Attachment C

Instructions for Using the MTPS for Verifying the VTD/BBSP Submission

United States
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I. USING THE MTPS TO VERIFY AND CORRECT THE VTD/BBSP SUBMISSIONS

This Attachment provides specific instructions on the installation and use of the MTPS for verifying and submitting corrections to Voting Districts (VTDs), State Legislative Districts (SLDs), Congressional Districts (CDs) and Block Boundary Suggestions (BBSP) to the Census Bureau.

Note: If not experienced with using the MTPS, it is critical to read this document in its entirety, as the sections build upon each other and each step is important.

In February 2010, the Census Bureau delivers verification products to the state participants for the VTD/BBSP. The verification products comprise the MTPS (Version 5.5)[1] and the Census Bureau provided shapefiles that reflect the processed and completed updates inserted into the MTDB. In some cases they reflect changes already discussed with the state and RCC staff. The Census Bureau delivers the VTD/BBSP verification products on Digital Versatile Disk (DVD) to the participating states.

Depending on the computer and equipment, and the size of the state, installation of the MTPS and the data can take up to 45 minutes.

The state data may be loaded into more than one computer or a local network server. However, make sure that only one person is working on a county (or county equivalent) at a time. Multiple data sets cannot be merged for the same county.

Also, since the MTPS is built on *Maptitude* it prevents more than one *Maptitude* session from running at the same time. If a *Maptitude* session is open, close it before opening the MTPS.

A. MTPS Installation

If the MTPS has not been previously installed, follow these steps:

1. **Start** <**Windows**>.

2. Insert the Program DVD, the **MAF/TIGER Partnership Software 2009, Version 5.5** into the DVD drive.

3. If the **Installation Wizard** does not automatically start up, choose the **Run** command from the **Start** menu.

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

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[1] MTPS v5.5 is now Vista compatible. This version no longer has Windows 98 compatibility.

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

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

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

8. The setup program guides the user through the installation process, prompting questions and providing suggestions along the way. It is best to accept the default settings. The MTPS sets up a folder on the C drive called **MTPS Data**.

9. Once the program has been installed, the setup program indicates that **Setup Needs the Census Data** and prompts to insert the **2010 Decennial Census, Redistricting Data Program, Phase 2 – VTD/BBSP, (State), (State FIPS[2] code)** DVD for the state.

10. Insert the state data DVD and click **OK**.

11. After the state data files are copied, the installation process is complete and the **Setup** is finished, click **Finish**.

12. Click the **Start** button on the **Windows** taskbar and from the **Programs** menu, choose **MAF-TIGER Partnership Software**” and then **MAF-TIGER Partnership Software 5.5**.

13. Click **OK**. This will display the **Please Log In** dialog box. Enter the **User Name** as **RDP**[3] (case sensitive).

14. Click **OK**.

15. Then a prompt appears with two **Startup Choices**.
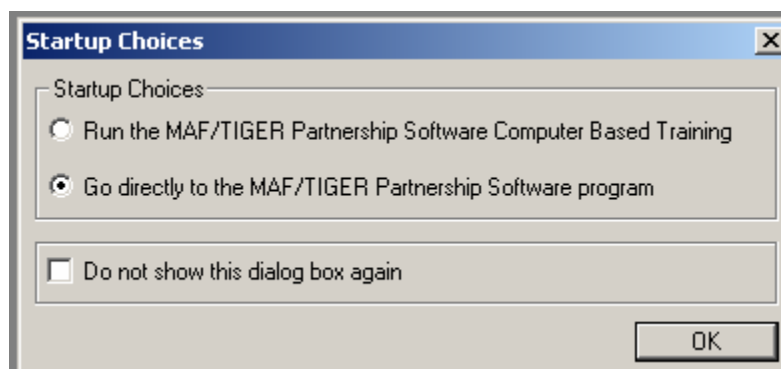
Note: If not experienced with the operation of the MTPS, read through these procedures and take the time to run the MTPS Computer Based Training (CBT).

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[2] Federal Information Processing System
[3] Redistricting Data Program

While operating in the MTPS, the CBT can be referred to by choosing **Start (Windows start button)→ Programs→ MAF-TIGER Partnership Software→ Computer Based Training for MAF-TIGER Partnership Software.**

B.   VTD/BBSP Help

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

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

C.   Starting the MTPS and Selecting a County to Verify

Before opening the **RDP.map** window, a county (or county equivalent) must be picked to verify. The MTPS then imports the data for that county. The MTPS is designed to work on one county at a time. Each time the **RDP.map** map window is opened, it displays the last county that was edited. To verify a different county, close the **RDP.map** window, pick another county, and open the VTD/BBSP map window again.

To pick a County (or county equivalent) to verify, follow these steps:

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

2.   Highlight a county in the scroll list.
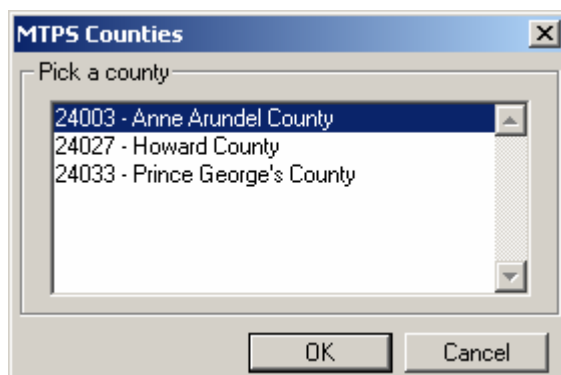
3.   Click **OK**.

Before starting the import process, the MTPS displays a message recommending that you disable any anti-virus software to speed the process. It is not necessary to turn the anti-virus software off. Click **OK**.
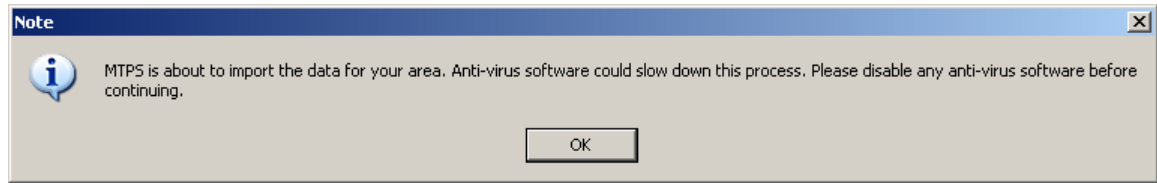
4. The software imports the county to work with.

5. Once the county's import is complete, click **OK** to close the import window.

D. Verifying the Selected County

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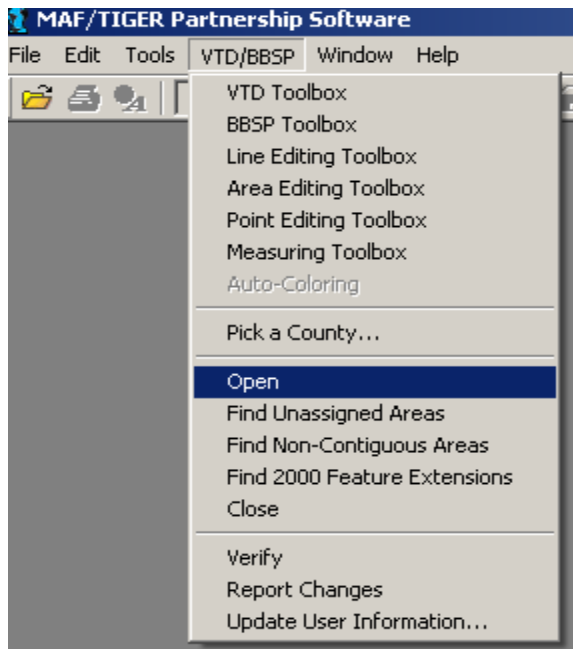
The MTPS displays the VTD/BBSP map window.

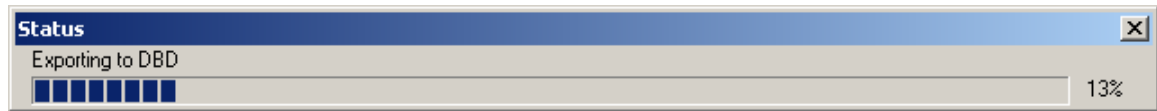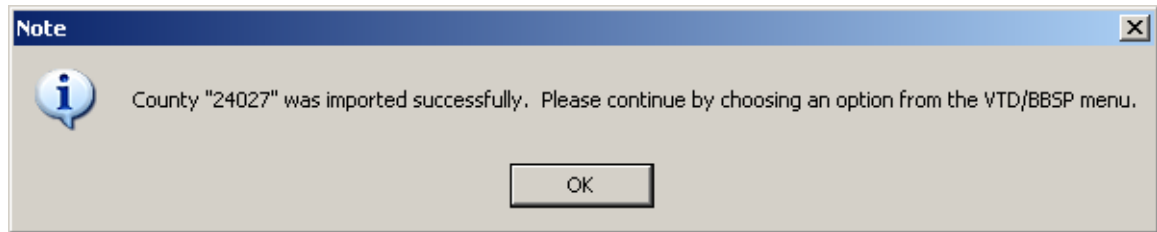2. If this is the first time running the VTD/BBSP module for a given county, the software displays this box:
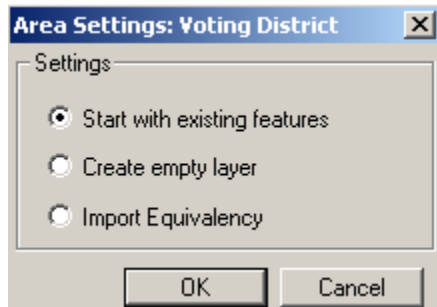
For the verification process, **Start with existing features** displays the VTDs submitted to the Census Bureau. Use this setting for verifying, correcting, and updating the submitted VTDs.

Important Note: **Do not select the Create empty layer radio button setting. This resets the submitted VTD layer to "scratch".)**

After selecting **Start with existing features**, click **OK**.

3. The file opens with the RDP.map and the **Standard** toolbar across the top of the screen.
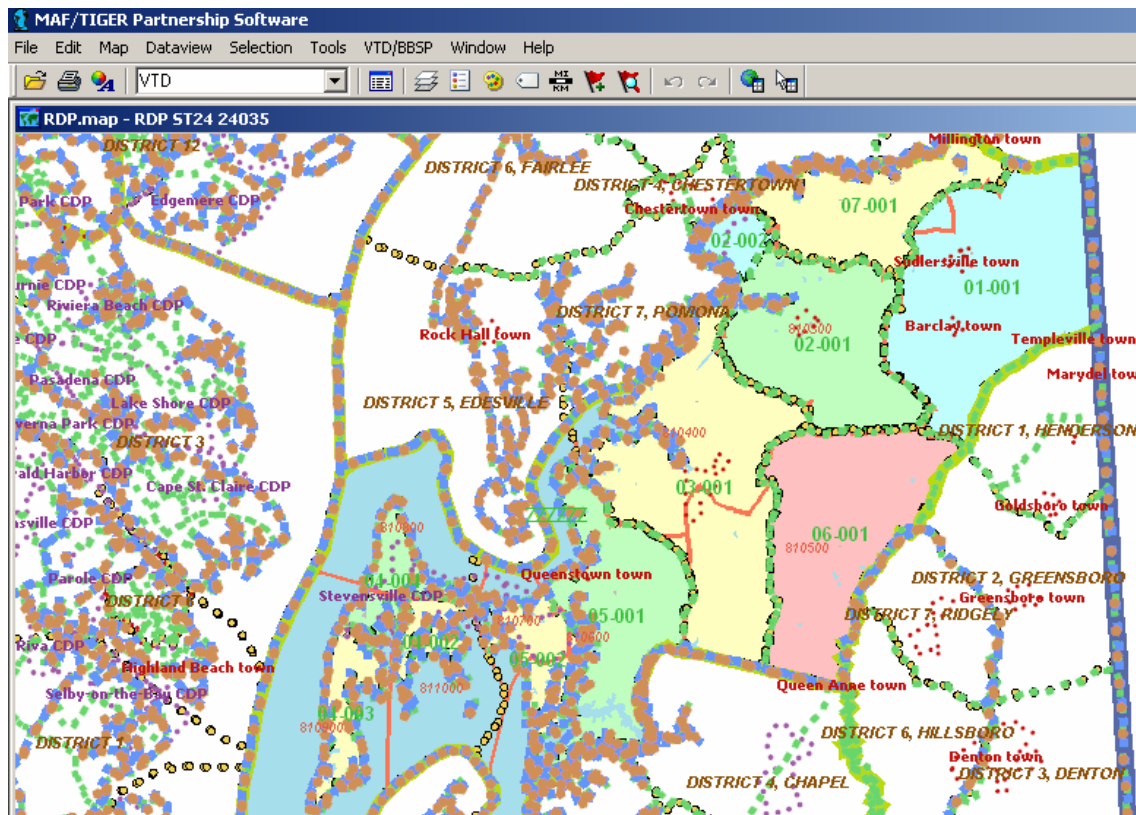
Note: The MTPS applies colors to the VTDs. If necessary, adjust the color scheme with the **Map→ Coloring** box. This changes the "scheme". A specific color for a specific VTD can not be set.

