and provides the

adjoining map sheet numbers in a grid. Shaded areas within the grid indicate area beyond the county boundary. Text in the lower right hand corner to the left of the Key to Adjacent Sheets identifies the map sheet type (parent or inset) and the number within type. Below the map sheet number, the text identifies the subject matter county and state. Both a north arrow and scale bar are provided to assist the map user.

2. Scale

The Census Bureau uses a standard set of scales. The selection of a scale is based upon the density of the feature network. All parent maps within a given county are at the same scale. Inset maps within a county can vary in scale. However, a single scale is used for multiple sheets of the same inset. For example insets C and D might be at two different scales, but map sheets D1 and D2 are at the same scale. An attempt was made to minimize the number of inset map sheets for this map series. Because the BBSP Annotation maps do not illustrate census block numbers and other statistical area geography, we were able to reduce the number of map sheets for this series. If there is a problem with the scale selected for a particular county, please notify your BBSP liaison in the RO.

3 Color

Color is used to distinguish water area (screened in blue) from land area (white). In addition, military installations and Federal and State prisons are screened in green. Symbology is very similar to that used for the County Block Map (1990) series. Insets are screened in gray and are identified by a letter character. Each inset will contain one or more map sheets identified by the letter and a possible numeric, for example, inset C, inset D1 and D2.

Participants must annotate the BBSP Annotation Maps to illustrate their suggested "must hold", "do not hold", and "contingency hold" census block boundaries. The BBSP Annotation Maps use color to depict the classification of features used by the Census Bureau.

The color classification illustrated on the map is as follows:

Red The Census Bureau guarantees all features shown in red will be 2000 Census block boundaries, unless during Census operations we are advised the feature does not exist. Participants should not annotate any feature shown in red as a must hold block boundary feature.

Blue/Black Land-based features (black) or water features (blue) are features acceptable to the Census Bureau as 2000 Census block boundaries, provided the polygon they form includes at least one segment from the list provided in Appendix G. Participants may highlight these features as "must hold", "contingent" or as "do not hold" features. Features suggested as a "contingent hold" must form a complete polygon with legal/administrative boundaries of governmental entities. The contingent status will remain in effect until the final January 1, 2000 boundaries for governmental entities are entered into the Census TIGER data base. At that time, the final census block algorithm will hold any contingent feature which intersects with a 2000 governmental entity boundary. If the contingent boundary fails to intersect the 2000 entity boundary, it will not become a 2000 census block boundary. An extension of 300 feet or less may be added to intersect with the governmental entity boundary. Features within this color range which are not selected by participants may or may not be used as census block boundaries.

Purple Features shown in purple may not be selected as a "must hold", "contingent", or "do not hold" boundaries. There are two types of features shown in purple: 1) current legal/administrative boundaries, and 2) 1990 census block boundaries no longer considered to be following a visible feature. Most of the features represented in purple are current legal entity boundaries. For the BBSP they represent governmental/administrative boundaries current as of the 1995 Boundary and Annexation Survey which uses a January 1, 1995 reference

date, (or earlier, see Appendix H). Governmental entity boundaries current as of January 1, 2000 are used as the final tabulation block boundaries. The current boundaries on the BBSP Annotation Maps are not guaranteed until they are the final tabulation boundaries used for the 2000 Decennial Census. Boundaries of American Indian Reservations, Alaska Native Regional Corporations, and off-reservation trust lands are displayed in purple. The Census Bureau will honor the boundaries used to tabulate data for these entities as 2000 census block boundaries.

In addition, some features illustrated in purple are features the Census Bureau believed were visible features going into the 1990 Census, but through enumerator update or subsequent information presented to the Census Bureau, were reclassified or deleted. Although these boundaries were used as 1990 census block boundaries, they generally will not be used for the 2000 Census, unless participants can identify that the underlying feature exists.

Feature extensions identified during the 1990 Redistricting Data Program as "must hold" and later used as a VTD boundary also are shown in purple. If participants require this extension, for the 2000 Redistricting Data Program as a VTD boundary, the Census Bureau will retain this extension, provided it still meets the requirements for an extension. Only those extensions held in 1990 are displayed on the maps in purple. All other extensions including map closure lines are not displayed on the maps. If the participant wishes to retain this feature extension, they must highlight it as a "must hold". Otherwise, the Census Bureau will not retain this extension when developing its block structure for the 2000 Census.

The colors used to classify the features are not illustrated outside of the subject county area. The features are shown and identified by name outside the

subject county but are not distinguished with the color coding. All work by the participant is restricted to the subject county. Participants should annotate their feature selections on the parent maps and, where insets are indicated by the gray screen, participants should annotate their feature selections on the inset maps. Participants should not submit block boundary suggestions on the gray inset areas of the parent sheet maps. Where participants annotate a feature shown on both the inset and parent maps, it is the participants responsibility to ensure that the annotation maps depict consistent information. Because the scale is greater on the inset map, the Census Bureau will use the inset map as the source map for insertion into the TIGER data base.

4. Materials Required

- a. BBSP Annotation Maps
- b. Legend Sheets
- c. Soft lead color pencils
 - Orange
 - Yellow
 - Green
 - Pink (if submitting non-visible legislative district boundaries)
- d. No. 2 or 2.5 black lead pencil
- e. VTD source maps
- f. Reference materials for feature updates
- g. Sketch maps (optional)

B. Census Block Boundary Suggestions

1. "MUST HOLD" Suggestions-Orange pencil

Participants must highlight a black/blue feature in orange pencil to ensure their suggested feature is considered as a census block boundary. Features identified on the maps in colors other than black or blue are not eligible for selection by participants, except when suggesting a feature extension. These suggestions are considered on an individual basis. (Please review the requirements for feature extensions. Chapter IV., Section D.)

2. "DO NOT HOLD" Suggestions-Green pencil

Participants must highlight a black/blue feature in green to ensure the feature is not held as a census block

boundary. The Census Bureau may not honor "do not hold" requests for features identified on the BBSP maps in black/blue or red if they are required for other Census Bureau purposes. Participants do not need to select features illustrated in purple as these features are not eligible as a census block boundary for 2000. In addition, it is not necessary to highlight a feature within a military installation as features within military installations are not held as block boundaries unless they are highlighted as a must hold.

3. "CONTINGENT HOLD" Suggestions-Yellow pencil

Participants must highlight in yellow a feature identified on the BBSP Annotation maps in black/blue, which is also internal to a polygon, to identify that feature as a "contingent" block boundary. The Census Bureau will honor the request should the "contingent" boundary intersect a 2000 legal/administrative boundary. Participants may add an extension from the end of the visible feature to the legal/administrative boundary in order for the two to successfully intersect each other. The street extension must be a straight line extension and may not exceed 300 feet. The Census Bureau will not guarantee a "contingent hold" boundary as a 2000 census tabulation block boundary. In order to be a 2000 census tabulation block boundary, the feature must intersect a legal/administrative boundary. These suggestions are retained until the Census Bureau establishes the 2000 tabulation geography. At that time, where an intersection occurs between a 2000 legal/administrative entity and a "contingent must hold", the Census Bureau will use the contingent boundary as a 2000 census block boundary.

See figure 1 on the next page.

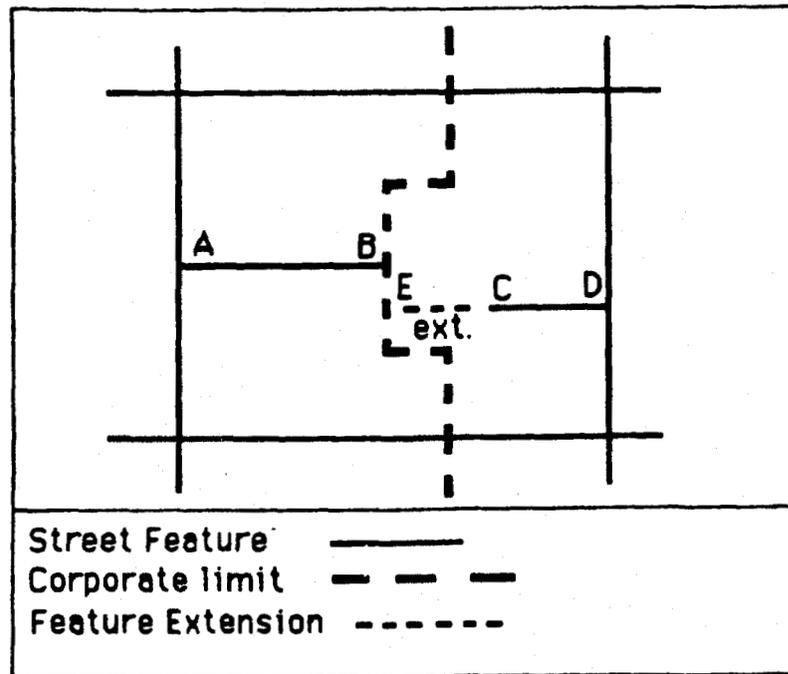


Figure 1

Non-qualifying features, such as current governmental unit boundaries, do not constitute a closed polygon for potential census block purposes (refer to Appendix C). Participants may flag segment AB in Figure 1 as a "contingent" line segment, but not as a "must hold" line segment. Participants may flag segment CD as a "contingent hold" block boundary. Participants may add up to a 300 foot extension to the CD line segment and flag it as a "contingent hold" and EXT, using the map annotation guidelines (see segment EC). Where later file updates create new polygons bounded by these "contingent hold" boundaries (for example where governmental unit boundaries intersect with internal "contingent hold" features, such as segment AB in Figure 1), the Census Bureau will attempt to hold the contingent line segment as a tabulation census block boundary. Since the Census Bureau does not establish its tabulation census block boundaries until governmental unit boundaries held for the 2000 census are known, the Census Bureau cannot inform participants which contingent line segments will be held as tabulation boundaries in advance of the census. However, BBSP Verification maps will indicate all line segments flagged as "contingent hold".

