| School District Review Program User Guide for the MAF/TIGER Partnership Software (MTPS) | Issued August 2015 |
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Table of Contents

| Preface | 5 |
|--|----|
| Installing MTPS version 5.11 and Census Bureau Data | 5 |
| Participant Information | 11 |
| SDRP Help | 12 |
| Starting the MAF/TIGER Partnership Software | |
| To Pick a SDRP County (or county equivalent) | |
| To Work with the SDRP Map Window | |
| Navigation Tools | 15 |
| Information Tools | 16 |
| To Work with Layers | 17 |
| To Use Images in a Map (TerraServer-USA) | |
| To Update School District Attributes | 19 |
| To Change School District Boundaries | 20 |
| Boundary Corrections | 20 |
| Selecting Whole Faces | 21 |
| Splitting Faces | 22 |
| Delete Area | 23 |
| Deleting an Area | 23 |
| Boundary Corrections Using a Local GIS File | 24 |
| Using external reference sources | 26 |
| Simple and Complex Dissolutions | 26 |
| Complex Dissolution Verification | 28 |
| Simple and Complex Consolidations | |
| Create a New District | 32 |
| To Display the MTPS Submission Log for a School District | 33 |
| To Compare School Districts Statewide | |
| To Verify Your SDRP Work | 35 |
| To Report Your SDRP Changes to the Census Bureau | 36 |
| Sending SDRP updates to the Census Bureau | 38 |

| Appendix A | 47 |
|--|----|
| How to Add Lines in the MTPS | 47 |
| Lines with "spikes" | 65 |
| Appendix B | 69 |
| Defining Small Land Parcels | 69 |
| Shorelines with School District Not Defined in Water | 71 |

Preface

The MAF/TIGER Partnership Software (MTPS) is a customized Windows software package built-on Caliper Corporation's Maptitude geographic information system (GIS). It is designed to facilitate streamlined updating of Census Bureau provided Environmental System Research Institute (ESRI) shapefiles by state and local partners within a Windows environment.

The Census Bureau provides all School District Review Program (SDRP) participants with a copy of the MTPS along with customized ESRI shapefiles.

This guide provides procedural instructions for using the SDRP within the MTPS environment.

We strongly encourage all participants to complete the Computer Based Training module and to read these instructions before performing actual updates in the MTPS. Moreover, the Census Bureau suggests that all participants familiarize themselves with the updating tools in the MTPS by performing several dry runs in a county before making actual updates.

Contact Information

If you have any questions, contact the SDRP team by phone at 301.763.1099:

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- Mr. Nathan Jones
- Ms. Lauren Kirsch
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School District Review Program (SDRP) Web Page

http://www.census.gov/geo/partnerships/sdrp.html

Installing MTPS version 5.11 and Census Bureau Data

This section provides instructions for installing both the software and the data. If you have any problems installing or using the MTPS program or data, please contact the SDRP Team.

You can skip the MTPS program installation if you installed MTPS 5.11 during the 2013-2014 SDRP and it is still on your computer. The Census Bureau recommends that you rename any existing MTPSData folders on your computer from the 2013-2014 SDRP and proceed to Step #8: Loading the Census Bureau Data.

Warning: Installing the MTPS and the accompanying data will delete any previous MTPS data installations and any work already completed, regardless of Census Bureau program (Boundary and Annexation Survey, Redistricting Data Project, SDRP, etc.). The Census Bureau recommends that you rename any existing MTPSData folders on your computer.

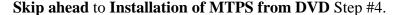
To rename existing MTPSData folders:

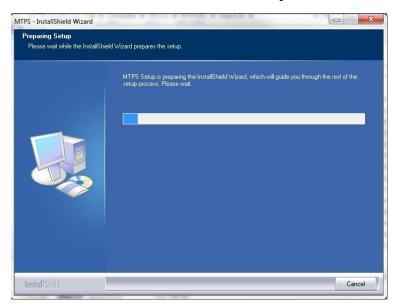
- 1. Navigate to the **c:\MTPSData** folder.
- 2. Rename the folder using the program initials so it can be easily identified later (e.g., c:\MTPSData_SDRP13-14 or c:\MTPSData_BAS).

Installation of MTPS from Download

In order to download the MTPS, please contact the SDRP Team using the phone number or email address listed above. The SDRP Team will email you the MTPS download username, password, and setup file within two business days.

- 1. Download the MTPS from the SDRP website at http://www.census.gov/geo/partnerships/sdrp.html using the download username and password provided by the SDRP Team.
- 2. Unzip (Extract) the MTPS5.11.zip file into a new folder on your c: drive labelled MTPS_Software.
- 3. In the c:\MTPS_Software folder, locate and double-click on the SETUP.EXE file to start the InstallShield Wizard.



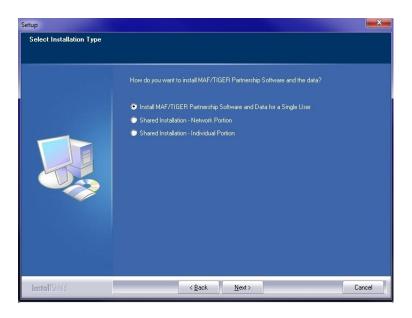


Installation of MTPS from DVD

- 1. Start Windows.
- 2. Insert the MTPS Program disc in the appropriate drive.
- 3. If the **InstallShield Wizard** does not automatically start:
 - 3.1 Choose the **Run** command from the Windows **Start** menu.
 - 3.2 Type the location of your disc plus the word **setup** (for example, type **d:\setup**), or use the Windows **Browse** button to locate the SETUP.EXE file to start the InstallShield Wizard.
- 4. In the **Setup: Welcome** window, click **Next**.



5. In the **Setup: Select Installation Type** window, select **Install MAF/TIGER Partnership Software and Data for a Single User** and then click **Next**. Do **NOT** choose "Network".



6. Setup will prompt you to select a folder where you want the MTPS files to install. Use the default Destination Folder and click on **Next**.



7. Setup will prompt you to select the MTPS program parts you want to install. Use the default selections and click on **Next**.