4. The MTPS opens the **Tools**, and the **VTD Editing** toolboxes, and the **Map layers** legend**.**
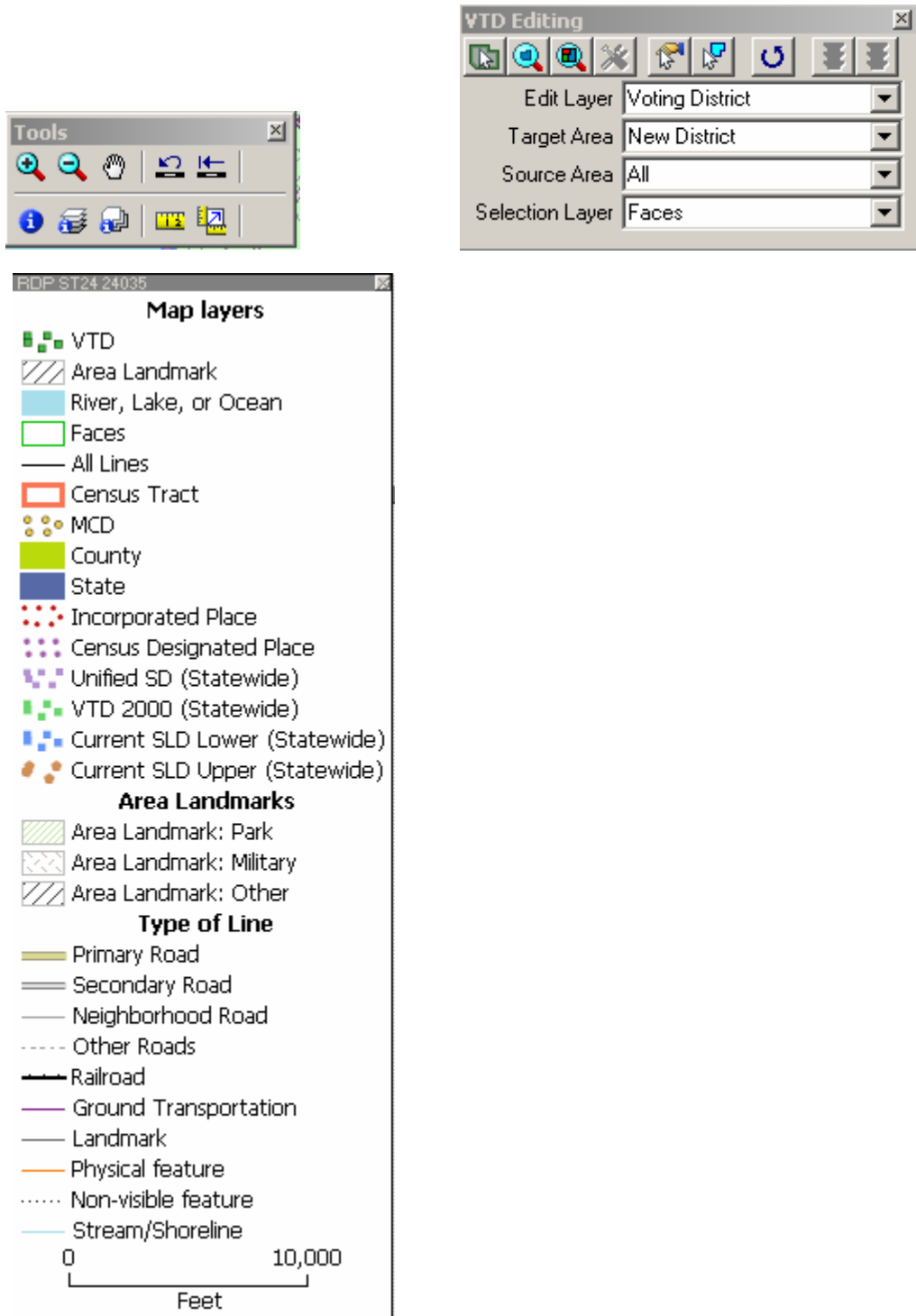
The **Map layers** legend shows which layers are displayed. The default setting shows all layers in the MTPS except Census 2000 blocks, block groups, SLDs, and CDs.

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

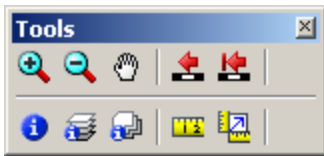**Note:** The session continuously saves while working and saves when closing the county.

E.   The Tools Toolbox

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

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

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

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

F.   The Layers Menu
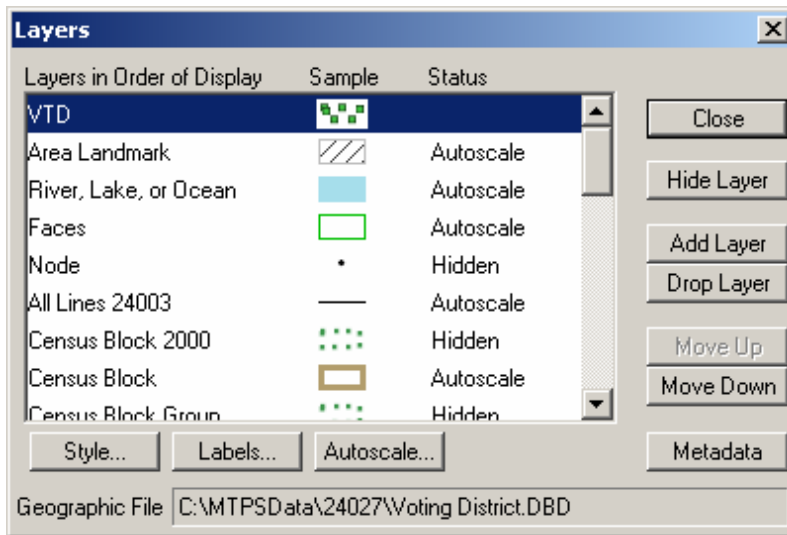
Engage the map **Layers** menu [icon] on the **Standard** toolbar across the top of the screen to see the map layers and their settings, as follows:

Turn map layers on or off depending on what to display on the map. For example, if VTDs have nothing in common with school districts, there is no need to display them and thus turn that layer off (**Hide Layer**). If reviewing SLDs or CDs to ensure that any relationships with other governmental entities are intact, turn those respective layers on (**Show Layer**).

Note: The first item listed in the **Layers in Order of Display** column, VTD, is the first layer drawn on the map. The remaining layers are drawn sequentially, with each added layer being drawn on top of the previous one.

To do this…	Do this…
Open the **Layers** dialog box	Choose **Map→ Layers** or click [icon] on the **Standard** toolbar, or right-click on the map window and choose **Layers**. The MTPS displays the **Layers** dialog box.
Choose a layer	Within the **Layers** dialog box, highlight the layer in the scroll list. This list shows the layers in the order drawn, a sample of the style, and the status. • **Hidden** means the layer does not draw. • **Autoscale** means the layer draws between certain scales. • **Blank** means the layer draws at all scales. Also hold the **Shift** key and click on another layer to highlight a range of layers, or hold the **Ctrl** key and click on a layer to toggle the highlight on or off and select multiple layers.
Hide a layer	Click **Hide Layer**. The button changes to **Show Layer** to reshow the layer. The layer's status changes to **Hidden**.
Add a layer	Click **Add Layer** to display the **File Open dialog** box. Choose the type of file and one or more files to open. Click **Cancel** to close the dialog box without adding any layers.
Drop a layer	Click **Drop Layer**. The MTPS displays a **Confirm** dialog box. Click **Cancel** to close the dialog box without dropping the layer. **Caution:** Only drop layers that (you) have imported from (your) own shapefile. If it is not desired to see a layer that is included in the MTPS, just **Hide** the layer.
Change the **order** of the layers	Click **Move Up** or **Move Down**. The MTPS moves the highlighted layer up or down.
Change the **style** settings for a layer	Click **Style** to display the **Style** dialog box, which is different for point, line, and area layers. Choose different styles from the dropdown settings. Selections are illustrated in the box to the right of the settings. Click **Apply** to try out changes to style settings, but click **Cancel** to close the dialog box without changing the settings. To save these settings, click **OK**.
Change the **label** settings for a layer	Click **Labels** to display the **Automatic Labels** dialog box. Click **Apply** to try out changes to label settings, but click **Cancel** to close the dialog box without changing the settings. To save these settings, click **OK**.
Change the **autoscale** settings for a layer	Click **Autoscale** to display the **Autoscale** dialog box. The largest dropdown list, if not blank, shows the largest scale at which to display the layer zooming in. The smallest dropdown list, if not blank, shows the smallest scale at which to display the layer zooming out. Click **Cancel** to close the dialog box without changing the settings.
Close the **Layers** dialog box	Click **Close**.

Note: The MTPS labeling engine places the labels on the center of the district. If the center of the district itself is outside of the district itself (as in a crescent shaped

district) the label is attached to the edge nearest to the center point. The labels are static when zooming in or out and panning.

The labeling engine makes a determination of which labels to draw and which to suppress when the drawing of all the labels would cause them to overlap. If it is zoomed into where the individual blocks are being labeled, this suppresses the VTD labels in some areas where drawing them forces an overlapping label. To see the VTD labels only, turn off the block labels. As long as no other area or feature labels overlap, the VTD labels should then appear.

G.   Reviewing the VTD/BBSP Submission

For reviewing VTDs, select **Voting District** as the **Edit Layer**. For reviewing other RDP entities, select **SLD Lower**, **SLD Upper**, or **Congressional District** in the **Edit Layer** for reviewing these RDP districts.

This section focuses on the review of the VTDs. Review and verify the VTD **Code**, **Name**, and the **boundaries**.

Note: Turn off or hide the water layer in the **Map layers** dialog box when viewing VTD coverage because that layer appears on top of the VTD layer, making it difficult to view the VTD coverage.

Note: Hover cursor over any area to identify the VTD. A text box appears with the VTD Name.
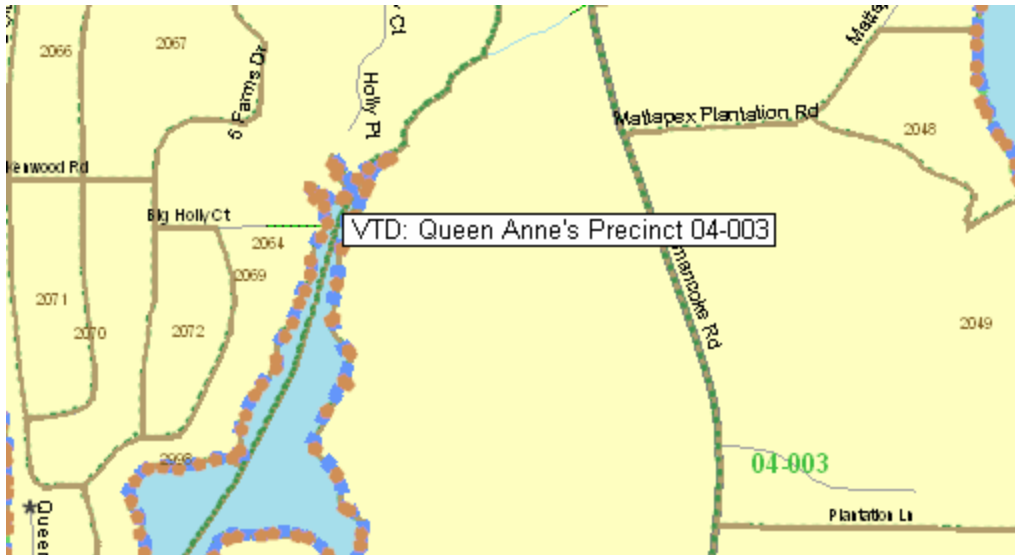
For more info about the VTD, select and click an area. The **Dataview1 –VTD Info** appears.