C. Adding Features not Shown on the BBSP Annotation Maps

Participants may update the BBSP Annotation maps with existing visible features not shown on the maps.

1. Visible features

Use the following procedures when adding visible features:

- a. Annotate the feature on the map using a black lead pencil,
- b. Ensure that the added feature intersects with an existing map feature,
- c. Annotate the entire feature on the map (not just the portion required as a "must hold" or "contingent hold".) For example, if only a portion of a road is suggested as a "must hold" census block boundary, update the map with the entire road.
- d. Label each feature update with its proper name or a generic name, (such as railroad, pipeline). If there is insufficient space on the maps to annotate the names legibly, provide a key identifier in the legend. Unique within map sheet, and beginning with the number 1, place a number as close as possible to the feature. Provide the number and feature name (e.g. 1 = Smith Street) in the margin area.
- e. Highlight the feature update (or portion of the feature) using the appropriate color as either a "must hold" or "contingent hold".
- f. Use Appendix A, a list of acceptable visible features when determining whether a feature may be added or not.

2. Non-visible features

Use the following procedures when adding property lines, pipelines, feature extensions or other nonvisible block features:

- a. Annotate the nonvisible feature as a "dashed" line on the map using a black lead pencil. Classify and label each add, for example "Airport Property line" or "ext" (for extension).
- b. Ensure the nonvisible feature intersects with an existing map feature.
- c. Highlight the nonvisible feature (or portion of it) using the appropriate color as either a "must hold" or "contingent hold."
- d. Annotate the entire feature on the map, not just the portion required as a "must hold" or "contingent hold".
- e. Where the nonvisible boundary intersects a street feature with addresses, provide the address breaks at the point of intersection.
- f. Please note that these nonvisible features may not be acceptable to the Census Bureau as census block boundaries. The provision of an address break may provide the necessary information required for the Census Bureau to accept a nonvisible boundary as a census block boundary.

3. Use the following instructions when providing feature corrections:

- a. Annotate any changes to features (for example streets, highways, railroads, lakes and rivers) and feature names in black lead pencil. Feature changes include adding, deleting and moving features.
- b. Do not add "paper" streets. The street feature must be on the ground or under construction.

- c. To delete a feature illustrated on the map, cross it out with "X"s in black led pencil. Mark the ends of the deletion with hatch marks (| |).
- d. To move a feature, draw a red circle around the feature to be moved. Draw the feature in the correct location in black lead pencil. Draw an arrowed line from the incorrect location to the correct location of the street you move. Participants also may move groups of features, such as a subdivision, using the same procedure.
- e. If feature updates are so extensive that they may not be legible on the 1995 BBSP Annotation map, participants may use an overlay made of a transparent material, such as mylar, to annotate the feature update. This may be particularly useful, where feature deletes and adds may be in the same vicinity. In unusual situations, the Census Bureau Regional Offices may be able to suggest a larger scale map. The participating state should contact their Regional Office in this situation.
- f. When adding a feature update that intersects a feature identified in Appendix A or a non-standard feature, provide the address break if the feature contains addresses. See Chapter IV, Section I on the provision of address breaks.

4. Ridge lines

Use the following procedures when submitting ridge line boundaries as census block boundaries:

- a. Use black lead pencil to annotate the ridge line on an original 1:24,000 scale USGS topographic quad map. Use the contour lines as a guide to accurately annotate the ridge line on the map. Please remember ridge lines do not follow contour lines. Contour lines merely define the ridge. The Census Bureau will use the topographic map to evaluate the ridge line submission.
- b. Participants must annotate ridge lines so that the elevation decreases when moving away from either side of the line.

- c. Participants must ensure the ridge line is "anchored" at both ends with acceptable features such as power lines, above-ground pipelines, or extensions from a stream or other feature source to the ridge. By definition, ridge lines cannot intersect with streams. If you need to use an extension to anchor a ridge line, annotate the extension in black lead pencil as a dashed line.
- d. Ridge lines may intersect transportation features. Examples include jeep and hiking trails, logging and mining roads, and forestry roads, such as those leading to fire towers, and ski lifts.
- e. Where the ridge line intersects a transportation feature that has addresses, provide the address breaks at the point of intersection.

5. Legislative Districts

Use the following procedure when providing non-visible legislative district boundaries:

- a. Add any non-visible state legislative district boundaries in pink dashed color pencil. Identify the proper name, for example, 1990 city limits-Cheverly or Section Line.
- b. The Census Bureau will hold non-visible legislative district boundaries as 2000 census block boundaries if:

States submit legislative districts as part of their Phase 2 submission and use those boundaries identified during Phase 1. If the non-visible legislative district boundaries identified during Phase 1 are not used during Phase 2 as part of a legislative district boundary, the Census Bureau will delete them from the TIGER data base. In turn, if non-visible boundaries are not submitted during Phase 1, they may not be submitted during Phase 2 as part of delineating legislative districts.

- c. When providing non-visible features as legislative district boundaries in areas with city style addressing, participants must provide the address break at the point of intersection, if it is not already in the TIGER/Line file. In areas without

a city style addressing system, or where the intersection is with a non-standard feature, supporting evidence that field enumerators may easily locate this point must be provided.

- d. If there are visible features not shown on the map that correspond to state legislative district boundaries, add them in a pink solid line and label them with the proper name, i.e., Jones Street, ridge line, etc.

6. Feature Identifier Corrections

- a. If a feature name is misspelled or incorrect, "X" out the incorrect spelling and label the feature correctly, using a black lead pencil.
- b. If a feature shown on the map does not exist, "X" it out using a black lead pencil. The Census Bureau will verify the feature does not exist before deleting it from the TIGER data base.
- c. Feature Repositioning

If a feature is shown in the wrong location, "X" it out using a black lead pencil and add it, following the annotation procedures for feature updates, in its proper location.

7. Attribute files

BBSP participants may include feature updates using a ASCII attribute update file. This attribute file should have delimited ASCII fields (comma separated values). The attribute file should only contain records with changes or updates to the 1995 TIGER/Line file. A record for a linear feature in a release of a TIGER/Line file has a permanent record number in the TLID field. The attribute file must have the corresponding TLID on a comma delimited record that contains any changed attribute.

For the proper format of the attribute file, see page 25. Code unknown information to zero or blank (character space). If a linear feature has more information than one record can contain, create additional records.

The attribute file is capable of handling name and CFCC changes, additional names for unnamed features, and deletes.

Field	Description	Legal Values
TLID	Permanent record number, the TLID, of the feature from the TIGER/Line® file	
Feature_Classification	Classification of linear feature, i.e., road, hydrography boundary	Use the alphabetic classification from the Census Feature Class Code (CFCC)
Name	Complete name of linear feature	If a road name, put a space between the directionals, name, and type

For example, a portion of High Valley Lane taken from the TIGER/Line file would be represented by the original information:

9657321,A,High Valley Lane

To change High Valley Lane to High Valley Drive you should submit:

9657321,A,High Valley Drive

A portion of Summer Creek, a stream taken from the TIGER/Line file, would be represented by the original information:

965721,H,Summer Creek

To represent the Summer Creek as Sumner River you should submit:

965721,H,Sumner River

A portion of Telegraph Road, also known as State Road 611, taken from the TIGER/Line® file would be represented by two original records:

9657371,A,Telegraph Rd
9657371,A,St Hwy 611

When making a name change to feature which carries more than one name in TIGER, it is important for the participant to provide not only the record with the change, but all records associated with the feature (TLID). In the example with Telegraph Rd and St Hwy 611, if a change is made to the name Telegraph Rd, and the record for St Hwy 611 is not provided the Census Bureau will delete the name for St Hwy 611 for this portion of the road.

Therefore, if a participant wanted just to change Telegraph Rd to Telegraph Lane and keep the name St Hwy 611, they would provide the following information:

965731,A,Telegraph Lane
965731,A,St Hwy 611

However, if a participant wanted to change Telegraph Rd to Telegraph Lane and drop the name St Hwy 611, they would provide the following information:

965731,A,Telegraph Lane

With the inclusion of the record only for Telegraph Lane, the Census Bureau would know to drop St Hwy 611.

If a participant wants to reclassify a non-visible feature (Census Feature Class F) to a named street (Census Feature Class A), the record might originally appear as:

965731,F,

A participant must submit the name for this former non-visible feature and their submission for this record might be:

965731,A,Abell Way

The name of this ASCII attribute update file must contain the FIPS state and county codes for the county, for example, AF12031.DAT or AFssccc.DAT. The state and county codes are part of the name of the TIGER/Line files and are an attribute of each Record type.

8. Sketch maps

When the number of feature updates are too numerous for the scale provided, making these annotations difficult to add, participants may provide sketch maps with the densely settled feature updates. Sketch maps may be automated or manually created but they should include:

- a. corner points providing the coordinates of the sketch map (for automated maps only)
- b. a unique code for each sketch map which relates the map to the original BBSP Annotation map
- c. an inventory of sketch maps so that the Census Bureau can ensure it has the entire submission.
- d. for manually prepared maps, provide information on whether the sketch map relates to the parent sheet or the inset by providing the map sheet code.