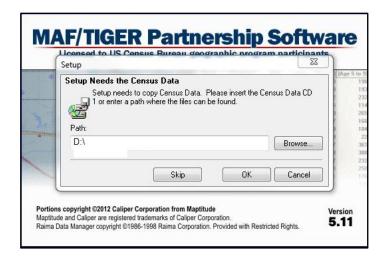


The setup program will continue through the MTPS program installation process and eventually prompt you to load the Census Bureau data.

Loading the Census Bureau Data

- 8. Once the MTPS program has installed, the setup process prompts you to insert the Census SDRP Data disc with a **Setup Needs the Census Data** message.
 - 8.1 If you are loading the data for your state from the Census Data disc, remove the MTPS Program disc and insert the Census Bureau Data disc. **Browse** to the location of the Data disc and click **OK**. The file name will be **SDRP_ss**, where **ss** represents the two-digit Federal Information Processing Standards (FIPS) code for your state.

8.2 If you will download the Census Bureau data for your state from the SDRP website, click **Skip** on the Setup screen to load the data after the MTPS has finished installing. *Skip ahead* to Step #10.



- 9. After the setup process finishes copying all state data shapefiles, Guidelines, and Listings onto your system, the setup phase of the process is now complete.
- 10. Click **Finish** on the Setup screen.



- 11. If you will download the Census Bureau data for your state, download it now, by county, from the SDRP website at http://www.census.gov/geo/partnerships/sdrp.html No username or password are required to download data.
- 12. Unzip (Extract) the data zip files, by county, into a new folder on your c: drive labelled MTPSData. The download for each county will come with a set of statewide shapefiles and a set of county shapefiles. On startup, MTPS will automatically load any state and county data that is in the MTPSData folder.
- 13. Click the Start button on the Windows taskbar and from the **Programs** menu. Choose **MAF TIGER Partnership Software** and then **MAF TIGER Partnership Software 5.11**.

MAF - TIGER Partnership Software

14. Click **OK**. This will display the **Please Log In** dialog box and enter **SDRP** as the user name using all upper-case letters for the SDRP (the user name is case-sensitive). Example:

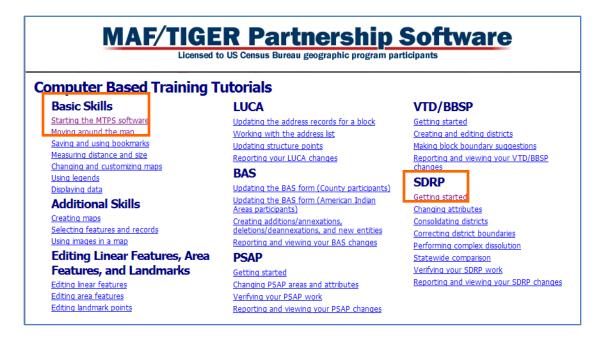


15. Click **OK**.

- 16. You are then prompted with the following two Startup Choices:
 - o Run the Computer Based Training (CBT)
 - o Go Directly to the MAF/TIGER Partnership Software program (default)

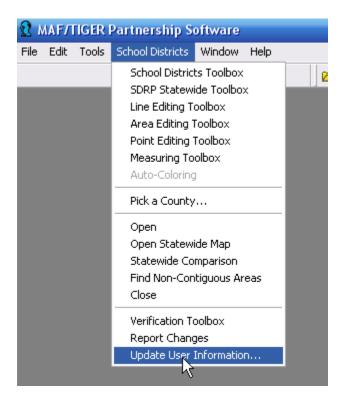
Select the CBT as your startup choice and click **OK** to review critical MTPS information and update procedures. Please review the lessons in the Basic Skills and SDRP tutorials. After you have reviewed the CBT, select "**Go directly to the MAF/TIGER Partnership Software program**" in the Startup Choices box to start using the MTPS.

While reading through the **Guide To Reporting School District Updates** and identifying your changes, we recommend that you learn the basics of the MTPS as shown below. After you read through the **Guide To Reporting School District Updates** and identify your changes, you can learn how to do the changes that you have identified.

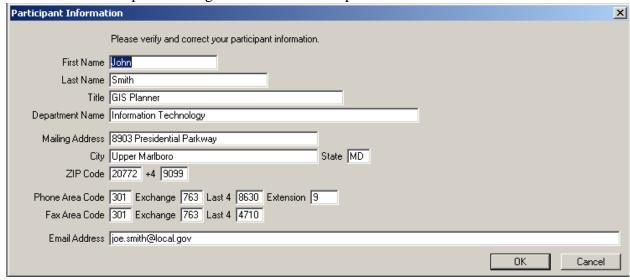


Participant Information

The first time you enter the MTPS, select **School Districts** from the MTPS menu and click on **Update User Information**, which is located at the bottom. Example:



A window will appear asking you to verify and correct the participant (Mapping Coordinator) information for the person using the software. Example:



Please use the example participant information provided as a guide when filling out this form. The Census Bureau tries to maintain complete contact information for each participant working with the SDRP, but if we are missing data, such as a fax number or e-mail address, please populate the appropriate fields with the information.

Click the **OK** button in the bottom right corner after you have completed making the necessary updates.

SDRP Help

Review the on-line help for the SDRP program by choosing **Help-Contents**, clicking the **MTPS Census Program Help** link, and then the **SDRP** link.

You can also run the CBT by clicking on the **Start** button, then **Programs-MAF-TIGER Partnership Software-Computer Based Training for MAF-TIGER Partnership Software.**

Note: Adobe Flash Player must be installed on your computer for the CBT to operate. The Census Bureau provides all MTPS participants with this software or you can download it for free at: http://www.adobe.com.

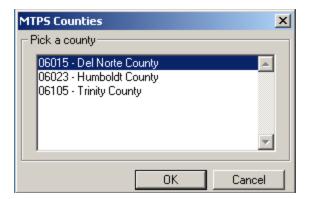
Starting the MAF/TIGER Partnership Software

Before you can open the SDRP Map window, you must pick a county to work with, so that the MTPS can import the data for that county. The last county you picked becomes the current county, and when you open the SDRP Map window, the software displays that county. To work with a different county you must close the SDRP Map window, pick another county, and open the SDRP Map window again.