Dataview1 - VTD Info	
NAME	Queen Anne's Precinct
ID	7
Area	346834880.00
[Voting District]	04-003
STATEFP00	24
COUNTYFP00	035
VTDST00	04-003
NAMELSAD	Queen Anne's Precinct
VTDI	A
LSAD	00
CHNG_TYPE	B
EFF_DATE	
NEW_NAME	
NEW_CODE	
RELTYPE1	
RELTYPE2	
RELTYPE3	
RELTYPE4	
RELTYPE5	
REL_ENT1	
REL_ENT2	

Verify that the following elements are correct:

- Verify that the VTD codes (ranging from 1-6 alphanumeric characters) are correct. The **Code** may include dashes, dots, or forward slashes.

- Verify that the VTD names are correct. If a **Name** is not provided in the submission, the Census Bureau uses the VTD **Code** as the **Name**.

  Note: Names can be up to 100 characters, including alphanumeric, spaces (consecutive spaces <u>not</u> allowed) and all special characters. If a VTD Name uses all 100 characters, the Census Bureau does not add the words "Voting District" after the name. Adding the "Voting District" character string is too long in these cases. This is accomplished by assigning a Legal Statistical Area Description (LSAD) code of "00". (See a full description of the LSADS on an upcoming page.) Codes and names should be consistent and should be reviewed for spelling accuracy, keeping in mind that these names will appear in public products.

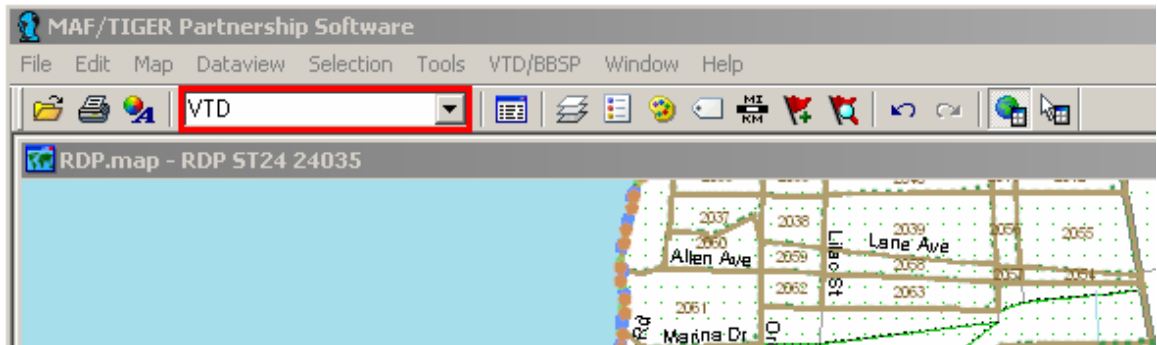 **Note**: If any area was submitted with unassigned areas (uncoded faces[4]), the Census Bureau assigns the code of **ZZZZZZ** to these unassigned areas. These are identified as **Voting Districts not defined** which appear in the American FactFinder and the P.L. summary files. This ensures that the Census Bureau has accounted for all faces in the county.

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[4] **Faces** is the MTPS term for polygon.

- Verify that the VTD boundary is correct and where relevant, is following the correct visible or non-visible feature. These features may be geographic entity boundaries such as township and incorporated place boundaries, or visible features such as roads or water features.

  Note: If a VTD follows a township or incorporated place limit that has moved, adjust the VTD to the new township or corporate limit. The Census Bureau only maintains whole entity relationships as described in the *Relationship Information Review* document.

  Note: At any time during the review and verification, a list can be reviewed of all submitted VTDs. With the **VTD Editing** toolbox open, generate this VTD inventory file for all current VTD codes and associated names by selecting **VTD** from the dropdown menu on the **Standard** toolbar.

Then click the **New Dataview** icon . The **Dataview2 – VTD** table appears.

Note the **VTDI** and **LSAD** fields in the **Dataview** table:

VTDI	LSAD	CHNG_TYPE	EFF_DATE	NEW_NAME
A	00			
A	00			
A	00			
A	00			
P	00			
A	00			
A	00			
P	00	B		
A	00			
A	00	B		
P	00			

- **VTD1:** This stands for Voting District Indicator. **A** = Actual; **P** = Pseudo.

  An **A** = Actual VTD is one that <u>exactly</u> matches the VTD (election precinct, ward or other election area) boundary in the state. If the VTD does not reflect the actual election VTD boundaries, the state may designate **P** = Pseudo.

  Note: If the state does not designate the **VTD1**, the Census Bureau designates **P** = Pseudo for the requisite VTD.

- **LSAD:** This stands for Legal Statistical Area Description. These codes determine the way the names of some entities appear in products.

  V1 = "Voting District" is the prefix to the VTD **Name**. For example, if VTD **Name** is "5", the **NAMELSAD** = Voting District 5.

  V2 = "Voting District" is the suffix to the VTD **Name**. For example, if VTD Name = "Albemarle", the **NAMELSAD** = Albemarle Voting District.

  00 = no prefix or suffix to the VTD **Name.** For example, if VTD **Name** is "Queen Anne's Precinct 01-001"**,** the **NAMELSAD** = Queen Anne's Precinct 01-001.

H. The VTD Editing Toolbox
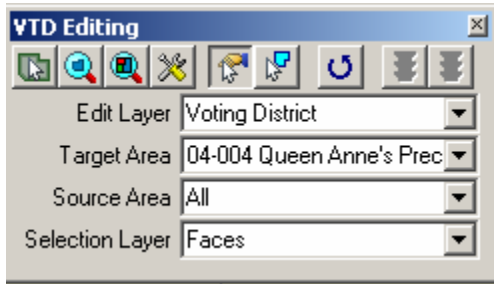
All VTD editing and corrections required for boundaries and line work are performed using the **VTD Editing** toolbox. The dropdown selections in the **VTD Editing** toolbox are:

- **Edit Layer**: The layer to edit (the layer to correct or update; **Voting District**, **SLD Lower**, **SLD Upper**, or **Congressional District**)

- **Target Area**: The area to edit, either editing a **New District**, a submitted <**existing**> district, or **Unassigned** area. For verification, typically an <**existing**> district is corrected. Selecting **New District** is for adding a new VTD.

- **Source Area**: The areas from which to select, either editing **All** areas, an <**existing**> district, or **Unassigned** area. Typically **All** is selected for the **Source Area**. Selecting an <**existing**> area for the **Source Area** restricts the designated **Target Area** to only those faces in the selected <**existing**> **Source Area**.

- **Selection Layer**: **Faces**, or a specific **geographic entity**. The layer from which to select. Typically select **Faces**. If the VTD is coextensive with a specific incorporated place or (other geographic entity), select **Incorporated Place** and place the cursor in the respective incorporated place to add this area to the **Target Area** VTD).

Note: There should not be any **Unassigned** VTD area (faces) in verifying the submission. The submission is checked and validated for any area(s) not assigned to a VTD. The RCC may have consulted the state participant regarding any unassigned faces for a VTD and solicited guidance on what the VTD assignment should be. Ultimately, for areas that were not assigned a VTD code, the Census Bureau enters the **ZZZZZZ** code as previously mentioned**.**

Follow these steps for editing and correcting a VTD using the **VTD Editing** toolbox.

1. Choose a layer from the **Edit Layer** dropdown list in the **VTD Editing** toolbox. Selections are **Voting District** for correcting or viewing submitted VTDs, **SLD Lower** (SLDL), **SLD Upper** (SLDU), or **Congressional District**.

2. Choose a **Target Area.** The **Target Area** is the VTD (or other RDP entity) to correct.

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

The MTPS makes the area selected the **Target Area** and shades it on the map. If the "water" layer is turned on and there is water in the area, the water is displayed instead of the shading. Hide the "water" layer at this point.

3. Use the following buttons in the **VTD Editing** for navigation:

To zoom to…	Do this…
An existing target area	Click . The MTPS zooms in the map so that the whole target area is visible. Zooming to the target area cannot be done if **New District** in the **Target Area** is selected in the dropdown list.
The entire map	Click . The MTPS zooms to show the entire map.

Note: Also use the **Tools** toolbox to navigate around the map.

4. To edit the **Target Area** VTD:

To do this…	Do this…
Update target area attributes	Click to display the Attributes dialog box. Make updates as necessary.
Delete all work in the county	Click
Choose areas to create a VTD	Click to select one or more areas, or click and drag a rectangle around areas to select them. The entire polygon or face must be within the rectangle or shape in order to be included. **This is used when creating an entirely new VTD from what was submitted.**
Unselect a face	Hold the **<Ctrl>** key while using the pointer tool (above) on the face. This will unselect it. Select areas by shape. Click to select areas within a shape, then click on the map and move mouse and click again until all the areas to select are inside the shape. Double click to end. The entire polygon or face must be within the rectangle or shape in order to be included. Save work on current action. Click

Undo work on current action	Click ![traffic light icon]
Undo work on current action	From the menu selections across the top of the Standard Toolbar, select **Edit**, **Undo**. It starts with undoing whatever has been committed or saved. A pop up box prompts to continue undoing **area** or **line** edit. Then it goes backwards until it reaches the end of everything saved or committed during that session. Once closing the file, the **Undo** is no longer functional.

Note: Use the ![icon] **Select by pointing from an area layer** tool to select one or more areas or the ![icon] **Select by shape from an area layer** tool to select areas within a shape. Using the ![icon] **Select by pointing from an area layer** tool, click on one or more areas, or click and drag a rectangle around areas to select them. Hold the **Ctrl** key and click on selected areas to remove them from the selection.

Use the ![icon] **Select by shape from an area layer** tool when drawing the "fence" or "lasso" around the desired selected area adding area of the **Target Area** VTD, click at each point and left double-click to complete the "fence." This selected area is highlighted. Use care to not include an inadvertent face in the "fence" or "lasso".

To remove the selected area during this VTD modification session, click ![traffic light icon].

5. To edit the **Relationships** for the VTD:

Edit relationships created during verification or add relationships in the **Voting District Attributes** dialog box as follows:

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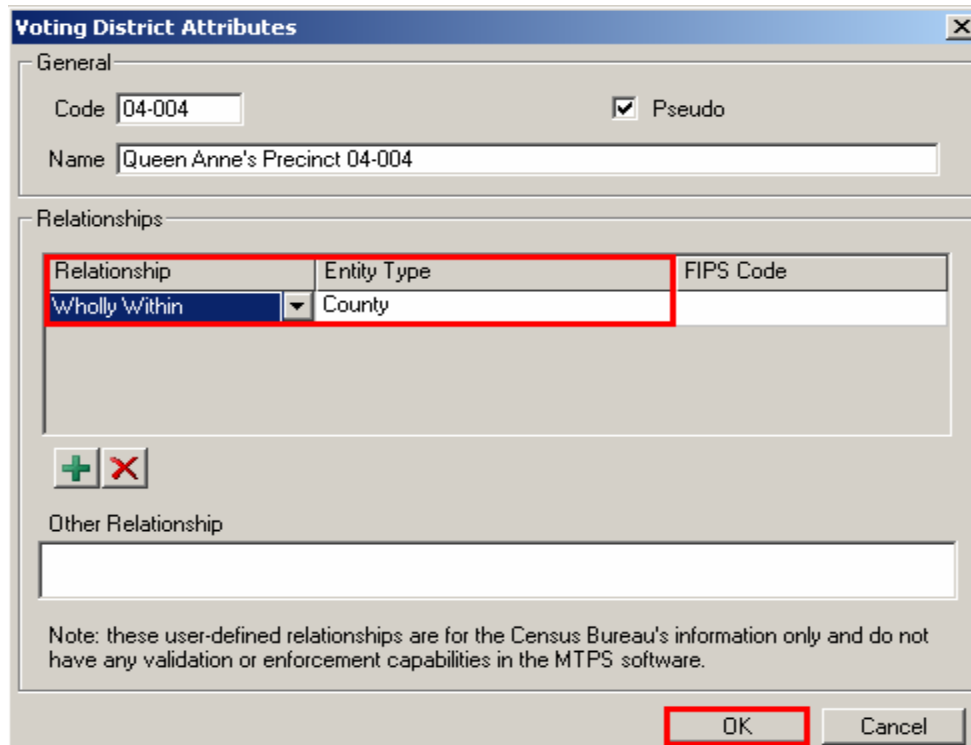
Click **OK**.