9. Map Annotation Review

Once participants have completed their annotations they should review the maps for the following:

- a. Ensure that annotations match between adjacent map sheets.
- b. Ensure feature additions and corrections are properly highlighted as "must hold" or "contingent hold". Otherwise, regional office geographers will assume the annotation is a feature update only.
- c. Ensure that the highlighted "must hold" features form a polygon with other "guaranteed" and "contingent hold" features. Ensure that at least one side of the block polygon includes a feature from Appendix G. Note: Even if the block polygon is bound by visible features it must contain a feature from Appendix G.
- d. Ensure work is complete for each map sheet within the county.

- e. Ensure all annotations are legible.

10. **Submission to Regional Office**

- a. The Census Bureau requests participants return **all** BBSP Annotation Maps (with annotations) to the appropriate regional office as identified in Appendix E. If participants wish to return only those maps sheets with annotations they must include a listing of the map sheets returned. In addition, an inventory of any sketch maps submitted must be provided with the map package. Appendix E provides a listing of Regional Office Geographers who will act as liaisons for this project, their addresses, telephone and e-mail numbers and jurisdiction for the BBSP.
- b. Include all USGS topographic maps covering ridge lines that are being submitted.
- c. Include supporting materials for feature updates.

11. **Regional Office Review**

BBSP submissions are sent to the Census Bureau's RO for review. The RO geographers will identify each request as either accepted or rejected. They will document features which they reject and provide an explanation. Some feature selections may be put into a "pending" file if the participants wish to provide further documentation regarding the features existence. Subsequent edits following the insertion of the BBSP submissions may reject further block boundary selections. The RO geographer will provide participants with a disposition listing, requiring follow-up by the state. This listing will include all features suggested as must holds which were rejected.

12. **TIGER Data Base Insertion**

Once the review is complete, the Census Bureau will insert the data into the TIGER data base. The Census Bureau will produce both Verification maps and TIGER/Line files for participants to review. The BBSP Verification maps will highlight the results of participant submissions in the following colors:

features designated as contingent are shown in orange, features that can not be held as a block boundary are shown in green, features that can not be accepted as a "do not hold" are shown in pink. The Census Bureau will continue to display guaranteed block boundaries in red, features not selected for any purpose in blue/black and features not available for selection in purple. Participants must provide corrections to the Verification maps to the appropriate regional office geographer within 6 weeks of receipt of materials. Instructions on providing corrections will follow.

13. RO BBSP Support to Participants

Direct questions regarding participation or these procedures to the appropriate RO geographer identified in Appendix E.

Participants also may direct questions to Ms. Cathy McCully, Chief, Statistical Areas Section, Geographic Areas Branch, Geography Division, Bureau of the Census, Washington, D.C. 20233. Her telephone number is (301)-457-1099; fax (301) 457-4710; e-mail cmccully@census.gov.

VI. Procedures for an Electronic BBSP Submission

A. Overview

Participants may select to participate in BBSP using an electronic submission: the Equivalency File (EF) option. The EF option uses equivalency files based on the TLID key field in the BBSP TIGER/Line file. The EF option will require the use of the BBSP Annotation Maps provided by the Census Bureau for the purpose of providing feature updates. Regardless of the submission method chosen by participants, the schedule for delivery will remain the same as described in Chapter II.

The Census Bureau will identify guaranteed and 'cannot hold' (cannot guarantee) line segments in the BBSP TIGER/Line files. The guaranteed line segments are segments that the Census Bureau guarantees to use as census 2000 block boundaries. These line segments are the same as those features illustrated in red on the BBSP Annotation maps. The Census Bureau may hold additional features as 2000 census block boundaries; they are identified as "available for suggestion". These features are identified in black and blue on the maps. The 'cannot hold' (cannot guarantee) line segments are segments that the Census Bureau may not use as census 2000 block boundaries and therefore should not be selected by participants as potential census block boundaries, unless reclassified or otherwise redefined. These features are shown in purple on the maps.

B. The Census Bureau will provide the following:

1. Procedures
 - a. Map Annotation Procedures
 - b. TIGER/Line Equivalency File (EF) Procedures
2. 1995 BBSP TIGER/Line File on CD-ROM for all counties within each participating state.
3. BBSP Annotation Maps
4. Glossary of Terms (Appendix C)
5. 1995 BBSP TIGER/Line File Layout (Appendix D)
6. TIGER/Line files Technical Documentation (Appendix F)

7. **Record Layout for the Equivalency File (Appendix I)**

Participants must secure the following:

1. Reference materials for any feature adds
2. USGS 7.5 minute (1:24,000) topographic maps with contour lines as a reference source for all requested ridge line boundaries

Note: Feature updates are submitted on the BBSP Annotation maps when using the EF method of submitting BBSP data.

C. **The Preparation Phase**

1. Process the BBSP TIGER/Line file as necessary to prepare the spatial data base for capturing the BBSPPART information.
2. Develop internal procedures and software routines to insert/update/maintain the BBSPPART code.
3. Identify which features are required as "must hold", "do not hold", and "contingent hold".

D. **The BBSP TIGER/Line Files**

Appendix D provides the record layout of the 1995 BBSP TIGER/Line File. The fields are unchanged from the 1994 TIGER/Line file. Since the release of the 1994 TIGER/Line files, the Census Bureau has continued to update, correct and edit the TIGER data base, including incorporating the results of the 1995 BAS.

The TLID uniquely identifies a single line segment in each file. The TLID is unique for the nation.

The Census Bureau is including only incorporated places and not census designated places (CDPs) as a current geographic area in the place fields on record type 1 and S. CDPs are not shown since they were defined to be consistent with 1990 legal boundaries. The Census Bureau is providing the CENBBSEL and BBSPPART fields on record type 1. The CENBBSEL data occupies position 129 and the BBSPPART field occupies position 130 on the record type 1.

E. Use of the CENBBSEL Field

The CENBBSEL field is set by the Census Bureau. The legal values of the CENBBSEL field range from '0' through '4' (see Table 1). The field contains '0', '2,' or '4'. A value of '2' identifies those features that the Census Bureau cannot hold as census block boundaries. A value of '4' in the CENBBSEL field identifies those features that the Census Bureau, guarantees to hold as 2000 census block boundaries. A value of '0' indicates that the Census Bureau has not selected the feature as a "guaranteed" or "cannot hold" census block boundary. These features may become 2000 census block boundaries, but are not guaranteed. The Census Bureau will set other legal values in the TIGER data base after receiving updates from the BBSP participants.

Table 1. Legal Values of the CENBBSEL Field

Value	CENBBSEL (Census)	Remarks
0		Not flagged
1		Census Bureau Use
2	Cannot Hold	Included in 1995 BBSP T/L
3		Census Bureau Use
4	Guaranteed Block Boundary	Included in 1995 BBSP T/L

The Census Bureau will not use "cannot hold" line segments as census block boundaries, unless the classification of these features changes to an acceptable feature type. For example, if a nonvisible line through a change in classification is identified as a street, the feature would be acceptable. In addition, the Census Bureau has set line segments, that form legal area boundaries for which the Census Bureau will tabulate 2000 Census data, to a "2", "cannot hold".

The Census Bureau will use line segments flagged as guaranteed as collection census block boundaries, provided that subsequent file update activities do not delete or change the classification of these features. For example, if a named road was deleted because it did not exist, the feature would no longer be guaranteed.

Table 2. Legal Values of the BBSPPART Field

Value	BBSPPART (Participant)	Remarks
0		Not flagged
1	Must Hold	Participant Request
2	Do Not Hold	Participant Request
3	Contingent Hold	Participant Request

F. Participant Use of the BBSPPART TIGER/Line File

Participants should create a graphic representation of all features in the TIGER/Line file for all line segments, using the TIGER/Line record types 1 and 2. Record type 2 provides the complete chain of "shape" coordinates for TIGER/Line files. The participant must differentiate between "guaranteed" and "cannot hold" line segments (CENBBSEL values of '4' and '2')

In addition to CENBBSEL "guaranteed" and "cannot hold" line segments, there are several geographic entities that the participants will require as reference aids in identifying BBSPPART line segments. The participants can extract the boundaries for these entities as polygon overlays (coverages) from data on record types 1, 2, 3, 7, 8, A, S and I. Participants should consider creating polygon overlays for the following geographic entities:

- current (record type 1 or S) boundaries for counties, county subdivisions, and incorporated places (The Census Bureau is not including 1990 CDPs on these records)
- water areas (use the water flag on record type S)
- military landmarks, National Parks, and Federal prison landmarks (record types 7, 8, and I)
- Other potentially useful overlays include 1990 voting districts (VTDs), 104th Congressional Districts, and 1990 census blocks. These boundaries may coincide with BBSPPART line segments.

Note that 1990 census tracts/BNAs, block numbers and CDPs (and other 1990 geographic areas) must not be used with current geographic area definitions. Also, note that the Congressional District codes and 1990 census geographic codes are valid only when used with the 1990 state and county codes on Record Type 3. The Census Bureau suggests having

available a polygon overlay with the current geographic area definitions and the 1990 geographic area definitions.

VII. Preparing an EF BSSP Submission

A. Software Requirements

If participants choose to provide a EF BBSP update, participant software must:

- translate and import TIGER/Line files (at a minimum, record types 1, 2, 3, 7, 8, S, and I)
- display a feature network and line feature attributes,
- create and display geographic polygon overlays (coverages) created by linking line segments on common attributes (geographic codes),
- select and update individual line segments and/or features (groups of line segments) with new attribute values,
- generate ASCII equivalency files in specified formats that the Census Bureau can use to review and update the TIGER data. See Table 3.