To Pick a SDRP County (or county equivalent)

Begin using the SDRP user interface by following these steps:

- 1. If the SDRP Map window is open, choose **School Districts-Close** from the Standard Toolbar. The MTPS closes the SDRP Map window and any toolboxes that are open.
- 2. Then choose **School District-Pick a County** from the Standard Toolbar. The MTPS displays the following MTPS Counties dialog box:



- 3. The aforementioned box will contain all the counties within your state. Highlight a county in the scroll list by clicking on it.
- 4. Click **OK**. If that county is already the current county, the MTPS displays a message reminding you. Otherwise, before starting the import process, the MTPS displays a message to recommend that you disable any anti-virus software to speed the process. Disabling your antivirus is <u>not required</u>, <u>only suggested</u>. When you click OK, the MTPS imports the county, makes it the current county and displays a message indicating success. Example:

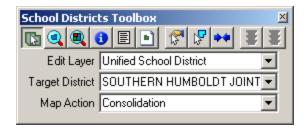


Note: Depending on the processing speed of your computer, some large counties, such as Los Angeles County and Cook County may take longer (20 minutes) to build than smaller counties.

5. Click **OK**.

To Work with the SDRP Map Window

- 1. From the Standard Toolbar choose **School District-Open**. The MTPS displays the SDRP Map window.
- 2. The MTPS opens the School Districts Toolbox. This toolbox can be turned on and off from the **School District** menu. Example:



3. The MTPS opens the **Tools** toolbox, which contains navigation and information tools. This toolbox can be docked into the Standard Toolbar at the top of the screen. Example:



4. The MTPS opens the map legend for the initial map view. The layers listed in the legend will automatically change as you zoom in and out on the map. Example:



Navigation Tools

| 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. MAF/TIGER Partnership Software makes the scale larger 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. MAF/TIGER Partnership Software 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. MAF/TIGER Partnership Software changes the center of the map. |
| Return to the previous scale and center | Choose Map-Previous Scale or click on the Tools toolbar. |
| Return to the original scale and center | Choose Map-Original Scale or click on the Tools toolbar. |
| Move the map in a cardinal direction | Choose Map-Pan-Pan Map Toolbox |
| | Pan Map X |
| | to display the Pan Map toolbox, then click the appropriate arrow button to move the map half the width or height of the map in that direction or return to the previous scale. |
| Move the map right, left, up, or down | From the Map-Pan submenu choose one of the commands: Pan Right, Pan Left, Pan Up, or Pan Down. |

Information Tools

| Do this |
|---|
| Choose the layer you want from the drop-down window on the Standard Toolbar. |
| Choose a layer from the drop down list. Click on the Tools toolbar to activate the Info tool and click on a feature on the map or drag a circle around the map feature. MAF/TIGER Partnership Software marks the feature with an 'i' and displays the data for the feature in the Info window. |
| There are two tools for displaying data for multiple layers. Choose on the Tools toolbar to activate the Multi-Layer Info tool to display the data for all of the features at a location where you click. Choose on the Tools toolbar to active the Multi-Layer Area Info tool to find all the area features at a location where you click. |
| Right click in any Info window and choose Field Sets , highlight an existing set or click Add to create a new set, and click OK. MAF/TIGER Partnership Software displays just the fields in the field set, in the order you chose. |
| Click the close box in the upper right corner or choose Close from the system menu in the upper left corner. |
| Choose on the Tools toolbar to activate the Measure Distance tool. Click a starting location, any intermediate location, and double-click the ending location. A dialog box displays the length. Choose on the Tools toolbar to active the Measure Size tool. Click a starting location and several shape points, double-clicking to close the area. A dialog box displays the area and |
| |

To Work with Layers

| To do this | Do this |
|---------------------------------------|---|
| Open the Layers dialog box | Choose Map-Layers or click on the Standard toolbar, or click the right mouse button on the map window and choose Layers . MAF/TIGER Partnership Software displays the Layers dialog box. |
| Choose a layer | Highlight the layer in the scroll list, which shows the layers in the order they will be drawn, a sample of the style, and the status. Note: The active or working layer is displayed at the bottom of the layers list, but will show as the top layer in the map legend. Hidden means the layer will not be drawn, autoscale means the layer will be drawn between certain scales, and blank means the layer will be drawn at all scales. You can also hold the Shift key and click on another layer to highlight a range of layers, or hold the Ctrl key and click on a layer to toggle the highlight on or off. |
| Hide a layer | Click Hide . The button will change to Show so that you can reshow the layer. |
| Add a layer | Click Add Layer to display the File. |
| | You can choose the type of file and one or more files to open. Click Cancel to close the dialog box without adding any layers. |
| Drop a layer | Click Drop Layer . MAF/TIGER Partnership Software displays a Confirm dialog box. Click Cancel to close the dialog box without dropping the layer. |
| Change the order of the layers | Click Move Up or Move Down . MAF/TIGER Partnership Software 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. Click **Apply** if you want to try out changes to style settings, but click **Cancel** to close the dialog box without changing the settings.

Change the label settings for a layer

Click **Labels** to display the Automatic Labels dialog box. Click **Apply** if you want to try out changes to label settings, but click **Cancel** to close the dialog box without changing the settings.

Change the autoscale settings for a layer

Click **Autoscale** to display the Autoscale dialog box. The **Largest** drop-down list, if not blank, shows the largest scale at which to display the layer, as you zoom in. The **Smallest** drop-down list, if not blank, shows the smallest scale at which to display the layer, as you zoom out. Click **Cancel** to close the dialog box without changing the settings.

Close the Layers dialog box

Click Close.

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 Use Images in a Map (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. If you have Internet access, you can get an image from TerraServer-USA to add as a new layer in your map. Images can function as layers in your maps in almost the same way as any other type of layer.

NOTE: The .NET Framework from Microsoft must be installed to use this functionality. For more information, see the Microsoft download page at: http://www.Microsoft.com. Also, please contact your IT staff before installing.