The MTPS saves the attributes.

To edit Relationships created during verification for an existing VTD, select the **Display Area Data** from **VTD Editing** toolbox. The **Voting Districts Attributes** dialog box opens and there you can edit Relationships.
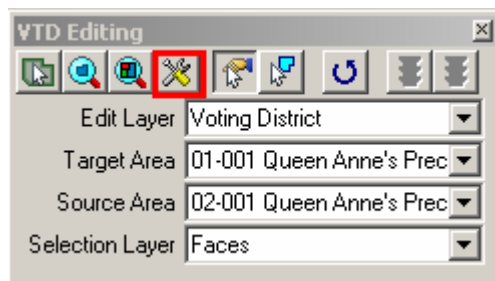
See the *Relationship Information Review* document included on the Data DVD for reporting relationship information.

I. Correcting VTDs Using a Layer From a Local Database as the Source

Some states maintain a VTD layer in their own Geographic Information System (GIS) software. The MTPS allows participants to import these files (some of which are compiled from the Census Bureau supplied data shapefiles) and use them to review and

verify VTDs. To import this correction data from the local GIS and create a new layer in the MTPS, perform the following steps:

1. To repeat, if this is the first time running the VTD/BBSP module for a given county, the software displays this box:
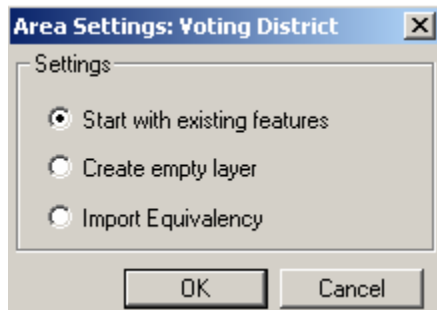
2. Again, for the verification process, **Start with existing features** displays the VTDs submitted to the Census Bureau. Use this setting for verifying, correcting, and updating the submitted VTDs.

    Important Note: Do not select the Create empty layer radio button setting. This resets the submitted VTD layer to "scratch".)

    After selecting **Start with existing features**, click **OK**.

3. Select Map Layers icon.

4. From the **Layers** dialog box, select **Add Layer**.
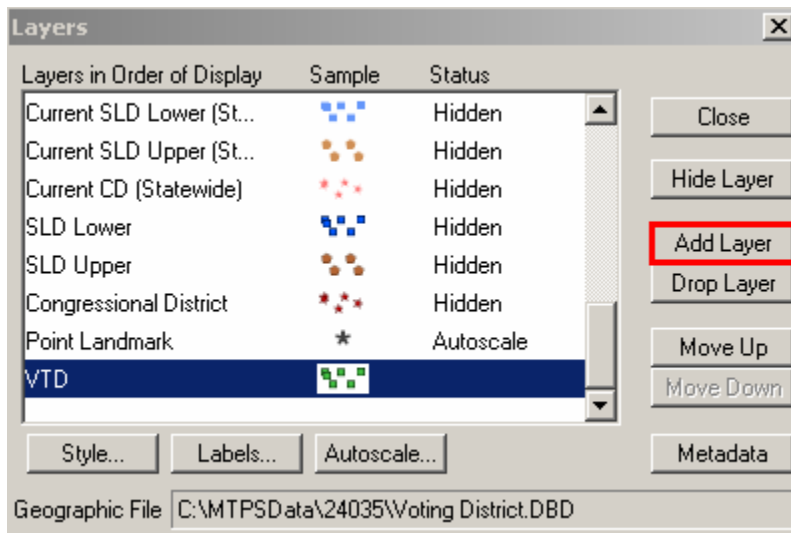
5.   From the **File open** box, select the **File name** and **Files of Type** and click **Open**.
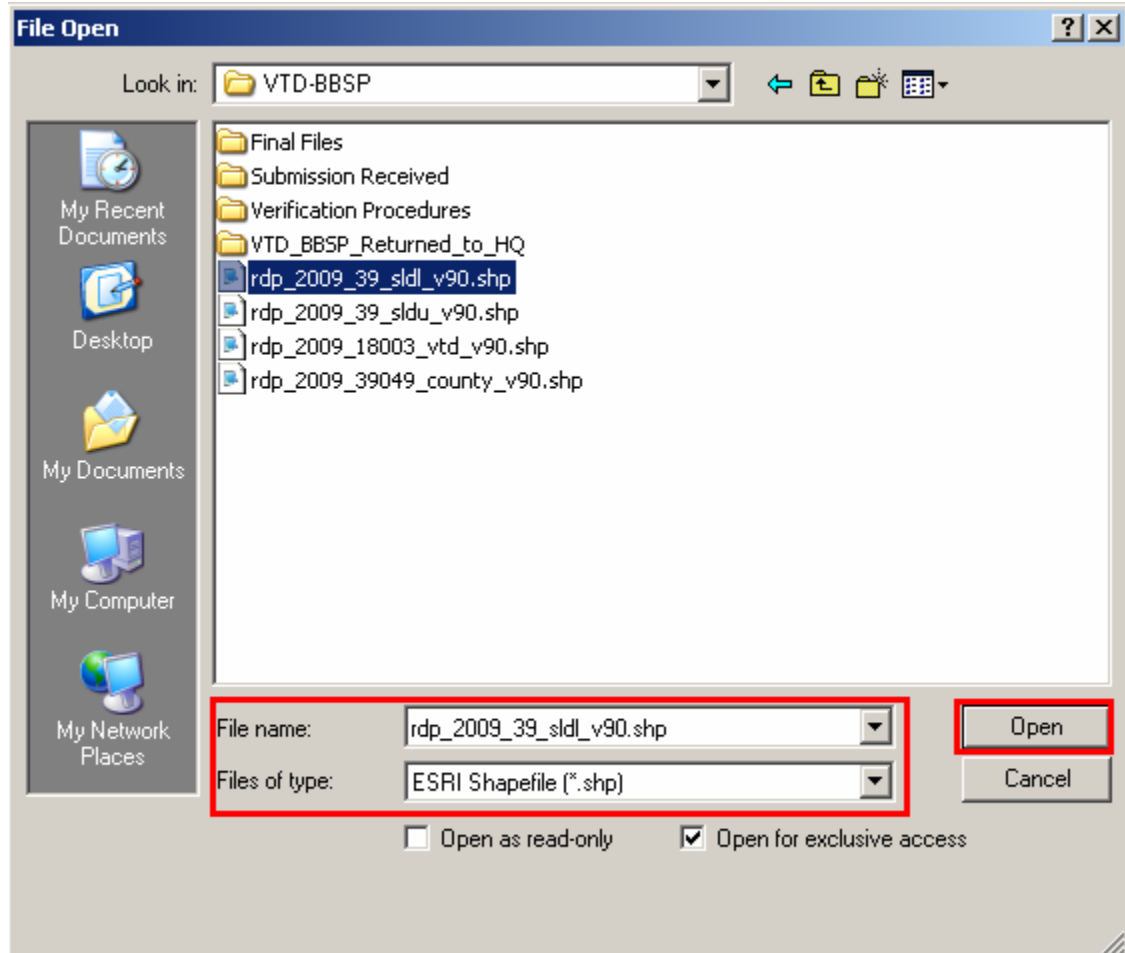
6.   The **ESRI shapefile** dialog box opens, click **Coordinates**.
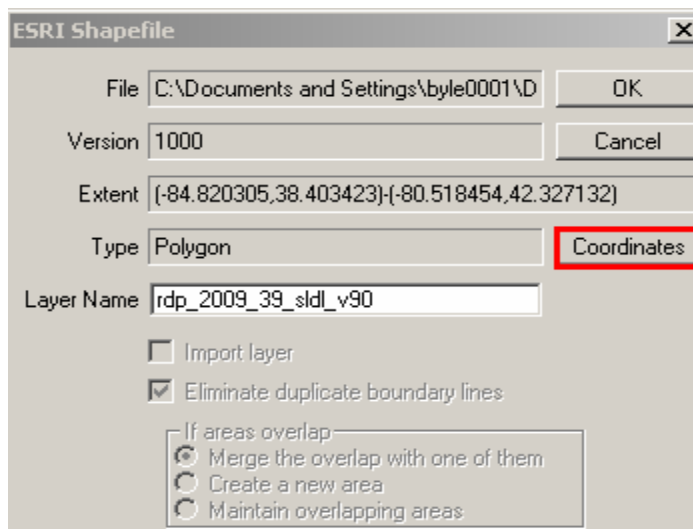
7. Set **Datum Conversion** if necessary, to **NAD 83**. For example, if the local shapefile is **USA NAD 27**, select **USA: NAD 27 to USA NAD 83** and click **OK**.
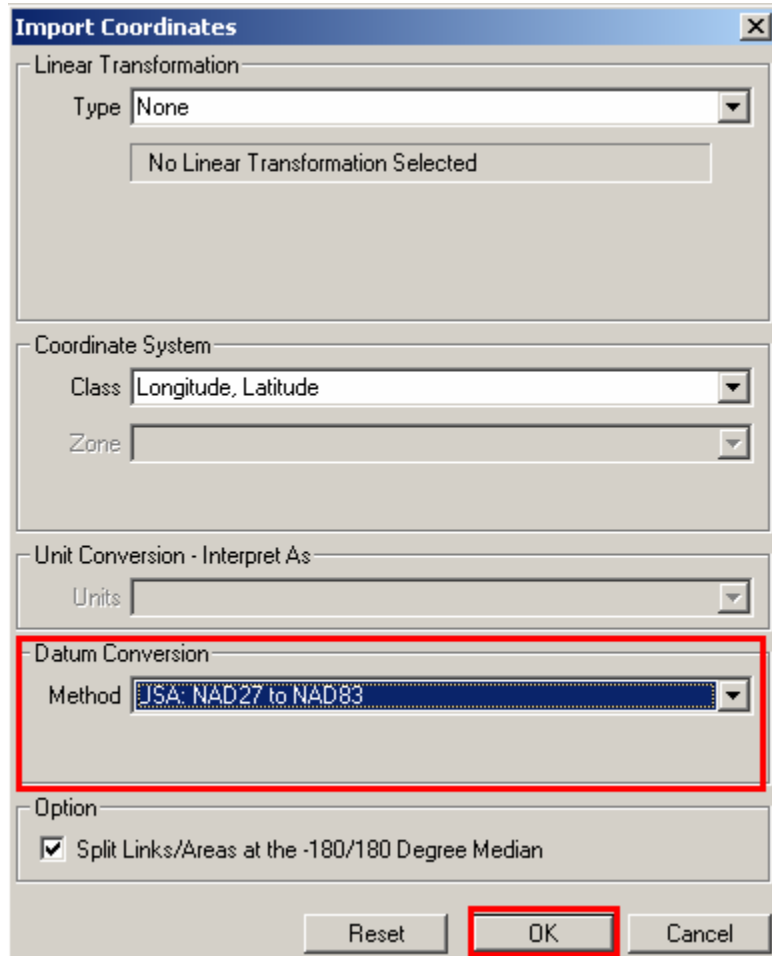
8. Now click **OK** to the **ESRI Shapefile** menu.
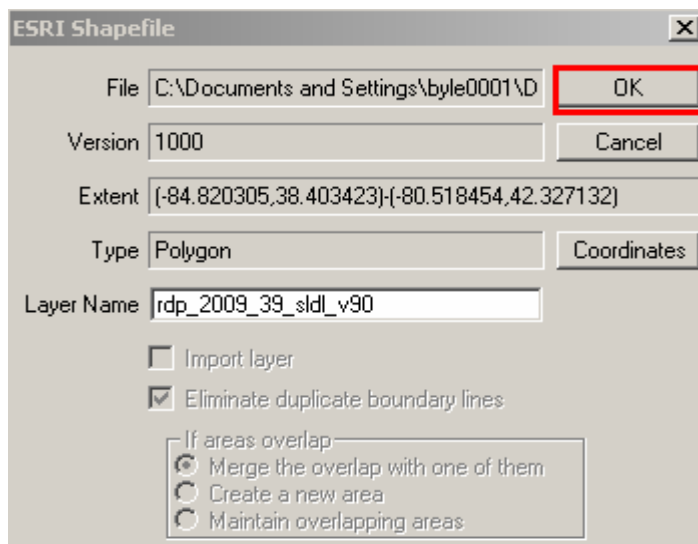
9. Close and re-open the **VTD Editing** toolbox.