Table 3. The BBSPPART Equivalency File

Field Name	Size	Columns	Description
STATE	2	1 - 2	
COUNTY	3	3 - 5	
TLID	10	6 - 15	
Filler	1	16	Blank
BBSPPART	1	17	Values of '1', '2', or '3'

Participants choosing the EF BBSP update method must limit their electronic submission to BBSPPART field updates only. The Census Bureau requires the return of all records, even those with potentially no update, rather than a transaction file. In addition, participants must annotate the addition, deletion or change of line segments on the BBSP Annotation maps provided by the Census Bureau.

B. EF BBSP Updates

All participants that have decided to undertake EF

updates will update the BBSPPART field only. Participants may identify "must hold", "do not hold", and "contingent hold" line segments. The Census Bureau will accept limited information in electronic attribute updates format. See Chapter V. Section C.7.

1. Follow the directions for designating "Must Hold", "Do Not Hold", and "Contingent Hold", under Chapter V. Section B. Do not annotate the maps (except when adding features or attribute information). Set the BBSPPART flag for all feature segments, as requested, that currently are in the 1995 TIGER/LINE file.
2. **Special Factors to Consider When Selecting Line Segments and Features for BBSP**

The participant must determine what line segments to request as census block boundaries. However, the participant must be aware of the following factors.

a. **Census Bureau "Guaranteed" Segments**

Do not select features that carry a "guarantee" flag (a value of '4' in the CENBBSEL field) as "must hold" since the Census Bureau already has flagged these as guaranteed 2000 census block boundary line segments.

b. **Census Bureau "Cannot Guarantee" Line Segments**

Do not flag line segments that the Census Bureau has identified as "cannot guarantee" as "must hold", unless there is some mitigating factor, such as where an actual physical feature is found to coincide with a non-visible line segment. The participant must submit the changes to the CFCC on the 1995 Annotation BBSP maps. Justification must be provided in each instance where a "cannot hold" feature is flagged as a "must hold". The Census Bureau will review this information during the RO review.

c. **Legal/Administrative Unit and Statistical Area Boundaries**

Participants may not flag legal/administrative units and statistical area boundaries as "must hold" or "contingent hold" since they are not

finalized until the Census Bureau establishes its final tabulation census block boundaries. Where a legal/administrative unit or statistical area boundary follows a visible feature, such as a road, power line, stream, or other physical feature, the participants can identify the underlying feature with a BBSPPART flag. The BBSPPART flag refers to the visible feature itself and not to the legal/administrative unit or statistical boundary. If the boundary moves to another feature, the BBSPPART flag remains on the physical feature. All line segments that are current nonvisible legal/administrative unit boundaries are flagged as "cannot guarantee" in the CENBBSEL field (value '2'). The Census Bureau will use the final legal/administrative boundaries certified as of January 1, 2000 as 2000 census tabulation block boundaries.

Governmental unit geographic entities include:

- State
- County (or statistical equivalent)
- Minor Civil Division
- Incorporated Place
- Consolidated Government
- American Indian reservation or trustland

Statistical geographic entities include:

- Census County Division
- Unorganized Territory
- Census Designated Place
- Census Tract
- Block Group
- Tribal Jurisdiction Statistical Area
- Tribal Designated Statistical Area
- Alaska Native Village Statistical Area
- Alaska Native Regional Corporation

d. 1990 Non-visible Line Segments

If the Census Bureau determines that certain non-visible features are not required for the 2000 census statistical area programs, the Census Bureau plans to delete the segments from the TIGER data base. Included in this list are the feature extensions (CFCC F20, F21, F22, and F23), and point-to-point lines (CFCC F30). The Census

Bureau has flagged these features as "cannot hold" (cannot guarantee) in the CENBBSEL field. The participants generally should not flag these features. If however, participants have information which would change the CFCC, they may request the CFCC change and then flag the feature. RO geographers will review the CFCC change at the time of submission. If the participants require the use of a segment, such as a point-to-point line, they may flag the feature and retain the existing CFCC. These features are suppressed from the BBSP maps.

e. **Features Within Military Installations and Federal Prisons**

The Census Bureau customarily does not hold features that are internal to military installations and Federal prisons as census block boundaries. For the 2000 Census, the participants must identify all features within military installations and Federal prisons that they require as census block boundaries as "must holds". Since these internal features are not ordinarily held as census block boundaries, there is no requirement to flag features as "cannot hold".

f. **Selecting "Must Hold" Line Segments and Features**

Using the resident GIS, first select an individual line segment, or a feature (a chain of line segments based on a common name) that you are requesting the Census Bureau to hold as a 2000 census block boundary. Code the line segment or group of line segments as "must hold" by inserting a "1" in the BBSPPART field.

1. **Discontinuous Chains**

Please note that the selection of a feature based upon a common feature name does not guarantee that all line segments belong to the same feature. For example, there may be two Main Streets, one in city A, and another in city B. Depending on participant software, participants may select both Main Streets. If a segment is erroneously coded,

participants may simply reset the BBSPPART code back to "0".

To locate any discontinuous features with the same name, the screen display must encompass the entire county. Participants must examine closely the screen, possibly zooming into quadrants to spot very small segments with the same name.

2. Gaps Along a Feature

Participants should carefully examine the grouping of segments selected via a feature name for gaps in the feature chain caused by segments that may have a different name, or no name at all. The Census Bureau has improved the consistency of names within the TIGER data base since the release of the 1992 TIGER/Line products. However, the 1995 BBSP TIGER/Line files still may contain some name inconsistencies. Primary names may alternate with secondary names along a feature chain. For example, U.S. Highway 1 may carry the primary name "King Street" within the city of Alexandria, and then revert again to Highway 1 (as primary) outside of the city.

Participants should "zoom" to a larger scale display to locate gaps in feature name chains. If there are gaps along a feature path, the participant needs to code those individual line segments to "1" to complete the "must hold" feature path.

g. Selecting "Do Not Hold" Line Segments and Features

Select all individual line segments or features that the participants do not want the Census Bureau to hold as 2000 census block boundaries. Some of these may be "guaranteed" census block boundary features. Set the BBSPPART field for all selected line segments to "2". As with "must hold" features, the participant also may exclude undesired segments of any group selection based upon feature name by recoding those individual

line segments with a "0" (not flagged), "1" (must hold) or "3" (contingent hold), as required.

h. Selecting "Contingent Hold" Line Segments and Features

Select those individual line segments and features that the participant wishes the Census Bureau to hold as census block boundaries, but which presently cannot be held until it is confirmed that they intersect tabulation boundaries for the 2000 census. The Census Bureau will hold "contingent" features as 2000 census block boundaries wherever they intersect with 2000 legal administrative boundaries.

Set individual line segments to "3" in the BBSPPART field. Participants may exclude undesired segments of the group settings by coding individual line segments with other BBSPPART field values.

Caution: The Census Bureau is not in a position to honor all features in the TIGER/Line file as guaranteed census block boundaries. We ask participants to suggest features as "must hold" where they are required as a VTD or potential VTD boundary. The Census Bureau will develop edits to ensure that all features in any given classification are not flagged without justification.

C. Edit Requirements

1. EF Option Edits

The Census Bureau will edit all submitted items to ensure that they are consistent with these procedures and fall within Census Bureau code standards. Where the participant has selected the EF option, the Census Bureau will check for the following:

- All BBSPPART values used are within the valid range of "1" through "3"
- State and county codes match the county codes
- TLID codes match the valid TLIDs within the county partition

- Participants use the correct file format and name
- All polygons formed by suggested features have at least one feature specified in Appendix G.

D. Submission

The Census Bureau prefers participants to submit their electronic submissions using the Internet. The Census Bureau will work with states selecting the EF option to determine the options available for the electronic submission of the data. Files will go directly to Census Bureau Headquarters. The Geography Division will ensure certain standards on the submission before they provide it to the Census Bureau's RO. Send any 1995 BBSP Annotation Maps to the appropriate RO geographer identified in Appendix E. Include a list of the maps provided if not returning the entire set.

Include an e-mail message at the time of submission to:

Mr. Marshall Turner
Chief, 2000 Redistricting Data Office
Bureau of the Census
Washington, D. C. 20233
mturner@census.gov

Ms. Cathy McCully
Chief, Statistical Areas Section
Geography Division
Bureau of the Census
Washington, D. C. 20233
cmccully@census.gov

Appendix A

ACCEPTABLE FEATURES AS CENSUS BLOCK BOUNDARIES

Guaranteed census block boundaries

All named roads
All unnamed roads within incorporated places
Shorelines of islands with roads
Shorelines of double line drainage

Features acceptable as census block boundaries

Intermittent streams*
Perennial rivers
Named walkways and alleys
Dry washes*
Reservoirs
Federal and State Parks
Jeep trails
Stone walls
Water bodies
Railroads
Pipelines
Powerlines
Ridgelines*
Fence lines
Footpaths
Unnamed roads, logging roads
Canyons, ravines*
Alleys, walkways
Aboveground rapid transit, aerial tramway, monorail, and other rail features (cog railroad, incline railway, logging tram)
Canals, aqueducts, ditches*
Tunnels
Open pit mines, strip mines, quarries
Swamps
Levees, berms, dams*

*The "visibility" certain features varies throughout the country. An intermittent stream that is clearly marked on a reference map may be very difficult to locate. Please note that for these features listed with an asterisk, the Regional Office geographer may request supporting information.