Follow these steps to use a Terra-Server-USA map image:

1. Change the scale of the map, if necessary to get the area for which you want the map image.

2. Select **Tools-Imagery-TerraServer USA toolbox** from the Standard toolbar. The MTPS opens the toolbox. Example:



- 3. Choose one of the following options from the **Methods** drop-down list:
 - Aerial image nationwide black and white digital orthophoto quadrangles (DOQs)
 - **Topographic map** nationwide digitally scanned images of USGS topographic maps, also called digital raster graphics (DRGs)
 - **Urban color maps** color DOQs for the 133 most populated metropolitan areas of the United States. See the USGS Fact Sheet at: gisdata.usgs.net/IADD/factsheets/fact.html.
- 4. Choose the image resolution from the **Resolution** drop-down list. If you choose Autoscale, the MTPS will choose an appropriate resolution.
- 5. Click on to get the image. The MTPS requests, receives, and displays the image in the map window.
- 6. Click on to save the image. The MTPS displays the Save Image As dialog box. Choose a folder, choose a file type, type a name, and click Save. The MTPS saves the image in the JPEG format.

Click on \times to drop the image layer from the map. The metadata for the image can be displayed by clicking on \times Click **OK** when you're finished reading the metadata.

When you're done, click on the close button in the top right-hand corner of the toolbox. The MTPS closes the toolbox.

More detailed information about using imagery can be found in the on-line **Help**. Click on the Search tab and type TerraServer in window 1. The relative topics will appear in window 3. When clicked on, the information associated with each topic will be displayed in the viewing window.

To Update School District Attributes

PLEASE NOTE: Updates or corrections to any existing Local Education Agency (LEA) codes, school district names, levels, and/or low and high grades should NOT be completed using the MTPS. Please record and submit the aforementioned changes manually using the Excel Submission_Log.xls spreadsheet (referenced in the User Guide for the Excel Submission Log and included on your MTPS Data disc).

To Change School District Boundaries

IMPORTANT NOTES:

- Participants will use the MTPS to make and record only boundary changes (annexations/corrections), complex consolidations, complex dissolutions, new districts, and to delete areas. Please do not use the MTPS for simple consolidations and simple dissolutions. List those updates manually in the Excel Submission_Log.xls (referenced in the User Guide for the Excel Submission Log and included on your MTPS Data disc).
- When a Unified school district moves (annexes) into an area previously covered by an Elementary or an Elementary and Secondary school district, you must also delete the same faces from the Elementary or the Elementary and Secondary school district layers. You do not have to take this action if the annexation of an area occurs within level (i.e., a Unified school district moves into an area previously covered by another Unified school district).
- When an Elementary or an Elementary and Secondary school district moves (annexes) into an area previously covered by a Unified school district, you must also delete the same faces from the Unified school district layer. You do not have to take this action if the annexation of an area is within level (i.e., an Elementary school district moves into an area previously covered by another Elementary school district and/or a Secondary school district moves into an area previously covered by another Secondary school district).
- The Census Bureau will not adjudicate between school districts when a change affects an adjacent district. We ask that you, as the mapping coordinator, please resolve these issues before submitting changes to the Census Bureau.

Boundary Corrections

<u>IMPORTANT NOTE</u>: Please read Appendix A: How to Add Lines in the MTPS before making any boundary corrections and filling out the MTPS Submission Log.

When making a boundary correction using the MTPS, you will need to know:

- 1. Which school district is the **target district** (i.e., the one adding area), and if it is an elementary, secondary or unified district.
- 2. Which school district is <u>losing</u> area, and if it is an elementary, secondary, or unified district.

Please zoom into the work area to ensure that the **ALL LINES** layer is visible, and use the MTPS as a frame of reference while making your boundary correction(s). Moreover, please try

to use existing census features as much as possible rather than adding lines within 30 feet of existing census features.

| To do this | Do this |
|----------------------------|---|
| Make a boundary correction | From the School Districts Toolbox, choose Boundary Correction from the Map Action drop-down list. |
| | Choose the type of school district (elementary, secondary, or unified) you wish to modify from the District Layer drop-down list. |
| | Choose the target school district to modify from either the District drop-down list or by selecting it using the Target Area Pointer tool. The chosen school district will shade. |
| | Zoom to the portion of the boundary that you wish to edit by using the Zoom In on the Tools toolbar and click on a point or drag a rectangle. |

There are **two** ways to effect a boundary change. One is by selecting individual faces or polygons. However, if the whole area of a selected face (polygon) isn't to be included in the boundary correction, the face will need to be split by drawing (adding) a new line (boundary) in the appropriate place.

Note: Once you have started making changes, you cannot choose a different edit (district) layer until you click **3** to save your changes or **4** to cancel your changes.

You can also undo changes with the **Edit-Undo** command.

Selecting Whole Faces

| To do this | Do this |
|-----------------------|--|
| Selecting whole faces | Click on the Select by Pointing tool on the School District Toolbar to select each individual face to add to the target school district or click on the Select by Shape tool to select faces within a shape. Remember to double-click to end your shape. The selected faces will shade green. |
| | Note: If you select an incorrect face, hold down the Control key and click to unselect it. And, you can click on Cancel Edits before effecting the change. If the |

change was already effected, go to **Edit/Undo** in the Standard toolbar at the top of the screen.

Then click on . The MTPS Submission Log dialog box is displayed showing the change has been made and recorded for the target district – the one adding area. Scroll to the right and click in the Narrative Description field of the Submission Log to enter the Type of change and any additional information regarding the change. NOTE: If a boundary correction or change is being made in conjunction with a Complex Consolidation, please enter, Complex Consolidation Boundary

Correction/Change in the Narrative Description field.

This field holds up to 500 characters. See the Quick Start Guide for the definition of a complex consolidation.

Click **Close.** The MTPS closes the Submission Log dialog box.

The MTPS corrects the school district boundary based on the added faces.

Splitting Faces

| To do this | Do this |
|------------------------------------|---|
| Add a line (Create a new boundary) | Choose School Districts-Line Editing Toolbox from the Standard toolbar at the top of the screen. |
| | Click to activate the Add Line tool. |
| | Zoom into the area where you want to draw the new boundary. |
| | Click where you want to start the line |
| | Move the cursor and click to create shape points (nodes, vertices) along the new line. |
| | Double-click to end the line. You may click at a node (either at an intersection or at the endpoint of a line), on a line, or in space. |

NOTE: Depending on where you draw your line, you may get a **Warning** pop-up box giving you the option to use existing lines for your boundary instead of adding a new one.