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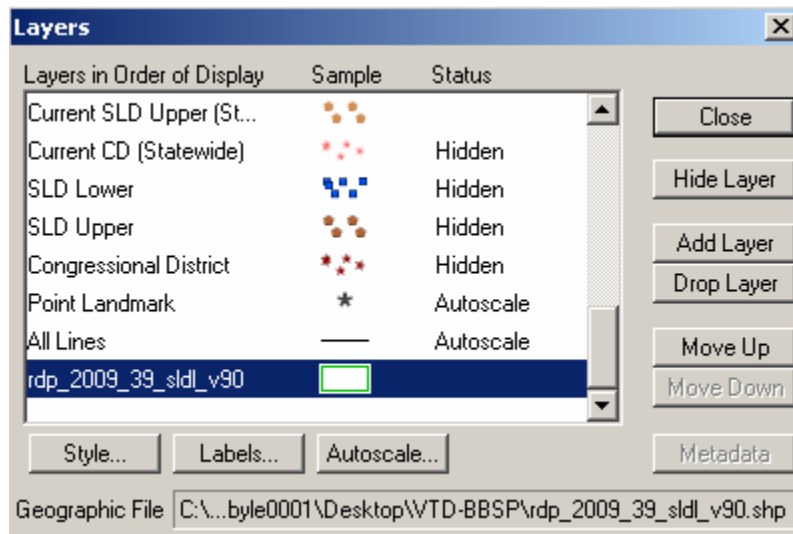
11. Change the **Styles** of borders, fills, etc., in the **Layers** dialog box. Set the style to a symbology that is conducive to seeing the local VTD boundaries superimposed on the file. A **Border Style** with a **dashed** symbology, **Border Color** of **red**, and **Border Width** of **1.5** is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

12. Set the labels to identify the VTDs by clicking on **Labels**. Scroll to **Precinct** on the **Field** drop down menu; on the **Position** drop down menu select **Centered;** select the **Arial Font** at **Size 16 Bold** is one suggestion.

13. Click **Apply**.

Note: When adding an external file (a local GIS file, table, or imagery) to the MTPS project, it is essential not to move the file from the location from which it was added. To do so will cause the application to not open since it is not able to find the added file and "crashes".

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

J.   Using a Block Equivalency File (BEF)

The MTPS has a function to create VTDs from a BEF. For verifying VTDs, the Census Bureau does not recommend using this function as it will likely result in more work.

The following sections in regards to the BEF are more for information purposes only.

Only use this approach if VTDs are maintained using Census tabulation blocks. If using this process, more accuracy is achieved when using the most current Census blocks to compile the BEF. As the MTDB is updated with new legal boundaries (for example, incorporated place limits) or with new streets and roads, the Census 2000 tabulation blocks are divided into smaller blocks through a process called "block suffixing." For example, a Census 2000 tabulation block number of 1004 may now be divided into smaller blocks that are numbered 1004a, 1004b, and 1004c. These "current" blocks have been provided in public TIGER/Line products over the years. If the block in the file is "1004," and does not contain the current suffixes, the MTPS does not associate a VTD code to the suffixed blocks. Find and fix these areas during a VTD editing session using the MTPS, as described in Section I.H. The VTD Editing Toolbox.

To correct VTDs with a BEF that is maintained in the local GIS or database application, select **Import Equivalency** from the **Area Settings: Voting District** box, when opening the county of the VTDs to correct.
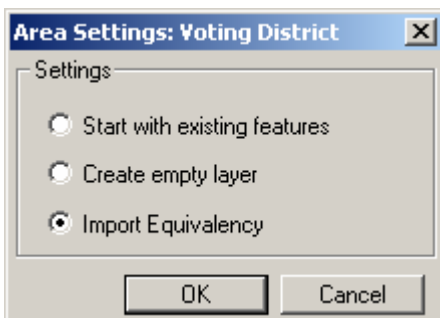
Click **OK**.

The **Choose File to Import** box appears: (The MTPS only supports the following file types: .bin, .txt, .csv, .dbf, .asc.)
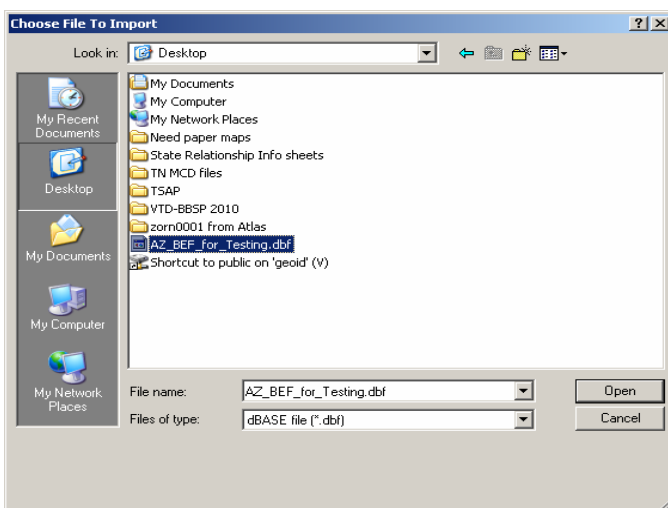
Choose a file and click **Open**. MTPS displays the **Import Block Equivalency File** dialog box. Choose the field from the BEF which matches the block field from the **Match Block Field To** dropdown list and the field which contains the district code from the **Fill District From** dropdown list, then, click **OK**. Each field in the state's block equivalency file should have a descriptive name such as **BLOCKID** and **DISTRICT**. This makes it easier to identify and select the **Match Block Field To** and **Fill District From** fields when using the importer. If the fields are not given a name, the first record in each field appears in the drop down lists as the field names.
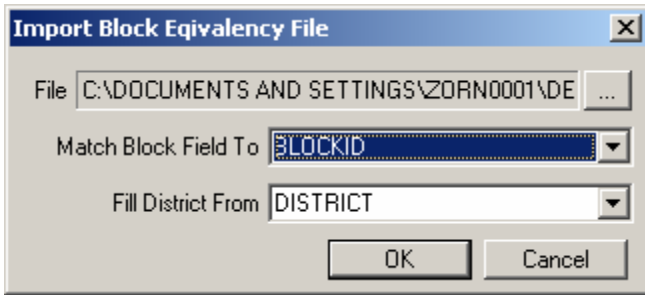
Block Equivalency File Format

In order for the match to work, the state BEF must contain two fields in each record. The first field (named **BLOCKID** in the graphic below) contains concatenated state, county, tract and block codes. If using current blocks there may be an additional block suffix appended at the end of the block code (as appears in the **SUFFIX1** column below). For example, **BLOCKID** appears as 110010001001001, where the 11 is the state FIPS code (**STATEFP** in the example below), 001 is the county FIPS code (**COUNTYFP** below), 000100 is the **TRACT** number and 1001 is the **BLOCK** number. If the block is suffixed, the **BLOCKID** appears as 110010001001001A, containing the additional A, as shown in the **SUFFIX1** column below. If the BEF currently shows those geographic areas as separate fields, concatenate them into a single field before performing the import. The second field is the **VTD_CODE**.

In the example below the **BLOCKID** field is used in the **Match Block Field To** pull down menu. The **VTD_CODE** is used in the **Fill District From** pull-down menu.

STATEFP	COUNTYFP	TRACT	BLOCK	SUFFIX1	SUFFIX2	BLOCKID	VTD_CODE
18	015	959300	3035	A		180159593003035A	02A555
18	015	959300	3035	C		180159593003035C	02A555
18	015	959300	3033			180159593003033	02A555
18	015	959300	3031			180159593003031	02A555
18	015	959300	3035	B		180159593003035B	02B555
18	015	959300	3034	A		180159593003034A	02B555
18	015	959300	3034	B		180159593003034B	02B555
18	015	959300	3032			180159593003032	02B555
18	015	959300	3029			180159593003029	02B555
18	015	959300	3030			180159593003030	02B555
18	015	959300	3035	D		180159593003035D	02B555

Once the import is completed, the MTPS fills the county based on the VTD codes included in the local file. However, as mentioned before, if the block record in the local file does not contain the current suffixes (if that block has been suffixed), that block does not fill with a VTD code.

Each VTD appears highlighted in a different color to distinguish adjacent VTDs.

1. Find and fix any unassigned or non-contiguous areas using an editing session as described in Section I.H. The VTD Editing Toolbox.

2. Review the boundaries of these VTDs. **This is a very important step.** Make sure that each VTD is following the correct feature. The Census Bureau's MTDB has changed significantly since Census 2000 and this can affect the feature to VTD relationship.

3. Click ⚒ in the **VTD Editing** toolbox to display the **Attributes** dialog box to correct the **Code**, **Name**, **Relationships**, or the **Pseudo** (**VTDI**) assignment. Note that the existing VTD must be selected in the **Target Area** dropdown menu of the **VTD Editing** toolbox.

4. To correct (or create) a VTD using these VTDs as a starting point (for example, create two "new" VTDs from one existing VTD), select **New District** in the **Target Area** dropdown menu.

K.   Reviewing and Correcting BBSP Submissions

As part of the VTD/BBSP verification, review each county (or county equivalent) for the correct flagging on features to hold (**Must Hold**) as 2010 Census tabulation block boundaries or linear features to not hold (**Do Not Hold**) as block boundaries as being correct.

Note: All **Must Hold** block boundary suggestions are contingent upon the lines intersecting to form a closed polygon at the time the Census Bureau creates the 2010 Census tabulation blocks, which occurs in the fall of 2010. For this reason all block boundary suggestions must form a closed polygon with other planned block boundaries.

Note: If any other program sponsored by the Census Bureau flags a line as a **Do Not Hold** as a block boundary, on a BBSP **Must Hold**, the Census Bureau overrides the (other program) **Do Not Hold** status of the line.

Review and verify that any Block Area Groups (BAG) are correct.

L.   Planned 2010 Census Tabulation Block Boundaries

The list below specifies the entity boundary description and the MAF/TIGER Feature Classification Code (MTFCC) that are currently planned as 2010 Census tabulation block boundaries.

It is not necessary to suggest any MTFCC on this list as a **Must Hold**.

Note: It is not allowed to suggest any of these MTFCCs as a **Do Not Hold**.

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

MTFCC	Description
G2120	Hawaiian Home Land
G2130	Alaska Native Village Statistical Area
G2140	Oklahoma Tribal Statistical Area
G2150	State-designated Tribal Statistical Area
G2160	Tribal Designated Statistical Area
G2170	American Indian Joint Use Area
G2200	Alaska Native Regional Corporation
G2300	Tribal Subdivision
G2400	Tribal Census Tract
G2410	Tribal Block Group
G4000	State or State Equivalent
G4020	County or County Equivalent
G4040	County Subdivision
G4060	Sub-Minor Civil Division
G4110	Incorporated Place
G4120	Consolidated City
G4210	Census Designated Place
G5020	Census Tract
G5030	Block Group
G5035	Block Area Grouping
G5200	Congressional District
G5210	State Legislative District (Upper Chamber)
G5220	State Legislative District (Lower Chamber)
G5240	Voting District
G5400	Elementary School District
G5410	Secondary School District
G5420	Unified School District
G5430	Special School Administrative Area
G6320	Traffic Analysis Zone
G6330	Urban Growth Area
K2110	Military Installation
K2181	National Park Service Land

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

MTFCC	Description

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

Note: Feature extensions and powerlines are not planned to be held as 2010 Census tabulation block boundaries (unless they are also the boundary for one of the entities listed above), but they are eligible to be selected as a **Must Hold**.

To see a complete list of all MTFCCs (previously referred to as Census Feature Class Codes [CFCCs]), see *Attachment D: MAF/TIGER Feature Classification Codes*.

M.   To Navigate the BBSP Map

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

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

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

Also use tools in the **Tools** toolbox to navigate around the map.

N.   To Review and Verify Census 2010 Must Holds and Do Not Holds

Use the MTPS to review and verify any state submitted features identified as **Must Hold** or **Do Not Hold**. To do this, follow these steps.