Possible census block boundaries

Property Lines
Pipelines, underground

Appendix B

TYPES OF COUNTY SUBDIVISIONS RECOGNIZED BY THE CENSUS BUREAU, BY STATE - 1995

<u>STATE</u>	<u>COUNTY SUBDIVISIONS</u>
Alabama	CCDs
Alaska	census subareas
Arizona	CCDs
Arkansas	townships; unorganized territories (2)
California	CCDs
Colorado	CCDs
Connecticut	towns*
Delaware	CCDs
District of Columbia	P (Washington city)
Florida	CCDs
Georgia	CCDs
Hawaii	CCDs
Idaho	CCDs
Illinois	townships*; election precincts; P (Chicago city)
Indiana	townships*; unorganized territory (1) (not shown in the 1980 and 1990 censuses)
Iowa	townships; unorganized territory (1); P
Kansas	townships*; P (unorganized territories erroneously shown in the 1980 and 1990 censuses)
Kentucky	CCDs
Louisiana	parish governing authority districts; unorganized territory (1); P (New Orleans city)
Maine	towns*; plantations*; gore (1); American Indian reservations ^{1/} (3); unorganized territories; P
Maryland	election districts; assessment districts (Anne Arundel County); P (Baltimore city)
Massachusetts	towns*; P
Michigan	townships*; P
Minnesota	townships*; unorganized territories; P
Mississippi	supervisors' districts
Missouri	townships#; P (St. Louis city)
Montana	CCDs
Nebraska	townships*; election precincts; P
Nevada	CCDs
New Hampshire	towns*; locations; purchases; grants; townships; P
New Jersey	townships*; P
New Mexico	CCDs
New York	towns*; boroughs (one in each of the 5 counties comprising New York city); American Indian reservations ^{1/} ; P
North Carolina	townships; unorganized territories (3); P
North Dakota	townships*; unorganized territories; P

<u>STATE</u>	<u>COUNTY SUBDIVISIONS</u>
Ohio	townships* ^{3/} ; P
Oklahoma	CCDs
Oregon	CCDs
Pennsylvania	townships*; road district (1)*; P
Rhode Island	towns*; P
South Carolina	CCDs
South Dakota	townships*; unorganized territories; P
Tennessee	CCDs
Texas	CCDs
Utah	CCDs
Vermont	towns*; gores (3); grant (1); P
Virginia	magisterial districts; county (1) ^{1/} ; P
Washington	CCDs
West Virginia	magisterial districts
Wisconsin	towns*; P
Wyoming	CCDs
American Samoa	counties*; islands
Guam	election districts
Northern Mariana Islands	municipal districts
Palau	states ^{1/} ; municipalities*
Puerto Rico	barrios; barrios-pueblos ^{2/}
Virgin Islands	census subdistricts

- P = Incorporated places independent of MCDs serve as MCD equivalents; see "Relationship" table
- = Functioning (but not necessarily active) governmental units
- # = Includes both functioning (but not necessarily active) and nonfunctioning governmental units
- ^{1/} Functioning governmental unit, but not as a "county subdivision"
- ^{2/} Barrios and barrios-pueblos may be further divided into subbarrios.
- ^{3/} One nonfunctioning township (Russia) exists in Lorain County completely within the incorporated place of Oberlin city.

Geography Division
Bureau of the Census
February 1995

Appendix C
Glossary of Terms

ANRC	Alaska Native Regional Corporation
attribute	A characteristic of a record, usually stored as a field on a record
Bbsp	Block Boundary Suggestion Project
bounding feature	one or more line segments that partially enclose a polygon or area
'cannot guarantee' line segment	A line segment that the Census Bureau does not plan to use as a census collection block boundary
CD-ROM	Compact Disc Read Only Memory
CFCC	Census Feature Class Code
closed polygon	An area formed by bounding features, usually of a specific feature type
collection census block	The smallest areal unit used to collect census data during the census enumeration
'contingent hold' line segment	A line segment that does not now qualify as a collection census block boundary, but that may qualify after final feature updates and governmental unit boundary updates are available
coordinate	A latitude and longitude position on the earth's surface

current boundary	The most recent governmental unit or statistical area boundary available in the data base
discontinuous chain	A group of line segments sharing a common attribute, such as a feature name, where the end-to-end linkage is interrupted by one or more intervening line segments with different attribute values
do not hold line segment	A line segment that BBSP participants are requesting the Census Bureau not to hold as a collection census block boundary
EF	Equivalency File
equivalency file	A file containing data base update information based upon one or more key fields
extension	A non-visible line of sight line from the end of a feature at an angle of 180 degrees from the feature no greater than 300 feet in length
feature	A group of connected line segments with the same primary name and classification
feature move	Revising the coordinate node or shape points of a line segment without altering the topology of the network
feature split	The division of a line segment into two or more separate line segments

field	a sub-unit of a data record used to store values for a particular attribute
GIS	Geographic Information System
'guaranteed' line segment	A line segment that the Census Bureau can guarantee will be held as a census collection block boundary
internal feature	A feature or line segment that terminates within a polygon
key field	A common attribute field occurring in two or more tables used to relate one table with the other
line segment	a linear spatial object consisting of a 'to' and 'from' node, attributes, and possibly additional intermediate shape points
local relief	The difference between the highest and lowest elevation for an area
Map Image Metafile (MIM)	Means of archiving census maps using a flat file of ASCII characters that is a self-documenting, full-image description of a special software. In fully expanded form, no external documentation is needed to describe the data fields. Differences in the bit-structure of the real, integer, and character data types between computers and programming languages are of no consequence. Information in the MIMs may be used to accurately recreate the original census map.

metafile	A file providing supporting documentation for digital data exchange
must hold	A line segment that the Census Bureau must use as a collection census block boundary
node	The end point of a line segment
point-to-point line	A non-visible line-of-sight line between two known points or intersections
polygon	An area bounded by one or more line segments
primary feature name	The complete name used in the TIGER/Line file consisting of a directional prefix, the name of the feature, the type of feature, and a directional suffix. Features in the file may lack one or more of these name components
record	The data element in a file
ridgeline	The crest of a mountain or hill with a significant difference in elevation from the surrounding area
RO	Regional Office
spatial object	The elemental geographic component of a geographic information system, such as a line segment, a point, or an area
table	A data base relation, or group of records sharing the same format

tabulation census block	A census block delineated for data presentation purposes
TIGER file	Topologically Indexed Geographic Encoding and Referencing file
T/L	TIGER/Line™
TLID	The TIGER/Line File segment identifier
TLID-EF	TIGER/Line Identifier Equivalency File Method of BBSP submission.
topology	The mathematical relationship between points, lines, and areas in a spatial network

Appendix D

TIGER/Line™ File

1995 BBSF Version

RT	Field Name	Blank Valid	Fmt	Type	Beg	End	Len	Description of Field
1 1	RT	No	L	A	1	1	1	Record Type "1"
2 1	VERSION	No	R	N	2	5	4	Version Number
3 1	TLID	No	R	N	6	15	10	TIGER/Line Segment Number
4 1	LSIDE	Yes	R	N	16	16	1	Single Side Segment Code
5 1	SOURCE	Yes	L	A	17	17	1	Linear Segment Source Code
6 1	FEDIRP	Yes	L	A	18	19	2	Feature Direction, Prefix
7 1	FENAMC	Yes	L	A	20	49	30	Feature Name
8 1	FETYPE	Yes	L	A	50	53	4	Feature Type
9 1	FEDIRS	Yes	L	A	54	55	2	Feature Direction, Suffix
10 1	CPCC	Yes	L	A	56	58	3	Census Feature Class Code
11 1	FRADDL	Yes	L	A	59	60	11	Start Address Left
12 1	TOADDL	Yes	L	A	70	80	11	End Address Left
13 1	FRADDR	Yes	L	A	81	91	11	Start Address Right
14 1	TOADDR	Yes	L	A	92	102	11	End Address Right
15 1	FRIADDL	Yes	R	N	103	103	1	Start Imputed Address Flag Left
16 1	TOIADDL	Yes	R	N	104	104	1	End Imputed Address Flag Left
17 1	FRIADDR	Yes	R	N	105	105	1	Start Imputed Address Flag Right
18 1	TOIADDR	Yes	R	N	106	106	1	End Imputed Address Flag Right
19 1	ZIPL	Yes	L	N	107	111	5	ZIP Code Left
20 1	ZIPR	Yes	L	N	112	116	5	ZIP Code Right
21 1	FAIRL	Yes	L	N	117	121	5	-Current FIPS 55 Code (American Indian / ANVSA) Left (was 1990)
22 1	FAIRR	Yes	L	N	122	126	5	-Current FIPS 55 Code (American Indian / ANVSA) Right (was 1990)
23 1	TRUSTL	Yes	L	N	127	127	1	-American Indian Trust Land Flag, Left (Was: Census ANRC Code Left)
24 1	TRUSTR	Yes	L	N	128	128	1	-American Indian Trust Land Flag, Right (Was: Census ANRC Code Left)
25 1	CENBSEL	Yes	L	A	129	129	1	Census BBSF Field (Was Census ANRC Code Right)
26 1	BBSFPART	Yes	L	A	130	130	1	Participant BBSF Field (Was Census ANRC Code Right)
27 1	STATEL	Yes	L	N	131	132	2	-Current FIPS State Code Left (was 1990)
28 1	STATER	Yes	L	N	133	134	2	-Current FIPS State Code Right (was 1990)
29 1	COUNTYL	Yes	L	N	135	137	3	-Current FIPS County Code Left (was 1990)
30 1	COUNTYR	Yes	L	N	138	140	3	-Current FIPS County Code Right (was 1990)
31 1	FMCDL	Yes	L	N	141	145	5	-Current FIPS 55 Code (MCD / CCD) Left (was 1990)
32 1	FMCDR	Yes	L	N	146	150	5	-Current FIPS 55 Code (MCD / CCD) Right (was 1990)
33 1	FSMCDL	Yes	L	N	151	155	5	-Current FIPS 55 Code (Sub-MCD) Left (was 1990)
34 1	FSMCDR	Yes	L	N	156	160	5	-Current FIPS 55 Code (Sub-MCD) Right (was 1990)
35 1	FPLL	Yes	L	N	161	165	5	-Current FIPS 55 Code (Race / CDP) Left (was 1990)
36 1	FPRL	Yes	L	N	166	170	5	-Current FIPS 55 Code (Race / CDP) Right (was 1990)
37 1	CTBNAL	Yes	L	N	171	176	6	*Census Tract/BNA Code Left
38 1	CTBNAR	Yes	L	N	177	182	6	*Census Tract/BNA Code Right
39 1	BLKL	Yes	L	A	183	186	4	*Block Number Left
40 1	BLKR	Yes	L	A	187	190	4	*Block Number Right
41 1	FRLONG	No	R	N	191	200	10	Start Longitude
42 1	FRLAT	No	R	N	201	209	9	Start Latitude
43 1	TOLONG	No	R	N	210	219	10	End Longitude
44 1	TOLAT	No	R	N	220	228	9	End Latitude