If you answer **Yes**, the new line you delineated disappears. You will have to redraw any line segments that connect to the existing lines you wish to use as a boundary.

If you answer **No**, the MTPS adds the new line and displays a **Dataview** window. The MAF/TIGER feature class code (MTFCC) for School District Boundary (P0001) is automatically filled-in.

If desired, enter the full name of the added line by clicking on the + **sign next to fullname**. The MTPS will automatically enter **Unnamed**. Use the **Delete** key to backspace over and then type in the feature name.

To close the **Dataview** window, click the **X** in the upper right-hand corner.

If you **choose not to add a name**, click on the **X** in the upper-right hand corner of the **Dataview** window.

Click **8** to add the line or **1** to cancel the added line. You can also go to **Edit-Undo**, while still in the map window, to cancel any added lines.

Once your new line is added, follow the instructions given above for **Selecting Whole Faces** to make your boundary correction/change.

Delete Area

You will never use this tool as a single action. It should always be done in conjunction with and as a result of a **boundary change (annexation/correction), complex dissolution, complex consolidation or when a new school district is created.**

Note: Once you have started making changes, you cannot choose a different edit (district) layer until you click **3** to save your changes or **3** to cancel your changes.

You can also undo changes with the **Edit-Undo** command.

Deleting an Area

| To do this | Do this |
|-------------|---|
| Delete area | From the School Districts Toolbox, choose Delete Area from the Map Action drop-down list. |
| | A Note dialog box will display reminding you that the Delete Area tool should only be used for deleting parts of school districts that cannot be deleted through the use of other tools. |
| | Click Okay. |

Choose the type of school district (elementary, secondary, or unified) you wish to modify from the **District Layer** drop-down list.

Choose the school district to modify from either the **District** drop-down list or by selecting it using the **Target Area Pointer** tool. The chosen school district will shade.

Zoom to the portion of the boundary that you wish to edit by using the **Zoom In** on the **Tools** toolbar and click on a point or drag a rectangle.

Select faces to <u>delete</u> using the **Select by Pointing** tool on the **School District Toolbar** to select one or more faces or the **Select by Shape** tool to select faces within a shape. Like before, the selected faces will turn green.

Then click on . The MTPS Submission Log pops up showing that this school district has lost area. Scroll over to the right to see. You can click in the **Narrative Description** field if you want to give us any information regarding the change.

Click Close.

You'll still see a residual line where the old boundaries were, but the symbology will be gone. This line remains in the event you need to find this area again to see where the original boundary was located.

Boundary Corrections Using a Local GIS File

In the event that your local participant provides you with electronic versions of their school district boundary changes, you can bring them in as additional layers in your map. Adding these as layers allows you to use them as templates for digitizing the boundary changes into the MTPS. When accepting GIS files from your local participants, make sure you also receive the projection information and metadata for the data that they are supplying. This will assist you if there are any problems when importing the data.

You will need to know the answer to the following questions before starting:

- What type of local file(s) have I received?
- Do I have the projection information for this file(s)?

NOTE: If you add additional files to your MTPS project, you must **not** move or delete those files on your PC until you drop them from the MTPS project. Failure to drop the files from the

project before moving or deleting them will render the project unable to open. Read How to Drop a Layer on page 14.

It is also important to remember when making updates, if an equivalent feature exists, you should use the equivalent feature in the Census File as your boundary even though it may not be spatially aligned with the source file's feature. See **Appendix B: Special Situations** for more information.

Use these steps to make a boundary correction using a local GIS file:

- 1. If necessary, select **Pick a County** from the School Districts drop-down menu in the Standard Toolbar.
- 2. Select the county you wish to work in and then select **Open** from the School District drop-down menu.
- 3. Open the **Layers Dialog** box by clicking the Map Layers 🗃 button.
- 4. Click the **Add Layer** button.
- 5. In the **File Open** window that appears, set the **Files of type** pull-down menu to the file type you are trying to add.
- 6. After setting the file type, still using the **File Open** window, navigate to and select the file you want to add. Click the **Open** button.
- 7. A pop-up box will appear listing information about the file you are adding. Click the **Coordinates** button. This lists the coordinates, as interpreted by the software, from any associated projection files. If the file you are trying to add does not have the associated projection file then this is where you would manually enter the projection information.

(Note: Each projection type has its own specific characteristics. In general, the information you need is the projection name, datum, units (if applicable), and zone (if applicable). It is also worth noting that the system of latitude and longitude is often referred to as unprojected. Help with projections is available in the Help section under Basic Skills -- Additional Skills -- Importing and Exporting Geographic Files -- Using Data in Other Coordinate Systems.)

- 8. After verifying or entering the projection information, click **OK**. Continue clicking **OK** until you are back at the **Layers Dialog** box. Your file should now be listed in the Layers window. You can change the symbology (dashed lines work best) for your layer here by clicking on **Style** button (refer back to the **To Work with the Layers** section).
- 9. Click the **Apply** button, the **OK** button, and the **Close** button to have your newly added file drawn in your map.

- 10. Examine where the boundaries diverge to determine if you need to draw a new line or if there is an existing line to which you can bring the school district boundary. See Attachment E for more information.
- 11. Once you've made your evaluation, use the **Boundary Correction** action in the **School District Toolbox** to make the needed school district changes.

If you wish to import an older data format such as ESRI E00 files, you must first convert them by clicking on **File** from the menu bar, then selecting **Open.** Open the pull-down menu from the **Files of Type** menu and select your data format from the list. If you fail to find your data format, then Maptitude does not support it.