1.   Click the **Display Settings** icon ⬜
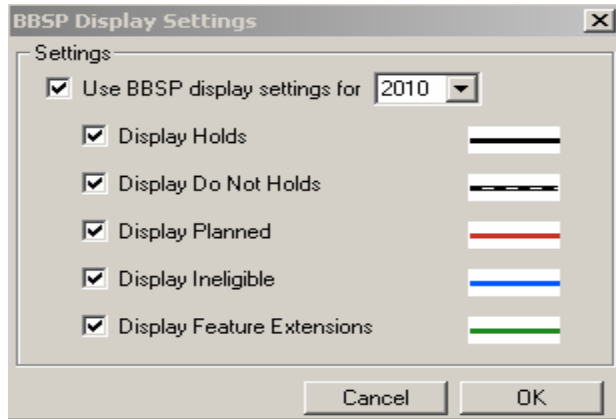
2.   Click **OK**. In the **Map layers**, the **2010 Hold Status** displays

3.   Use the **Info** tool to determine the current BBSP values, following are the
      current values:

- **2010BBSP** = **1**:   Participant Suggested Census 2010
                               Must Hold

- **2010BBSP** = **2**:   Participant Suggested Census 2010 **Do
                               Not Hold**

- **CBBFLG** = **4**:   **Planned** 2010 Census Block Boundary

- **CBBFLG** = **9**:   **Ineligible** 2010 Census Block Boundary

O. To Change BBSP Display Settings

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

2. Make changes as follows:

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

3. Click **OK**.

The MTPS redraws the map to use the display settings chosen.

P. To Review BBSP Suggestions

1. All BBSP suggestions can be reviewed and verified, including those entered for this verification session. Enter a choice as follows in the **BBSP toolbox**:

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

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

2. Use the navigation buttons as follows:

Click…	To zoom to the…
⏮	First suggestion
⏪	Previous suggestion
⏩	Next suggestion
⏭	Last suggestion

The MTPS zooms in on the map to show the suggestion. Also click 🔍 to zoom to the current suggestion.

Note: To review BBSP suggestions added in the verification session, click to the last suggestion and review backwards. The first suggestions in the tool are the suggestions entered in the submission phase.

Q. To Correct BBSP Suggestions

To enter any corrections to the submitted BBSP suggestions, follow these steps:

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

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

2. Click ⟋ to activate the **Select feature** tool.

3. Click on one or more line features. The MTPS displays a warning message if a suggestion is not appropriate or if clearing a **Must Hold** or **Do Not Hold** suggestion.

4. If the correction involves entering a **Must Hold** suggestion for a line feature marked **Ineligible**, it is required provide imagery to re-classify the feature. Attach an imagery file or reference an image on the Internet by providing a URL. The MTPS displays the **Ineligible BBSP Feature** dialog box.
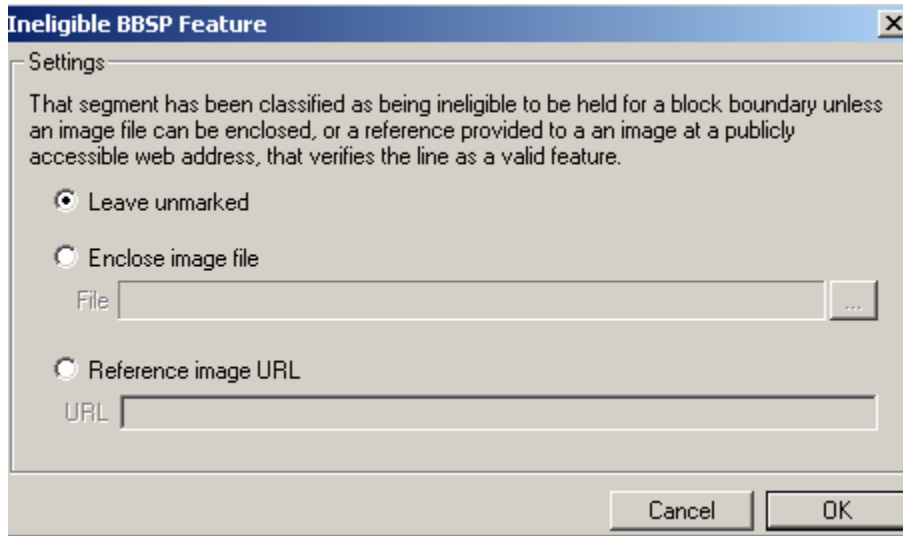
Enter choices as follows:

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

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

Note: To use a *TerraServer USA* image, follow the instructions in Section II.A. Importing Digital Imagery from TerraServer USA and save the image on the local hard drive. Then **Enclose an image file** as instructed above.

5. If trying to add a **Do Not Hold** suggestion for a line feature marked as a **Planned Hold**, the MTPS displays a **Note**:
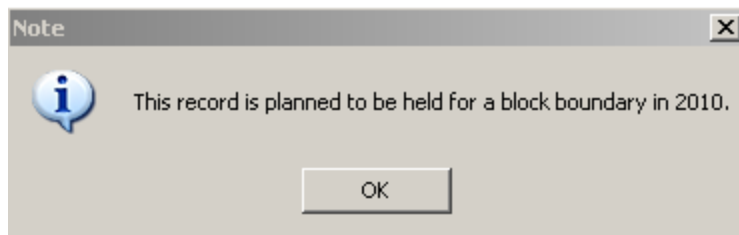
Click **OK**.

Note: Remember that the boundary of each governmental entity (or statistical entity)[5] is held as a 2010 Census tabulation block boundary as are most roads. Private roads, trails, and unimproved roads may or may not be held and therefore are more eligible for a **Do Not Hold** suggestion.

R. Feature Extensions

To form a closed polygon, a short line feature extension may be added. Requirements for feature extensions are:

- no longer than 300 feet;

- straight lines from the end of a road and intersecting a non-road feature. These include all hydrographic features, pipelines, powerlines, and railroads. Highways and freeways are acceptable as long as it is confirmed that there are no housing units on them. This situation has the potential for causing a housing unit to be in the wrong Census 2010 tabulation block.;

- not intersecting a cul-de-sac.

Verify that the submitted (approved) feature extensions are correct.

To create a new feature extension, add the line as described in Section II.E. To Add a Line.

S. Dividing Large Water Blocks

If during verification it is necessary to add a line to divide large water blocks for the BBSP program, add the line and assign an MTFCC of P0002. Also assign a **Must Hold** status to the line.

T. To Verify any BBSP Flagging, Unassigned, and Non-Contiguous VTDs

1. From the top menu choose **VTD/BBSP→Verify**. The MTPS performs the tests. These tests include checking for noncontiguous and unassigned areas and closed polygons for **Must Hold** selections.

2. If the test fails for noncontiguous or unassigned areas, the MTPS displays an appropriate message. Review these areas by choosing from the top menu, **VTD/BBSP→ Find non-contiguous areas** or **Find unassigned areas**. A message appears to open **VTD Editing** toolbox.

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

---

[5] i.e., Census tract, Census Designated Place

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

As needed, correct any BBSP suggestions made during the verification review using the BBSP toolbox.

If entering any corrections, run **VTD/BBSP→ Verify** again to ensure any recent corrections are valid.

When all tests pass, the MTPS displays the message; **The verification of VTD/BBSP data was successful**.

Click **OK** to close the message.

II. ADDING ANY LINES AND PROVIDING IMAGERY

As mentioned in the *VTD/BBSP Verification Guidelines for Participants,* features added as part of the Census Bureau's Address Canvassing Operation, which was held in the spring/summer of 2009 are reflected in the VTD/BBSP verification products.

In verifying the Phase 2, VTD/BBSP file, if a road feature (and **only a road feature**) is identified as still missing and not included in the MTDB as reflected in the verification materials, it can be submitted to the Census Bureau to add.

Recent imagery and/or links must be provided to substantiate the road add(s). If imagery is not provided, the Census Bureau examines all viable imagery, source, and reference material in determining if the road candidate is added. The Census Bureau accepts road adds and updates upon validation with requisite imagery and source material.

The following source material may be accepted:

- add imagery from *TerraServer USA*
- include own imagery
- mail or fax an image or map
- provide a URL to display an image or map

Add any non-visible VTD (and other RDP boundaries, i.e., SLDU and SLDL) boundaries for correction and label them as such.

See Section II.E. for instructions on adding a line.

A.   Importing Digital Imagery from *TerraServer USA*

Microsoft Corporation maintains *TerraServer USA*, an on-line database of high resolution United States Geological Survey (USGS) aerial imagery and scanned USGS topographic maps. This can be used to submit requisite imagery for the line add(s) and to add as a new layer in the MTPS map.

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

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

To save an image to be included in verification corrections and update, click **Save** and choose **Jpeg** in the **Files of Type** dropdown menu, in the **Save As** dialog box. Be certain to include the state and county FIPS codes as part of the name.

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

B.   Adding Digital Imagery as a Layer

If any recent state or local digital imagery is available, this imagery can be added to assist in the verification review. To add any state or local digital imagery as a layer, use the **Add a Layer** function as described on page 13. The imagery must be in a geo-referenced format to export the image into a format that can be read by the MTPS. These can be seen by using the **Add a Layer** function and then using the **File Type** pull down menu. Be sure to include the state and county FIPS code as part of the name.

C.   Mailing or Faxing an Image or Map

To provide an image or a map to show that a feature does or does not exist, mail or fax it to the respective RCC office.

Be certain to clearly reference the image or map (i.e., image or map #)[6] with the specific large scale location of the line add in the specific state and county (or county equivalent). Include a contact person and e-mail and/or telephone number in reference to the image or map. The RCC may be in contact if there questions regarding the line add.

To provide information for a deleted line, the image or map must clearly show that a line no longer exists. When selecting the line for deletion, provide an explanation in the **Add a Comment** box that appears and reference the image or map that has been mailed or faxed to the respective RCC.

D. Providing a URL to Display an Image or Map

To supply a URL to display an image or map, include the URL, state and county (or county equivalent) and FIPS code and e-mail it to the respective RCC. Be clear to reference the state and county (or county equivalent) and the location of the specific line being added.

When providing URLs to existing imagery, provide the full path to the specific imagery that contains a close up of the feature or area being revised or added. The Census Bureau requests this to increase the likelihood to accept the changes and corrections identified by the participant for verification. Be certain to clearly reference this link with the large scale location of the line add in the specific state and county. Include a contact person and e-mail and/or telephone number in reference to the image or map. The RCC may be in contact if there are questions regarding the line add.

After requisite imagery, map and/or other source material is provided, the line can be added during the verification process.

E. To Add a Line

To engage the Line Editing tool, select **VTD/BBSP→ Line Editing Toolbox**.

The **Line Editing** tool appears.

Any line added too close to existing lines may not be accepted. To avoid this problem it is highly suggested to use existing lines, if possible, when delineating VTD (or other RDP) boundary lines. If an added line repeatedly intersects or is within 10 meters of another line, the MTPS prompts to use the (close) existing line.

---

[6] This is more paramount when submitting multiple images and/or maps.

```
Confirm                                    ☒
                    WARNING
       The new line intersects line 23447 in 2 locations.
    The new line intersects line 76314 in 2 locations. Can you use
                  the existing lines instead?




                  [   Yes   ]      [   No   ]
```
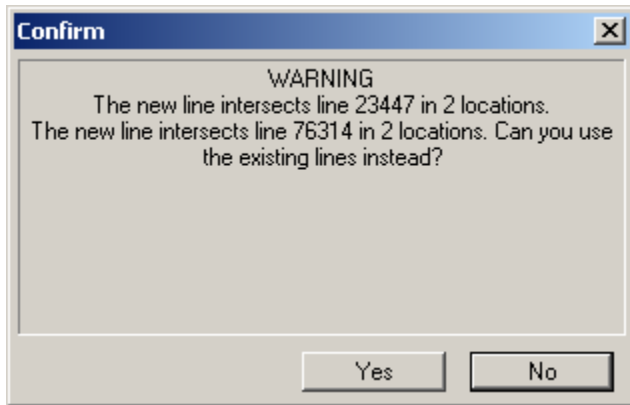
The line numbers in the above **Confirm** box are called line IDs. If the line has no name, only the line ID is listed. To review the referenced line, follow these steps:

- Make a note of the numbers in the box.

- Click **Yes**. (The line just delineated is not added to the map)

- Make sure that **All lines** appears in the drop down menu on the **Standard** toolbar at the top.

- Click on the **Dataview** Icon 📰

- Click on **Edit** in the **Standard** menu at the top.

- Click **Find**.

- Type in the number in the **Dataview Find** box.

- Click **OK**.

- Right click on the **Record ID**.

- Select **Zoom**.

MTPS zooms to the line. Hover the cursor over the line, a box appears with the line ID number.