* Data Field will contain Current Geographic Area Code until 2000 Code available

* Data Field will contain 1990 Geographic Area code until 2000 Code available

RT: Record Type Identifier Character

Fmt: Format of Data Where L=Left Justified, R=Right Justified

Type: Type of Data Where A=Alphanumeric, N=Numeric

Italic: Field Definition Change

1 2	RT	No	L	A	1	1	1	Record Type "2"
2 2	VERSION	No	R	N	2	5	4	Version Number
3 2	TLID	No	R	N	6	15	10	TIGER/Line Segment Number
4 2	RTSQ	No	R	N	16	18	3	Record Sequence Number
5 2	LONG1	No	R	N	19	28	10	Point 1, Longitude
6 2	LAT1	No	R	N	29	37	9	Point 1, Latitude
7 2	LONG2	Yes	R	N	38	47	10	Point 2, Longitude
8 2	LAT2	Yes	R	N	48	56	9	Point 2, Latitude
9 2	LONG3	Yes	R	N	57	66	10	Point 3, Longitude
10 2	LAT3	Yes	R	N	67	75	9	Point 3, Latitude
11 2	LONG4	Yes	R	N	76	85	10	Point 4, Longitude
12 2	LAT4	Yes	R	N	86	94	9	Point 4, Latitude
13 2	LONG5	Yes	R	N	95	104	10	Point 5, Longitude
14 2	LAT5	Yes	R	N	105	113	9	Point 5, Latitude
15 2	LONG6	Yes	R	N	114	123	10	Point 6, Longitude
16 2	LAT6	Yes	R	N	124	132	9	Point 6, Latitude
17 2	LONG7	Yes	R	N	133	142	10	Point 7, Longitude
18 2	LAT7	Yes	R	N	143	151	9	Point 7, Latitude
19 2	LONG8	Yes	R	N	152	161	10	Point 8, Longitude
20 2	LAT8	Yes	R	N	162	170	9	Point 8, Latitude
21 2	LONG9	Yes	R	N	171	180	10	Point 9, Longitude
22 2	LAT9	Yes	R	N	181	189	9	Point 9, Latitude
23 2	LONG10	Yes	R	N	190	199	10	Point 10, Longitude
24 2	LAT10	Yes	R	N	200	208	9	Point 10, Latitude

RT	Field Name	Blank Valid	Fmt	Type	Beg	End	Len	Description of Field
1 3	RT	No	L	A	1	1	1	Record Type "3"
2 3	VERSION	No	R	N	2	5	4	Version Number
3 3	TLID	No	R	N	6	15	10	TIGER/Line Segment Number
4 3	STATE90L	Yes	L	N	16	17	2	FIPS State Code, 1990 Left (was 1990)
5 3	STATE90R	Yes	L	N	18	19	2	FIPS State Code, 1990 Right (was 1990)
6 3	COUNT90L	Yes	L	N	20	22	3	FIPS County Code, 1990 Left (was 1990)
7 3	COUNT90R	Yes	L	N	23	25	3	FIPS County Code, 1990 Right (was 1990)
8 3	FMC900L	Yes	L	N	26	30	5	FIPS 55 Code (MCD/CCD), 1990 Left (was 1990)
9 3	FMC900R	Yes	L	N	31	35	5	FIPS 55 Code (MCD/CCD), 1990 Right (was 1990)
10 3	FPL90L	Yes	L	N	36	40	5	FIPS 55 Code (Place/CDP), 1990 Left (was 1990)
11 3	FPL90R	Yes	L	N	41	45	5	FIPS 55 Code (Place/CDP), 1990 Right (was 1990)
12 3	CTBNA90L	Yes	L	N	46	51	6	Census Tract/BNA Code, 1990 Left (was 1990)
13 3	CTBNA90R	Yes	L	N	52	57	6	Census Tract/BNA Code, 1990 Right (was 1990)
14 3	RS1	Yes	L	A	58	60	3	Reserve Space 1 (Was:Block Number, 1990 Left)
15 3	RS2	Yes	L	A	61	63	3	Reserve Space 2 (Was:Block Number, 1990 Right)
16 3	RS3	Yes	L	A	64	66	3	Reserve Space 3 (Was:Census MCD/CCD Code, 1990 Left)
17 3	RS4	Yes	L	A	67	69	3	Reserve Space 4 (Was:Census MCD/CCD Code, 1990 Right)
18 3	BLK90L	Yes	L	A	70	73	4	Block Number, 1990 Left (Was:Census Place Code, 1990 Left)
19 3	BLK90R	Yes	L	A	74	77	4	Block Number, 1990 Right (Was:Census Place Code, 1990 Right)
20 3	AIRL	Yes	L	N	78	81	4	<Current Census American Indian/TJSA/TDSA/ANYSA Code Left (was 1990)
21 3	AIRR	Yes	L	N	82	85	4	<Current Census American Indian/TJSA/TDSA/ANYSA Code Right (was 1990)
22 3	RS5	Yes	L	N	86	88	3	Reserve Space 5 (Was:Census MCD/CCD Code Left)
23 3	RS6	Yes	L	N	89	91	3	Reserve Space 6 (Was:Census MCD/CCD Code Right)
24 3	ANRCL	Yes	L	N	92	93	2	<Census ANRC Code Left (Was:Census Sub-MCD Code Left)
25 3	ANRCR	Yes	L	N	94	95	2	<Census ANRC Code Right (Was:Census Sub-MCD Code Right)
26 3	RS7	Yes	R	N	96	99	4	Reserve Space 7 (Was:Census Place Code Left)
27 3	RS8	Yes	R	N	100	103	4	Reserve Space 8 (Was:Census Place Code Right)
28 3	VTD90L	Yes	L	A	104	107	4	Reserve Space (Census Voting District Code, 1990 Left)
29 3	VTD90R	Yes	L	A	108	111	4	Reserve Space (Census Voting District Code, 1990 Right)
1 4	RT	No	L	A	1	1	1	Record Type "4"
2 4	VERSION	No	R	N	2	5	4	Version Number
3 4	TLID	No	R	N	6	15	10	TIGER/Line Segment Number
4 4	RTSQ	No	R	N	16	18	3	Record Sequence Number
5 4	NAME1	No	R	N	19	26	8	Linear Name Identification Number, First
6 4	NAME2	Yes	R	N	27	34	8	Linear Name Identification Number, Second
7 4	NAME3	Yes	R	N	35	42	8	Linear Name Identification Number, Third
8 4	NAME4	Yes	R	N	43	50	8	Linear Name Identification Number, Fourth
9 4	NAME5	Yes	R	N	51	58	8	Linear Name Identification Number, Fifth
1 5	RT	No	L	A	1	1	1	Record Type "5"
2 5	STATE	No	L	N	2	3	2	FIPS State Code For File
3 5	COUNTY	No	L	N	4	6	3	FIPS County Code For File
4 5	NAME	No	R	N	7	14	8	Linear Name Identification Number
5 5	FEDIRP	Yes	L	A	15	16	2	Feature Direction, Prefix
6 5	FENAME	Yes	L	A	17	46	30	Feature Name
7 5	FETYPE	Yes	L	A	47	50	4	Feature Type
8 5	FEDIRS	Yes	L	A	51	52	2	Feature Direction, Suffix
1 6	RT	No	L	A	1	1	1	Record Type "6"
2 6	VERSION	No	R	N	2	5	4	Version Number
3 6	TLID	No	R	N	6	15	10	TIGER/Line Segment Number
4 6	RTSQ	No	R	N	16	18	3	Record Sequence Number
5 6	FRADDL	Yes	R	A	19	29	11	Start Address Left
6 6	TOADDL	Yes	R	A	30	40	11	End Address Left
7 6	FRADDR	Yes	R	A	41	51	11	Start Address Right
8 6	TOADDR	Yes	R	A	52	62	11	End Address Right
9 6	FRIADDL	Yes	L	A	63	63	1	Start Imputed Address Flag Left
10 6	TOIADDL	Yes	L	A	64	64	1	End Imputed Address Flag Left
11 6	FRIADDR	Yes	L	A	65	65	1	Start Imputed Address Flag Right
12 6	TOIADDR	Yes	L	A	66	66	1	End Imputed Address Flag Right
13 6	ZIPL	Yes	R	N	67	71	5	ZIP Code Left
14 6	ZIPR	Yes	R	N	72	76	5	ZIP Code Right
1 7	RT	No	L	A	1	1	1	Record Type "7"
2 7	VERSION	No	R	N	2	5	4	Version Number
3 7	STATE	No	L	N	6	7	2	FIPS State Code For File
4 7	COUNTY	No	L	N	8	10	3	FIPS County Code For File
5 7	LAND	No	R	N	11	20	10	Landmark Identification Number
6 7	SOURCE	Yes	L	A	21	21	1	Source Code
7 7	CFCC	Yes	L	A	22	24	3	Census Feature Class Code
8 7	LANAME	Yes	L	A	25	54	30	Landmark Feature Name
9 7	LALONG	Yes	R	N	55	64	10	Longitude
10 7	LALAT	Yes	R	N	65	73	9	Latitude
11 7	FILLER	Yes	L	A	74	74	1	Filler (to make even character count)