Using external reference sources

The Census Bureau encourages the use of external reference sources such as georeferenced imagery and the Public Land Survey System (PLSS) grid when reviewing your school district boundaries. However, please keep in mind the topological nature of the MAF/TIGER database when choosing where to add boundaries and coverage. It would be incorrect to digitize a PLSS line or a feature from imagery as intersecting existing features if it's in the wrong relative location. It would also be incorrect to assign coverage based on the location of these external sources without reviewing the feature network. Doing either of these could cause a misallocation of population when tabulations are created based on these topologically incorrect lines and coverages. To prevent this, please look at the relative position of these guiding sources to both the Census supplied geography and your own data. Recreate the lines in the Census supplied geography in the same relative position as to where they exist in your own data. Also, be sure to use equivalent features as boundaries when creating coverages. See **Appendix A: How to Add Lines in the MTPS** for more information.

Simple and Complex Dissolutions

A dissolution results in the disappearance of a school district with <u>no new school district being</u> created. There are two types of dissolutions – **simple and complex**.

The term **simple dissolution** refers to the situation where one or more existing school districts are entirely absorbed by **one** other existing school district. A new school district is **not** created. The name and LEA code of the **receiving** school district are retained.

Note: do not make simple dissolutions using the MTPS. Report them manually using the **Excel Submission_Log.xls** (referenced in the User Guide for the Excel Submission Log and included on your MTPS Data disc).

The term **complex dissolution** refers to the situation where a single school district is dissolved and its area is split between **two or more** other existing school districts, with or without additional boundary changes/corrections. Again, a new school district is **not** created, and the names and LEA codes of the **receiving** school districts are retained.

Before you do a complex dissolution using the MTPS, you must be sure about two basic things:

School District Review Program: User Guide for the MTPS

- 1. What is the school district being dissolved? Is it actually true that **the entire district** will disappear? If any part of the district is to remain, then it is not a complex dissolution, but just a boundary correction.
- 2. Which school districts will gain the area formerly covered by the dissolving school district? Remember, you must split the territory between districts in order for it to be a complex dissolution. If transferring all territory to only a **single** school district, then it is just a simple dissolution.

Note: Once you have started making changes, you cannot choose a different edit (district) layer until you click **3** to save your changes or **4** to cancel your changes.

You can also undo changes with the **Edit-Undo** command.

| To do this | Do this |
|---------------------|---|
| Complex dissolution | Choose Complex Dissolution from the Map Action drop-down list. |
| | Choose the school district layer (level) of the school district being dissolved from the Source Layer drop-down list. |
| | Choose the school district that is being dissolved from the Dissolve From drop-down list. It will shade gray on the map. |
| | Choose the school district layer of the school district adding area from the To Layer drop-down list. |
| | Choose the school district that is adding area from the Dissolve Into drop-down list. It will shade with a pattern. |
| | Zoom into the area you wish to edit and select the faces to take from the district being dissolved by using the tool to select one or more faces or the tool to select faces with a shape, then click |

Note: The MTPS checks to make sure all the selected faces come from the district specified in the Dissolve From window. Don't worry about over-bounding into another school district. If incorrect faces are selected, hold down

the **Ctrl key** and click to remove the incorrect selections and then click **3** again.

The MTPS displays the **Confirm with Explanation** dialog box. Type an explanation, which will be automatically entered into the Narrative/Description field in the Submission Log, and click **Continue**.

The MTPS displays the **Submission Log** dialog box for the target school district.

Click Close.

The MTPS adds the faces to the target school district.

Repeat the above steps, choosing a different selection in the **To Layer** and **Dissolve Into windows if applicable**, and entering the same explanation into the Narrative/Description field, until all parts of the school district are dissolved into other school districts.

Note: If you choose another map action before completing a complex dissolution, the MTPS displays a message. Click **OK** to continue.

You can undo changes with the **Edit-Undo** command.

Complex Dissolution Verification

The MTPS contains a verification tool that ensures that no small pieces of the dissolving school district were missed during the complex dissolution process.

To run the tool –

- 1. Go to **School Districts** and then **Verification Toolbox**.
- 2. From the **Type of Verification** drop-down list, pick **Required-Complex Dissolution**.
- 3. From the **Source Layer** drop-down list, <u>always choose the level of district that</u> was dissolved.
- 4. Click Verify.
- 5. The tool will run and list any school districts from the chosen level that were not completely dissolved.
- 6. Click on the magnifying glass icon to zoom to the extent of the district's undissolved pieces.

7. Use the **Complex Dissolution** tool to reassign the neglected faces.

Simple and Complex Consolidations

A consolidation is when two or more school districts combine to form a **new** school district. There are two types of consolidations – **simple and complex.**

The term **simple consolidation** refers to the situation where two or more school districts merge to create a **NEW** school district with a **new** name and **new** LEA code, <u>with no additional boundary changes/corrections</u>. There is no change in the overall boundaries of the former school districts.

For example: All of School District **A** merges with all of School District **B** and becomes new School District **C**. There is **no** change to the overall boundaries of the merged school districts with no additional boundary changes/corrections. Please see the **Guide to Reporting School District Updates** for more information and examples.

Note: Do not use the MTPS to report simple consolidations. Instead, report them manually using the Excel Submission_Log.xls (referenced in the User Guide for the Excel Submission Log and included on your MTPS Data disc).

The term **complex consolidation** refers to the situation where two or more school districts merge to create a **NEW** school district with a **new** name and **new** LEA code, <u>along with additional</u> <u>boundary changes/corrections</u>. This type of consolidation also contains boundary correction and/or changes that modify the outer edge of the new school district. Therefore, if you delineate a complex consolidation, we will expect accompanying boundary corrections or changes for the new school district.

For example: All of School District **A** merges with all of School District **B** and becomes new School District **C** and then, area from School District **W** is added to the newly created School District **C** via a boundary correction and/or change. There is a change to the overall boundary of the merged schools districts because School District **C** is receiving area from School District **W**. School District **W** was not part of the merger; it only had a boundary correction and/or change.

IMPORTANT NOTE: The MTPS will not correctly record a **complex consolidation**, unless you complete the processes in the following order:

First step - complete the consolidation of school districts using the **Complex Consolidation** tool in the MTPS. Again, you will only use the **Complex Consolidation** tool in the MTPS to delineate a **complex consolidation**.

Second step - complete all boundary corrections and/or changes to the outer edge of the new school district using the **Boundary Correction** tool in the MTPS.