If a line is within 15 feet of a Census provided line, do not add it. Lines added within 15 feet of an existing line **are not added (inserted) during the verification phase** of the VTD/BBSP.

The steps for adding a line for VTD/BBSP correction are as follows:

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

2. Click ➕ to activate the **Add Line** tool.

3. Click where to start the line.

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

   Note: When digitizing shapepoints, if the line intersects any existing line, enter a shape point (left-click) precisely at the point of intersection. This precludes a segment from snapping to other existing nodes (vertices) when digitizing completes.
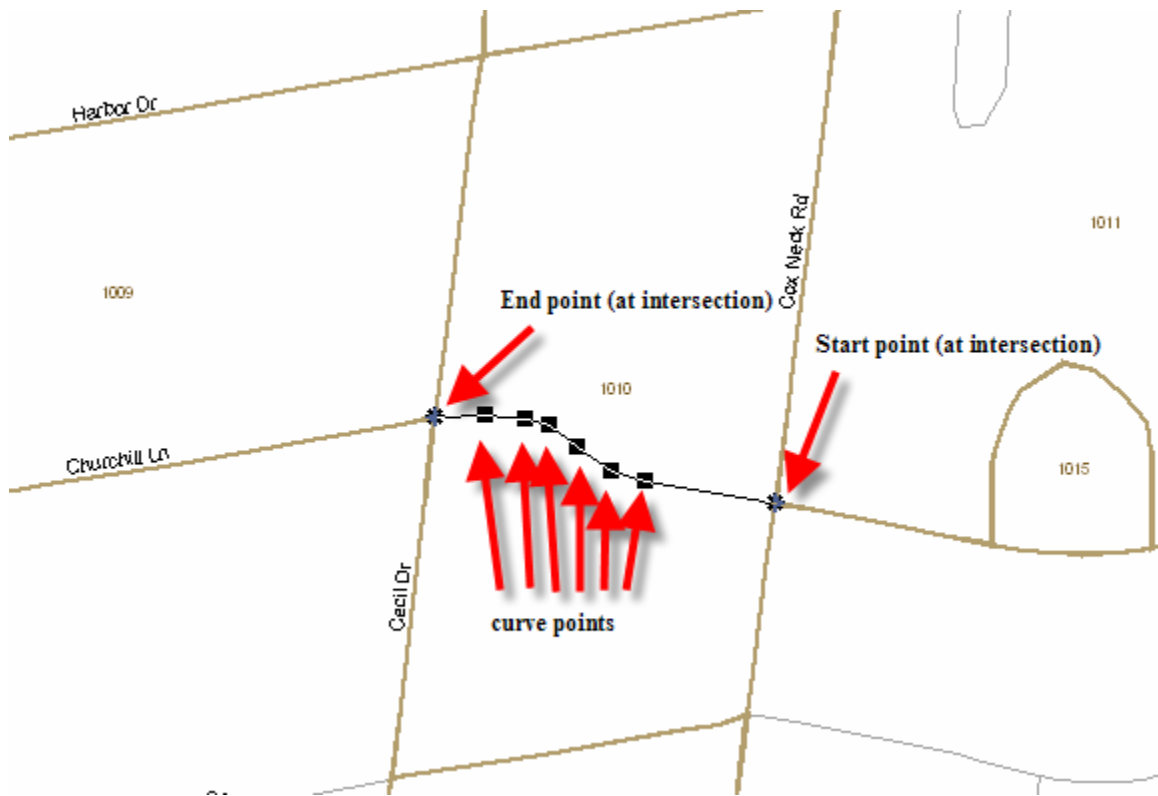
5. Be sure to zoom in sufficiently to see that the end point is connected to another line to form a closed polygon.

   Note: To end the digitizing of a line without actually creating the line started, hit the **Esc** key.

6. To finish the line, double-click to end it. (Click at a node [either at an intersection or at the endpoint of a line], on a line, or in space.)

   The MTPS adds the new line and displays the **All Lines – Editing Attributes dataview** box.

If the line is too close to, or intersects another line, the MTPS displays the **Confirm** dialog box.
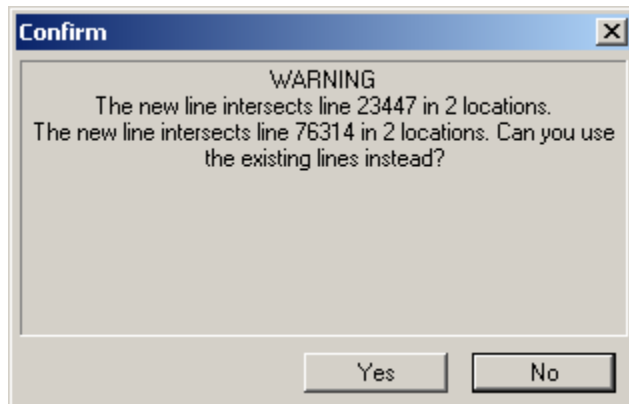
Follow the instructions above to review the suggested lines.

If it is not desired to use an existing line, see the following note.

Note: For adding lines in tight topology, lower the snapping distance. Choose from the top menu, **Edit➔ Preferences.** On the **System** tab, change **Snap Tolerance** to the distance and units desired. 10 feet is one suggestion.
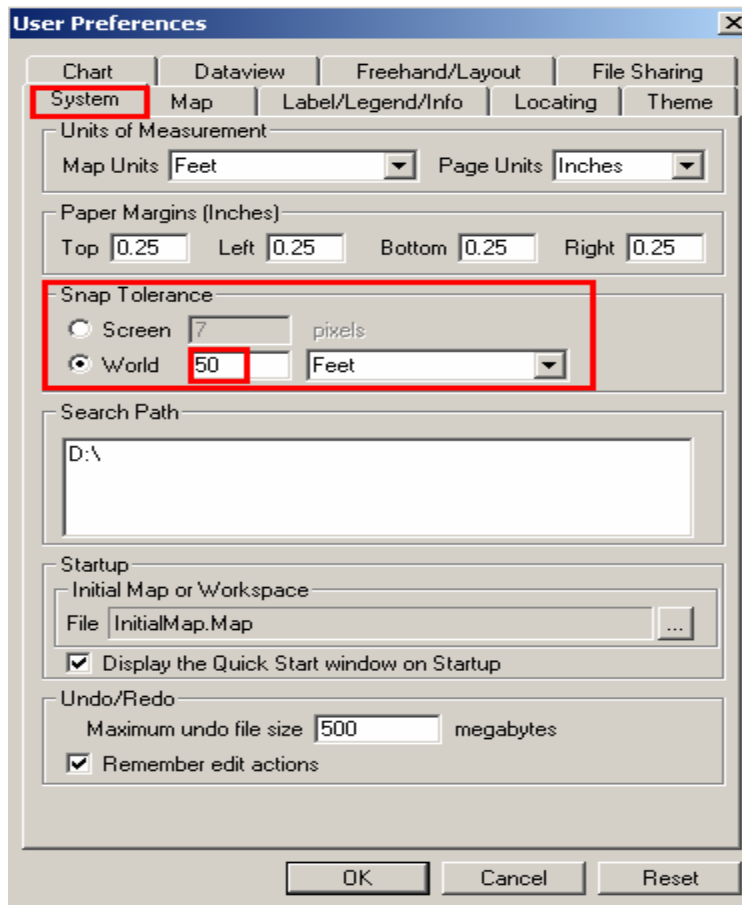
Click **OK**.

7. After changing the snap tolerance, re-add the line. After double clicking the end point of the added line, the **Confirm** box appears.
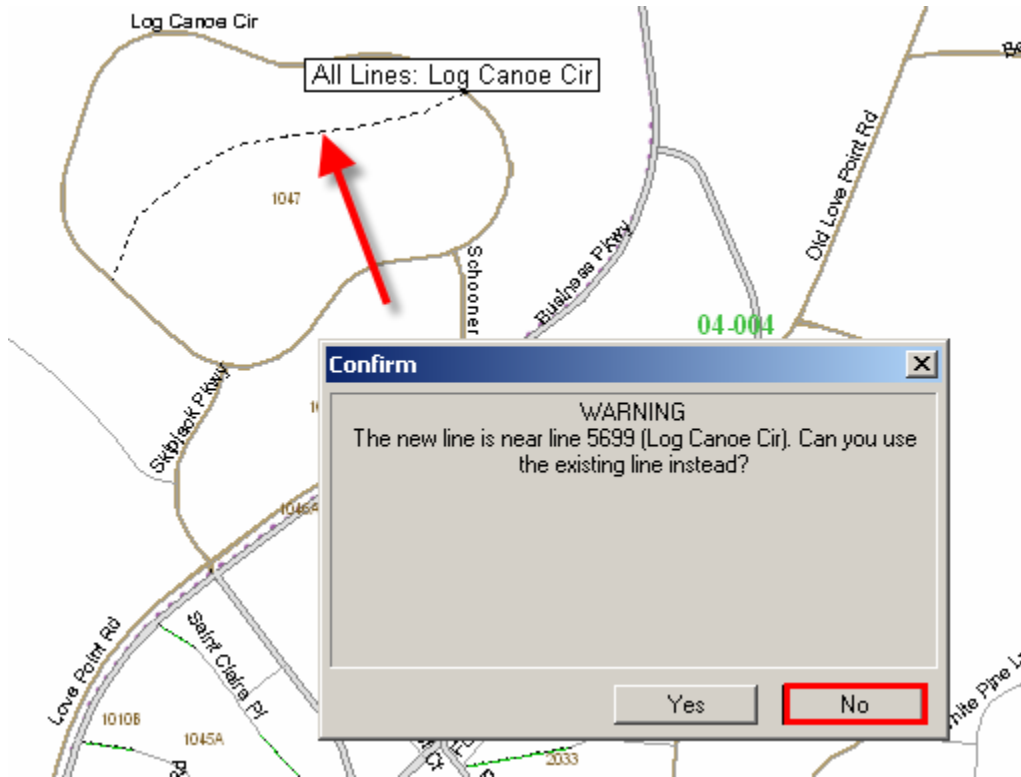
Click **No** to use the added line.

8. Now the **Dataview1 – All lines – Editing attributes** panel appears. Specify the **MTFCC** for the line add. Do this by double-clicking the panel to the right of **MTFCC** and select a feature type from the dropdown list. See the following example of assigning a Local Neighborhood Road.
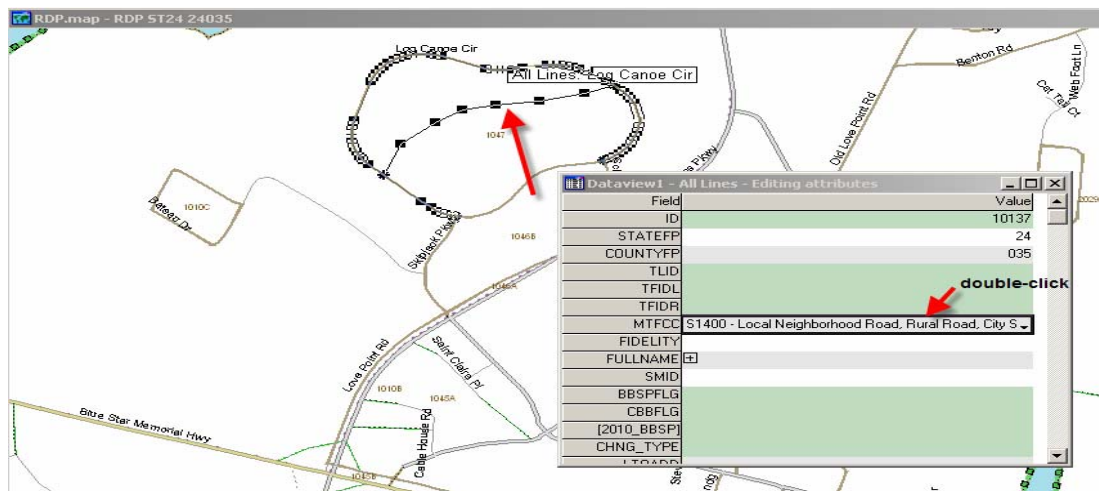
- If adding a correction line to be a non-visible VTD boundary, choose **P0001** (**Non-visible Legal/Statistical Boundary**).

- If adding a correction line to be a feature extension, choose **P0004** (**Other non-visible bounding Edge (e.g., Census water boundary, boundary of an areal feature**). See Section I.R. Feature Extensions.