RT	Field Name	Blank Valid	Fmt	Type	Beg	End	Len	Description of Field
1 8	RT	No	L	A	1	1	1	Record Type "8"
2 8	VERSION	No	R	N	2	5	4	Version Number
3 8	STATE	No	L	N	6	7	2	FIPS State Code For File
4 8	COUNTY	No	L	N	8	10	3	FIPS County Code For File
5 8	CENID	No	L	A	11	15	5	Census File Identification Code
6 8	POLYID	No	R	N	16	25	10	Polygon Identification Code
7 8	LAND	No	R	N	26	35	10	Landmark Identification Number
8 8	FILLER	Yes	L	A	36	36	1	Filler (to make even character count)
1 9	RT	No	L	A	1	1	1	Record Type "9"
2 9	VERSION	No	R	N	2	5	4	Version Number
3 9	STATE	No	L	N	6	7	2	FIPS State Code For File
4 9	COUNTY	No	L	N	8	10	3	FIPS County Code For File
5 9	CENID	No	L	A	11	15	5	Census File Identification Code
6 9	POLYID	No	R	N	16	25	10	Polygon Identification Code
7 9	SOURCE	Yes	L	A	26	26	1	Source Code
8 9	CFCC	Yes	L	A	27	29	3	Census Feature Class Code
9 9	EGLNAME	Yes	L	A	30	39	10	Key Geographic Location Feature Name
10 9	NUMBER	Yes	R	N	40	70	11	Street Number for Key Geographic Location
11 9	ZIP	Yes	R	N	71	75	5	ZIP Code for Key Geographic Location
12 9	ZIP4	Yes	R	N	76	79	4	+4 Postal Add-on Code for Key Geographic Location
13 9	NAME	Yes	R	N	80	87	8	Linear Name Identification Number
14 9	FILLER	Yes	L	A	88	88	1	Filler (to make even character count)
1 A	RT	No	L	A	1	1	1	Record Type "A"
2 A	VERSION	No	R	N	2	5	4	Version Number
3 A	STATE	No	L	N	6	7	2	FIPS State Code For File
4 A	COUNTY	No	L	N	8	10	3	FIPS County Code For File
5 A	CENID	No	L	A	11	15	5	Census File Identification Code
6 A	POLYID	No	R	N	16	25	10	Polygon Identification Code
7 A	FAIR	Yes	L	N	26	30	5	*FIPS 55 Code (American Indian/ANVSA)
8 A	FMCD	Yes	L	N	31	35	5	*FIPS 55 Code (MCD/CCD)
9 A	FPL	Yes	L	N	36	40	5	*FIPS 55 Code (Place/CDP)
10 A	CTBNA	Yes	L	N	41	45	5	*Census Tract/BNA Code
11 A	BLK	Yes	L	A	47	50	4	*Block Number
12 A	CD106	Yes	L	N	51	52	2	Congressional District Number, 106th (was 101st CD)
13 A	CD108	Yes	L	N	53	54	2	Congressional District Number, 108th (was 103rd CD)
14 A	SDELM	Yes	L	A	55	59	5	*Elementary School District Code
15 A	SDMID	Yes	L	A	60	64	5	*Middle School District Code
16 A	SDSEC	Yes	L	A	65	69	5	*Secondary School District Code
17 A	SDUNI	Yes	L	A	70	74	5	*Unified School District Code
18 A	TAZ	Yes	L	A	75	80	6	*Traffic Analysis Zone Code
19 A	UA	Yes	L	N	81	84	4	*Census Urbanized Area Code, 1990
20 A	URBFLAG	Yes	L	A	85	85	1	*Census Urban/Rural Indicator, 1990
21 A	CTPP	Yes	L	A	86	89	4	*CTPP Area Code (Was Reserved Space)
22 A	RS9	Yes	L	A	90	95	6	Reserve Space 9
1 C	RT	No	L	A	1	1	1	Record Type "C"
2 C	VERSION	No	R	N	2	5	4	Version Number
3 C	STATE	No	L	N	6	7	2	FIPS State Code
4 C	COUNTY	No	L	N	8	10	3	FIPS County Code
4 C	FPSYR	Yes	L	A	11	12	2	Applicable Year for Code/Name Relationship
5 C	FIPS	Yes	L	N	13	17	5	FIPS PUB 55-3 Code
6 C	FIPSCC	Yes	L	N	18	19	2	FIPS Class Code
7 C	PDC	Yes	L	N	20	20	1	Place Description Code
8 C	LASAD	No	L	N	21	22	2	Legal/Administrative/Statistical Area Description Code
9 C	ANRC	Yes	L	N	23	24	2	ANRC Code
10 C	CSMA	Yes	L	N	25	28	4	Consolidated Metropolitan Statistical Area Code
11 C	MA	Yes	L	N	29	32	4	Metropolitan Area Code
12 C	AIR	Yes	L	N	33	36	4	Census American Indian/TJSA/TDBA/ANVSA Code
13 C	VTD	Yes	R	A	37	42	6	Voting Districts Code
14 C	UA	Yes	L	N	43	46	4	Census Urbanized Area Code
15 C	NAME	No	L	N	47	112	66	Name
1 H	RT	No	L	A	1	1	1	Record Type "H"
2 H	VERSION	No	R	N	2	5	4	Version Number
3 H	STATE	No	L	N	6	7	2	FIPS State Code For File
4 H	COUNTY	No	L	N	8	10	3	FIPS County Code For File
5 H	TLID	No	R	N	11	20	10	TIGER/Line Segment Number
6 H	HIST	No	L	A	21	21	1	Reserve Space (History Reason)
7 H	SOURCE	No	L	A	22	22	1	Reserve Space (Source Code for History)
8 H	TLIDFR1	Yes	R	N	23	32	10	Created From TIGER/Line Segment Number 1
9 H	TLIDFR2	Yes	R	N	33	42	10	Created From TIGER/Line Segment Number 2
10 H	TLIDT01	Yes	R	N	43	52	10	Became TIGER/Line Segment Number 1
11 H	TLIDT02	Yes	R	N	53	62	10	Became TIGER/Line Segment Number 2