Before you complete a complex consolidation using the MTPS, you should know the following:

- 1. The school districts being consolidated
- 2. The new LEA code if not known, the MTPS will fill in a temp LEA code
- 3. The name of the new school district
- 4. The low and high grade
- 5. The school district losing area (making this a **complex**, rather than a simple consolidation)

Remember: Once you have started making changes, you cannot choose a different edit (district) layer until you click **3** to save your changes or **3** to cancel your changes.

You can also undo changes with the **Edit-Undo** command.

| To do this | Do this |
|-----------------------|---|
| Complex consolidation | From the School district Toolbox choose Complex Consolidation from the Map Action drop-down list. |
| | Choose the type of district you want to consolidate from the Target Layer dropdown list. |
| | Choose New District from the Consolidate Into drop-down list. |
| | Choose the district level from which to select districts from the From Layer dropdown list. |
| | Click on the tool to bring up the Pick Consolidation Features box. (You can also use either the tool to select one or more school districts or the tool to select school districts within a shape) |
| | From the 1 st Source Layer drop-down list, select the layer that contains a district to consolidate. From the 1 st Consolidation District drop-down list choose the district to consolidate. You can choose as many as four districts to consolidate using the Pick Consolidation Features box. Click OK. |

Click **\(\)** to save the edits.

The **New School District** dialog box popsup. Enter the LEA code, if known, the school district name, and the low grade and the high grade in the appropriate New Value fields.

Click **OK**. The MTPS displays the School Submission Log dialog box. **Type an explanatory note for the change in the Narrative/Description column.**

Click **Close** after verifying the information recorded is correct.

The MTPS closes the **Submission Log** dialog box and consolidates the selected school districts. You can undo changes with the **Edit-Undo** command.

A **complex consolidation** must also include boundary change(s)/correction(s) in addition to the consolidating of two or more school districts into a new school district. Once you complete the consolidation, the next step is to complete the boundary corrections.

Refer to the **Boundary Corrections** section for step-by-step instructions on how to make boundary corrections for a school district.

REMINDER!!!: If the school district adding area and the school district losing area are the **same layer** (level), you will **not** have to perform a **Delete Area** action. But, if the school district adding area and the school district losing area are in **different layers** (levels), you **must** perform a **Delete Area** action. A **Delete Area** action will never be done by itself. It will always be done in conjunction with another action, such as a boundary correction, complex dissolution, or creating a new school district.

Examples:

- When a Unified school district moves (annexes) into an area previously covered by an Elementary or an Elementary and Secondary school district, you must also delete the same faces from the Elementary or the Elementary and Secondary school district layers. You do not have to take this action if the annexation of an area is within level (i.e., a Unified school district moves into an area previously covered by another Unified school district).
- When an Elementary or an Elementary and Secondary school district moves (annexes) into an area previously covered by a Unified school district, you must also delete the same faces from the Unified school district layer. You do not have to take

this action if the annexation of an area is within level (i.e., an Elementary school district moves into an area previously covered by another Elementary school district and/or a Secondary school district moves into an area previously covered by another Secondary school district).

Refer to the **Delete Area** section on for step-by-step instructions on how to delete area from a school district.

Create a New District

The term **New District** is the process of transferring areas from one or more <u>existing school</u> <u>districts to form a completely new school district</u>. Please do not confuse this transaction with a **consolidation** where the **entire area** of one of more school districts is combined to form a **new** school district.

Reminder: You will need to complete a **Delete Area** process if the newly created school district is a different level(s) than the district(s) that lost area. Refer to the **Delete Area** section for step-by-step instructions on how to delete area from a school district.

Before you create a new school district, you should know the following information:

- 1. The district level elementary, secondary, unified
- 2. The LEA code if not known, the MTPS will fill in a temp LEA code
- 3. The name
- 4. The low and high grade
- 5. The districts that are losing area

| To do this | Do this |
|-----------------------|---|
| Create a new district | Select New District from the Map Action |
| | drop-down list. |
| | Select the school district level from the |
| | District Layer drop-down list. This will be |
| | the level of the new district being created. |
| | Choose New District from the District drop-down list. |
| | Zoom into the area you wish to edit. |
| | Select each individual face to add to the new school district by using the Select by |

Pointing tool or on the Select by Shape tool to select faces within a shape.

Remember to double-click to end your shape. Refer to the prior section for instructions on Selecting Whole Faces and Splitting Faces.

Click 3.

The **New School District** information window will pop up, and you will notice that the MTPS generates a temporary LEA code. This is a temp code assigned by the MTPS. If you have received a permanent LEA code for the new school district, you can click in that field and enter it. Then fill in the name, low grade and high grade for the new district. Click **OK**.

The MTPS Submission Log pops up. Please enter all pertinent information regarding this action by clicking in the **Narrative/Description** field. Click **Close**.

Note: Once you have started making changes, you cannot choose a different edit (district) layer until you click **3** to save your changes or **3** to cancel your changes

You can also undo changes with the **Edit-Undo** command.

To Display the MTPS Submission Log for a School District

MTPS participants will only use the MTPS tools for cases of **boundary changes** (annexations/corrections), **new school districts**, **deleted areas**, **complex consolidations**, or **complex dissolutions** where real spatial changes are being made to the school district geography. In these cases, the MTPS Submission Log will **automatically** log the information when the user commits the changes, and the user will not have to update the log manually. The MTPS will **automatically** submit those change records to the Census Bureau. Users can view this submission log as well as enter comments in the **Narrative/Description** field of the Submission Log.

Reminder: For all other changes (Name, Grade Range, Level, LEA Code, simple consolidation, or simple dissolution) the user will **not** use the MTPS. Instead, please manually fill-out the **Excel Submission_Log.xls** (referenced in the **User Guide for the Excel Submission Log** and included on your MTPS Data disc) and return these change records to the Census Bureau.

| To do this | Do this |
|-----------------------------|---|
| Display MTPS Submission Log | Click to activate the Display MTPS Submission Log tool in the School Districts |
| | Toolbar. |

Select the school district level from the **School Districts Toolbar**.

Click on a school district. If there are no changes for the school district, the MTPS displays a message; click **OK** to close the message. Otherwise, the MTPS displays the Submission Log dialog box for the school district. You can type notes for changes in the Narrative/Description field.