9. Click the icon to the right of **FULLNAME** to enter any name. See the following example.
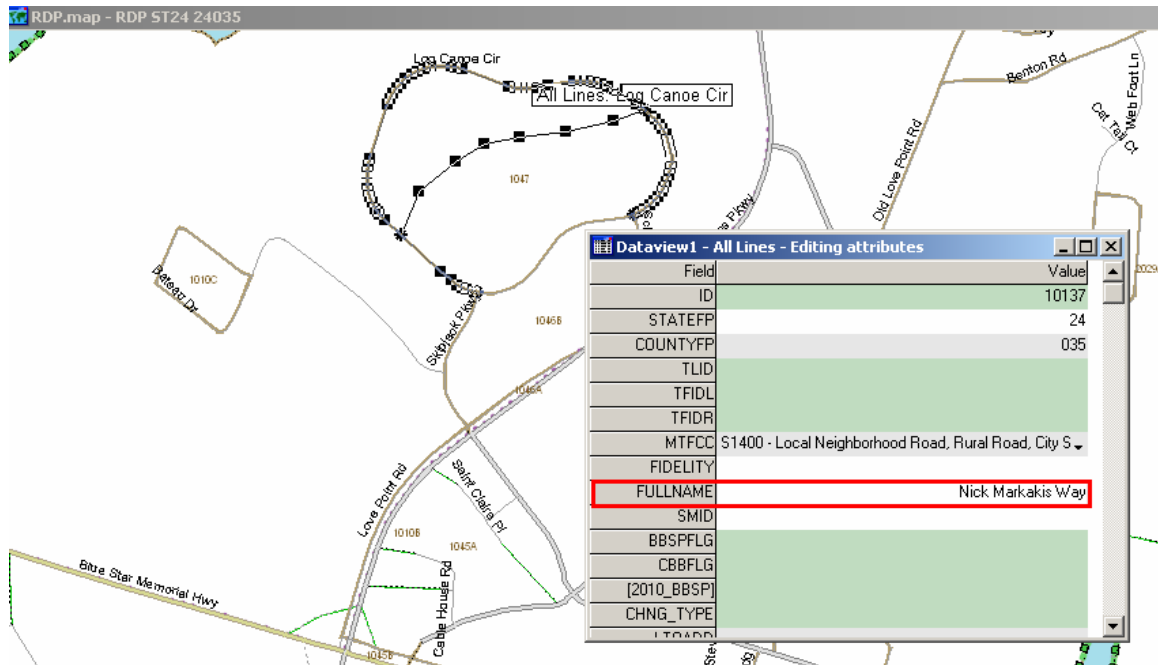
If the feature added does not have a name, describe the line being added in the **FULLNAME** field as follows:

- Right click in the **FULLNAME** field

- Add description (i.e., Section Line) and

10. Click ![icon] to add the line or ![icon] to cancel the added line. Also go to **Edit→ Undo**, while still in the map window, to cancel any added saved lines.

Note: The **Line Editing** tool allows users to delete, split, and copy lines; edit line attributes; and display names and address ranges. A deleted line that has been added and saved appears as a red dashed line. For more information on this toolbox, review the **Editing Linear Features** lesson in the **CBT**. Also, highlight the tool and press **F1**.

Note: Many pre-existing line attributes, such as addresses, are not editable in the RDP version of the MTPS. Furthermore, in regards to address ranges, when a line is split in the MTPS, both segments retain the original address range. The address range "imputes" the range break in the MTDB.

III. IF STATE/LOCAL GEOGRAPHIC DATA IS NOT CONSISTENT WITH CENSUS BUREAU DATA

Since the geographical data displayed in the local layer may not align exactly to the Census Bureau MTDB file, it may be necessary to adjudicate this geography. For example, if a VTD follows a school district boundary and the location of the school district is different between the local file and the Census Bureau MTDB file, use the school district boundary as aligned in the MTDB location. This situation is demonstrated in the graphic below. If local knowledge determines that the school district boundary (or other geographic entity boundary) is incorrect or is out-of-date, contact the Geography Division by sending an email to GEO.redistricting.list@census.gov. Census Bureau staff will provide the appropriate contact person, for school districts this would be the mapping coordinator. If the boundary requires correction, work with the school district mapping coordinator to correct the Census school district boundaries, and if agreed upon, the change will be reflected in a later Census Bureau shapefile product.

To ensure that the VTD and the school district (or any other legal or administrative area) boundary maintain that relationship, provide relationship information as instructed in the *Relationship Information Review* document.

Census Bureau and local school district boundaries have a similar shape but are in different locations.
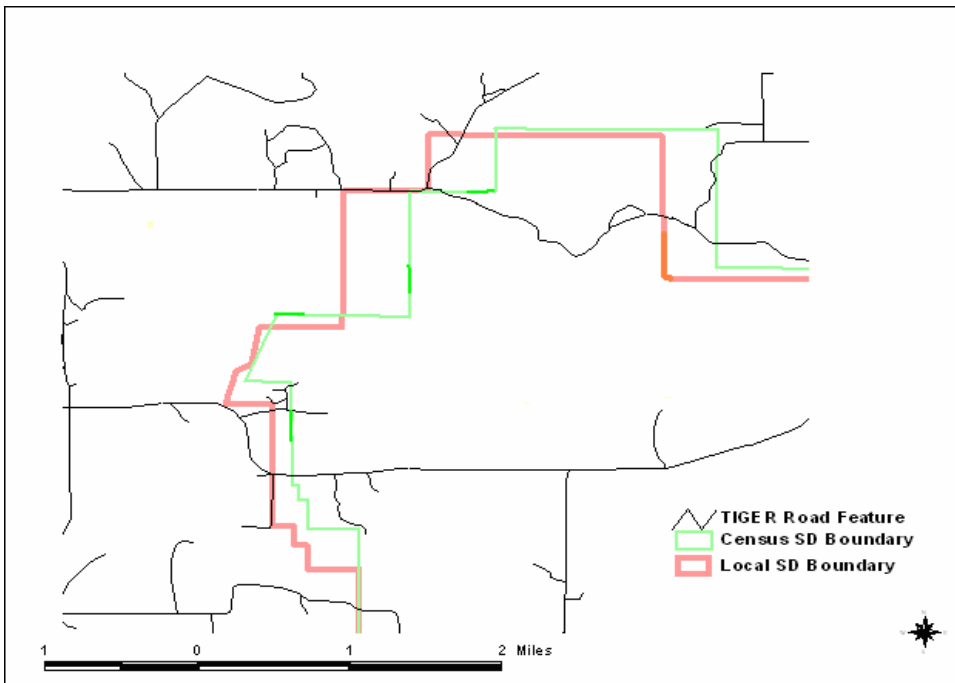
A. Boundary Corrections/Kinks and Distortions

The Census Bureau files sent out with the initial VTD/BBSP may have contained state, county, and other boundary types with "kinks" and boundary distortions.

The Census Bureau has been working to correct these situations. This boundary review and repair work will continue up until the Census Bureau creates the 2010 tabulation blocks in the fall of 2010. Some of these distortions have been repaired in time for the VTD/BBSP verification. In some cases, the Census Bureau has opted to "keep" the distortion if re-alignment and coordinate enhancement actually causes the roads and potential housing units to "move" from one governmental unit to another. In order for the Census Bureau to enter that type of correction, confirmation from the BAS respondent is required.

B. Boundary Corrections for Legal State, County, Minor Civil Division (MCD), and Incorporated Place

The initial phase of the VTD/BBSP work highlighted many areas of the country where local officials have not provided responses to the BAS. For this reason, the Census Bureau's legal boundary may be out of date. Many RDP liaisons have worked within their states to raise awareness of the importance of the BAS and the Census Bureau has acknowledged a good response to the 2009 BAS. The VTD/BBSP verification files to review reflect the results of the 2009 BAS. The Census Bureau conducts the 2010 BAS in November, 2009 – March, 2010. Any additions or boundary updates to legally defined areas must be submitted to the Census Bureau as part of the 2010 BAS in order to be reflected in the 2010 Census.

For information about the 2010 BAS, go to:

http://www.census.gov/geo/www/bas/bashome.html

Refer any questions or for further information, e-mail the BAS team at geo.bas@census.gov. Please include the complete name of the legal entity in question, a contact person, phone number and if possible an e-mail address.

IV. VALIDATING ANY CORRECTED VTD/BBSP

To ensure that any and all VTD/BBSP corrections and updates are complete and valid, execute the built-in edits in the MTPS before submitting these corrections and updates to the Census Bureau. These edits comprise identifying any unassigned areas and noncontiguous areas.

Note: It is suggested to execute these validations even if not entering and submitting any corrections or updates to ensure there were no inadvertent changes to the file during the verification process.

A. To Identify any Unassigned VTD Areas

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

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

3. Enter choices as follows:

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

4. Assign all unassigned area using the steps outlined in Section I.H. The VTD Editing Toolbox. After all unassigned areas are assigned, click the refresh 🔄 icon and a **Note** box appears indicating no unassigned areas. Click **OK**.

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

B. To Identify any Noncontiguous VTDs

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

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

3. Enter choices as follows:

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

4. If necessary, make any corrections by following steps in Section I.H. The VTD Editing Toolbox**.** When complete, close box in the upper right corner.

V.   REPORTING ANY CORRECTIONS AND UPDATES FOR VERIFICATION SUBMISSION

This section provides procedure on reporting any corrections and/or updates to the Census Bureau upon completing the verification and review of the VTD/BBSP state submission.

A.   To Report any VTD/BBSP Corrections and Updates for Verification to the Census Bureau

To submit any VTD/BBSP corrections and updates to the Census Bureau, follow these steps:

1.   From the top menu choose **VTD/BBSP➔ Report Changes**. The MTPS prompts a **Confirm** dialog box to create a ZIP archive of corrections and/or updates to send to the Census Bureau.

2.   Click **Yes**. The MTPS creates a ZIP archive called **RDP_ssccc_Return.zip** (ssccc = state and county FIPS code) and places it in the **MTPS Data** folder on the hard drive of the local computer, and displays a message with the path to the archive. Click **OK** to close the message.

B.   To View any VTD/BBSP Changes and Updates After Reporting

To view any VTD/BBSP corrections and updates to report to the Census Bureau, follow these steps:

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

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

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

4.   Click **OK**. The MTPS displays a map with the verification Shapefile that embodies corrections and updates. Return to Step 3 to open another Shapefile, or add one or more Shapefiles to the map by:

    (1)   Choosing, from the top menu, **Map➔ Layers** to display the **Layers** dialog box

    (2)   Clicking **Add Layer** to display the **Layers** dialog box

    (3)   Choosing **ESRI Shapefile** from the **Files of Type** dropdown list

    (4)   Highlighting one or more Shapefiles

(5)   Clicking **Open**; The MTPS displays the **ESRI Shapefile**"dialog box, where the settings are correct

(6)   Clicking **OK** for each Shapefile; the MTPS returns to the **Layers** dialog box

(7)   Highlighting each added Shapefile, clicking **Style**, and choosing a different border color. Click **Apply** and **OK**.

(8)   Clicking **Close**; The MTPS displays the map with the added layers

C.   Submitting the Corrected and Updated Verification Files Using the Census Bureau's "Send a File Utility"

To submit the corrected and updated VTD/BBSP verification file to the Census Bureau, upload the file through the Census Bureau's **Send a File Utility** at:

https://secure.census.gov/cgi-bin/sendfile

See the letter that was sent with the verification materials from the Redistricting Data Office (RDO). The letter provides the User name and Password.

1.   Under **Source Information (Local)**, click on the **Browse** button to navigate to the **RDP_ssccc_Return.zip** file to send. Select the file from the **Choose file** window by clicking on it. Click **Open**. The **File to Send** field now contains the file name.

   Note: Only one file can be sent at a time.

2.   In the **Target Information (Remote Directory)** section, select the appropriate state from the **Select a state:** pull down menu.

3.   Do not make an entry for **New File Name**.

4.   Under **Notify by E-mail**, type the participant e-mail address in the **Sender's Email Address** field. In the **Census Bureau Employee's E-Mail Address** field, enter the appropriate RCC email address.

5.   After filling in all the fields correctly, click on **Upload**. If an error occurs, **Clear** and repeat the steps.

   Note: If a file must be resubmitted for any reason, **rename the file**. If not, the utility produces an error message.   Please retain the default naming convention of **RDP_ssccc_Return** when renaming it.   For example:

   • RDP_42027_Return_revised.zip
   • RDP_42027_Return_2.zip.