RT	Field Name	Blank Valid	Pos	Type	Beg	End	Len	Description of Field
1	RT	No	L	A	1	1	1	Record Type "T"
2	VERSION	No	R	N	2	5	4	Version Number
3	TLID	No	R	N	6	15	10	TIGERLine Segment Number
4	STATE	No	L	N	16	17	2	FIPS State Code
5	COUNTY	No	L	N	18	20	3	FIPS County Code
6	RTLNK	No	L	A	21	21	1	Record Type of Link
7	CENIDL	Yes	L	A	22	26	5	Census File Identification Code Left
8	POLYIDL	Yes	R	N	27	36	10	Polygon Identification Code Left
9	CENIDR	Yes	L	A	37	41	5	Census File Identification Code Right
10	POLYIDR	Yes	R	N	42	51	10	Polygon Identification Code Right
11	FILLER	Yes	L	A	52	52	1	Filler (to make even character count)
1	P RT	No	L	A	1	1	1	Record Type "P"
2	P VERSION	No	R	N	2	5	4	Version Number
3	P STATE	No	L	N	6	7	2	FIPS State Code
4	P COUNTY	No	L	N	8	10	3	FIPS County Code
5	P CENID	No	L	A	11	15	5	Census File Identification Code
6	P POLYID	No	R	N	16	25	10	Polygon Identification Code
7	P POLYLONG	No	R	N	26	35	10	Longitude
8	P POLYLAT	No	R	N	36	44	9	Latitude
1	R RT	No	L	A	1	1	1	Record Type "R"
2	R VERSION	No	R	N	2	5	4	Version Number
3	R STATE	No	L	N	6	7	2	FIPS State Code
4	R COUNTY	No	L	N	8	10	3	FIPS County Code
5	R CENID	No	L	A	11	15	5	Census File Identification Code
6	R MAXID	No	R	N	16	25	10	Highest Record Number in Range for Census File
7	R MINID	No	R	N	26	35	10	Lowest Record Number in Range for Census File
8	R HIGHID	No	R	N	36	45	10	Current High Record Number for Census File
9	R FILLER	Yes	L	A	46	46	1	Filler (to make even character count)
1	S RT	No	L	A	1	1	1	Record Type "S"
2	S VERSION	No	R	N	2	5	4	Version Number
3	S STATE	No	L	N	6	7	2	FIPS State Code For File
4	S COUNTY	No	L	N	8	10	3	FIPS County Code For File
5	S CENID	No	L	A	11	15	5	Census File Identification Code
6	S POLYID	No	R	N	16	25	10	Polygon Identification Code
7	S WATER	Yes	L	A	26	26	1	Water Flag
8	S CSMA	Yes	L	A	27	30	4	-Current Consolidated Metropolitan Statistical Area Code
9	S MA	Yes	L	A	31	34	4	-Current Metropolitan Area Code
10	S FAIR	Yes	L	N	35	39	5	-Current FIPS 55 Code (American Indian/ANVSA)
11	S AIR	Yes	L	A	40	43	4	-Current Census American Indian/TJSA/TDSA/ANVSA Code
12	S TRUSTL	Yes	L	A	44	44	1	-Current American Indian Trust Land Flag
13	S ANRC	Yes	L	A	45	46	2	-Current Census Alaska Native Regional Corporation Code
14	S CSTATE	Yes	L	A	47	48	2	-Current FIPS State Code
15	S CCOUNTY	Yes	L	A	49	51	3	-Current FIPS County Code
16	S FCCITY	Yes	L	A	52	56	5	-Current FIPS 55 Code (Consolidated City)
17	S FMCD	Yes	L	N	57	61	5	-Current FIPS 55 Code (MCD/CCD)
18	S FSMCD	Yes	L	A	62	66	5	-Current FIPS 55 Code (Sub-MCD)
19	S FPLC	Yes	L	N	67	71	5	-Current FIPS 55 Code (Place/CDP)
20	S CTBNA	Yes	L	N	72	77	6	-Census Tract/BNA Code
21	S BLK	Yes	L	A	78	81	4	-Block Number
22	S RS10	Yes	L	A	82	82	1	Reserved Space 10 (2000 Block Suffix)
23	S CDC	Yes	L	N	83	84	2	Congressional District Number, Current
24	S SSSDC	Yes	L	A	85	90	6	Reserved Space (State Senate District Code)
25	S SHDC	Yes	L	A	91	96	6	Reserved Space (State House District Code)
26	S VTD0	Yes	L	A	97	102	6	Voting District Code (2000)
27	S RS11	Yes	L	A	103	108	6	Reserved Space 11 (CT2000)
28	S RS12	Yes	L	A	109	109	1	Reserved Space 12 (BC2000)
29	S RS13	Yes	L	A	110	114	5	Reserved Space 13 (CCD2000)
30	S RS14	Yes	L	A	115	119	5	Reserved Space 14 (CDP2000)
31	S FILLER	Yes	L	A	120	120	1	Filler (to make even character count)
1	Z RT	No	L	A	1	1	1	Record Type "Z"
2	Z VERSION	No	R	N	2	5	4	Version Number
3	Z TLID	No	R	N	6	15	10	TIGERLine Segment Number
4	Z RTSQ	No	R	N	16	18	3	Record Sequence Number (0-999)
5	Z ZIP4L	Yes	R	N	19	22	4	-4 Postal Add-on Code Left
6	Z ZIP4R	Yes	R	N	23	26	4	-4 Postal Add-on Code Right

Appendix E

BBSP Regional Office (RO) Liaison and Address List

Atlanta

Mr. Skip Rose
Bureau of the Census
101 Marietta Street, N.W.
Suite 3200
Atlanta, Georgia 30303-2700
404-730-3955
rrose@info.census.gov
(AL, FL, GA)

Detroit

Mr. Joe Kogelmann
Bureau of the Census
1395 Brewery Park Blvd.
P.O. Box 33405
Detroit, Michigan 48232-5405
313-259-1077
Joesph_H_Kogelmann@ccmail.
census.gov
(OH, MI, WV)

Boston

Ms. Vicki Louderback
Bureau of the Census
2 Copley Place, Suite 301
P. O. Box 9108
Boston, Massachusetts 02117-9108
617-424-0513
vlewis@census.gov
(CT, ME, MA, NH, RI, VT)

Kansas City

Matthew Milbrodt
Bureau of the Census
Gateway Tower II, Suite 600
400 State Avenue
Kansas City, Kansas 66101-2410
913-551-6750
mmilbrodt@census.gov
(AR, IA, KS, MN, MO, OK)

Charlotte

Mr. David Wiggins
Bureau of the Census
901 Center Park Drive, Suite 106
Charlotte, NC 28217-2935
704-344-6702
david_h_wiggins@ccmail.
census.gov
(KY, NC, SC, TN, VA)

Los Angeles

Mr. Tim McMonagle
Bureau of the Census
15350 Sherman Way, Suite 300
Van Nuys, California 91406-4224
818-904-6364
timothy_w_mcmonagle@ccmail.
census.gov
(CA)

Chicago

Mr. Scott Deuel
Bureau of the Census
2255 Enterprise Drive, Suite 5501
Westchester, Illinois 60154-5800
708-562-1736
sdeuel@census.gov
(IL, IN, WI)

Dallas

Ms. Betty Adamek
Bureau of the Census
6303 Harry Hines Blvd., Suite 210
Dallas, Texas 75235-5269
214-767-7482
badamek@census.gov
(MS, LA, TX)

Denver

Mr. Mark Hellfritz
Bureau of the Census
6900 W. Jefferson Avenue
P. O. Box 272020
Denver, Colorado 80227-9020
303-969-7760
mhelfri@census.gov
(AZ, CO, NE, NM, ND,
SD, UT, WY)

New York

Mr. Jon Martin
Bureau of the Census
Jacob K. Javits Fed. Bldg., Rm. 37-130
26 Federal Plaza
New York, New York 10278-0044
212-264-6272
Jonathan.D.Martin@ccmail.
census.gov
(NY)

Philadelphia

Mr. Phil Lutz
Bureau of the Census
105 South 7th Street, First Floor
Philadelphia, Pennsylvania
19106-3395
215-597-1139
philip.m.lutz@ccmail.census.gov
(DE, MD, NJ, PA)

Seattle

Ms. Wendy Hawley
Bureau of the Census
101 Stewart Street, Suite 500
Seattle, Washington 98101-1098
206-728-5557
whawley@census.gov
(AK, HI, ID, MT, NV, OR, WA)

Appendix G

Features Required to Bound a 2000 Census Block Polygon

This listing is comprised of all features in the Class A CFCC category except those in tunnels, cloverleaves, interchanges, and ferry crossings. In general, these features are those that Census enumerators could use to reach a housing unit or structure.

CFCC Class A

FEATURE

A08	Road, divided, with rail line in center
A11	Primary road, interstate highway and limited access road, undivided
A13	Primary road, interstate highway and limited access road, undivided, underpassing
A14	Primary road, interstate highway and limited access road, undivided, with rail line in center
A15	Primary road, interstate highway and limited access road, divided
A17	Primary road, interstate highway and limited access road, divided, underpassing
A18	Primary road, interstate highway and limited access road, divided, with rail line in center
A21	Secondary road, unlimited access roads, U.S. highway not classified A10, and state roads, undivided
A23	Secondary road, unlimited access roads, U.S. highway not classified A10, and state roads, undivided, underpassing
A24	Secondary road, unlimited access roads, U.S. highway not classified A10, and state roads, undivided, with rail line in center
A25	Secondary road, unlimited access roads, U.S. highway not classified A10, and state roads, divided
A27	Secondary road, unlimited access roads, U.S. highway not classified A10, and state roads, divided, underpassing
A28	Secondary road, unlimited access roads, U.S. highway not classified A10, and state roads, divided, with rail line in center
A31	Connecting road, county roads, and major roads not classified as A10 or A20, undivided
A33	Connecting road, county roads, and major roads not classified as A10 or A20, undivided, underpassing
A34	Connecting road, county roads, and major roads not classified as A10 or A20, undivided, with rail line in center
A35	Connecting road, county roads, and major roads not classified as A10 or A20, divided

A37	Connecting road, county roads, and major roads not classified as A10 or A20, divided, underpassing
A38	Connecting road, county roads, and major roads not classified as A10 or A20, divided, with rail line in center
A41	Neighborhood roads, city streets and all other vehicular roads not classified as A50, undivided
A43	Neighborhood roads, city streets and all other vehicular roads not classified as A50, undivided, underpassing
A44	Neighborhood roads, city streets and all other vehicular roads not classified as A50, undivided, with rail line in center
A45	Neighborhood roads, city streets and all other vehicular roads not classified as A50, divided
A47	Neighborhood roads, city streets and all other vehicular roads not classified as A50, divided, underpassing
A48	Neighborhood roads, city streets and all other vehicular roads not classified as A50, divided, with rail line in center
A51	Jeep trail passable only by four-wheel (4wd) vehicle, undivided
A53	Jeep trail passable only by four-wheel (4wd) vehicle, undivided, underpassing
A60	Special road feature
A61	Cul-de-sac, a dead-end roadway with turn-around
A62	Traffic circle - a junction of roads that form a circle around which traffic normally moves in one direction
A64	Service drive
A70	Other thoroughfare
A71	Walkway
A72	Stairway
A73	Alley