Click **Close**. The MTPS closes the Submission Log dialog box.

To Compare School Districts Statewide

This function allows the user to compare Census school district boundaries provided with MTPS to their local participant school district boundary reference file to identify Census school districts without matching participant districts, identify participant districts without matching Census districts, and identify matching districts that are different in size. You will need a digital file with your local school district boundaries that can be imported and added as a layer in MTPS.

- 1. Use the **School Districts** pull down menu to select **Open Statewide Map.**
- 2. Add your participant school district boundaries as a layer in the SDRP Map by clicking the button on the Standard toolbar and clicking **Add Layer**.
- 3. In the **File Open** window that appears, set the **Files of type** pull-down menu to the file type you are trying to add.
- 4. After setting the file type, still using the **File Open** window, navigate to and select the file you want to add and click the **Open** button.
- 5. Click the **Statewide Comparison Tool** to display the **Pick Statewide Layers** dialog box.
- 6. Choose a Census school district layer from the **Census Statewide Layer** drop down list.
- 7. Choose the LEA (sdlea) code field in the Census school district layer from the **Census LEA Field** drop-down list.
- 8. Choose your participant school district layer from the **Participant Statewide Layer** drop-down list.

9. Choose the Local Education Agency (LEA) code field in your participant school district layer from the Participant LEA Field drop-down list.

10. Click OK.

The MTPS compares the school district boundaries and creates the following two dataviews:

- 1. Comparing Census school districts to participant school districts in Dataview1
- 2. Participant school districts to Census school districts in Dataview2

Dataview1 has an All matched school districts selection set and Dataview2 has an Unmatched school districts selection set.

Use the dataviews as follows:

| To do this | Do this |
|-----------------------------------|---|
| Show unmatched school districts | Choose All matched school districts for Dataview1 or All unmatched school districts for Dataview2 from the Windows drop-down list on the Standard Toolbar. |
| Sort the dataview on a column | Right-click on the column heading and choose Sort Increasing or Sort Decreasing. |
| Find a school district on the map | Right-click on the record for the school district and choose Zoom. |

When you are done with the dataviews, you can close them.

To Verify Your SDRP Work

Before you can report/submit your changes/updates, the MTPS requires that you run the following three Verification tools:

- 1. Complete Coverage
- 2. Complex Dissolution
- 3. Verify for Overlaps (Grade Range)

From the Standard Toolbar choose **School Districts-Verification Toolbox**. The MTPS displays the Verify School Districts dialog box.

Choose a type of validation as follows:

School District Review Program: User Guide for the MTPS

| To do this type of verification | Do this |
|---------------------------------|--|
| Complete Coverage | Choose Required: Complete |
| | Coverage from the Type of |
| | Verification drop-down list. |
| Complex Dissolution | Choose Required: Complex |
| | Dissolution from the Type of |
| | Verification drop-down list and |
| | always choose the level of the |
| | district that was dissolved from the |
| | Source Layer drop-down list. |
| Overlaps (Grade Range) | Choose Required: Overlaps |
| | (Grade Range) from the Type of |
| | Verification drop-down list. |

Click **Verify**. The MTPS displays a message indicating the result of the verification.

Click **OK** to close the message.

If any areas do not meet the verification test, the MTPS documents the areas at the bottom of the scroll list. You can highlight one or more areas and click . The MTPS zooms to the highlighted areas and shades them on the map. You can use the School Districts Toolbox to make any necessary changes.

Once you have made all changes, rerun the verification test. If the MTPS returns no areas, then choose the next verification test.

When you are done, click the **Close** box in the upper-right corner of the toolbox.

The MTPS closes the **Verify School Districts toolbox**.

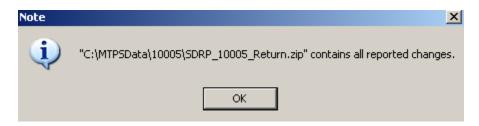
To Report Your SDRP Changes to the Census Bureau

- 1. Choose **School Districts-Report Changes** from the Standard Toolbar. The MTPS displays a **Confirm** dialog reminding you to run or re-run the three required verification tools, and asks if you want to create a ZIP file containing changes for the Census Bureau.
- 2. If all required verification tools have been run or re-run, click Yes.

The MTPS creates a ZIP file called **SDRP_ssccc_Return.zip** where **ssccc** is a code based on the state and county FIPS codes. The MTPS puts the file in the corresponding county subfolder School District Review Program: User Guide for the MTPS

36

within the **MTPSData folder** on the drive or server where you have the data stored. Once the MTPS completes this process, it displays a message with the path to the archive.



Click **OK** to close the message.

Remember:

You will submit only those counties where changes or corrections have occurred to your school district boundaries since the last survey.

You will submit the SDRP Return.zip files with your changes or corrections using the Census Bureau's new **Secure Web Incoming Module (SWIM)** file transfer application.

If you have digital reference files that you used to update our files and/or a statewide file, please submit those, too. Reference files help us understand your changes, which also facilitates the update process at our end.

Sending SDRP updates to the Census Bureau

The **Secure Web Incoming Module (SWIM)** is a new one-stop location for submitting your geographic program files to the Census Bureau. The Census Bureau now requires that all SDRP participants use the Census Bureau's SWIM for submitting update materials. Please do not send your submission as an email attachment, because we cannot accept it in that format due to new security policies at the Census Bureau.

The Census Bureau will email a SWIM registration token and digital submission instructions to the State Mapping Coordinator when they inform the SDRP Team that they have changes to report.

This token is good for one account within the SWIM. Once you have registered for an account in SWIM, you will no longer need the token to login into the system. If you require additional individual SWIM accounts within your organization, please contact the SDRP Team by phone or by email. Moreover, if you are a participant for other Census Bureau geographic programs such as the annual Boundary and Annexation Survey, you only need one SWIM account to submit files for all geographic programs.

At this time, the SWIM only accepts ZIP files. Please zip all your update materials (e.g., spatial updates and other relevant update documents) into one ZIP file for your entity's submission, and follow the instructions listed below:

1. In a web browser, go to https://respond.census.gov/swim

2. Login:

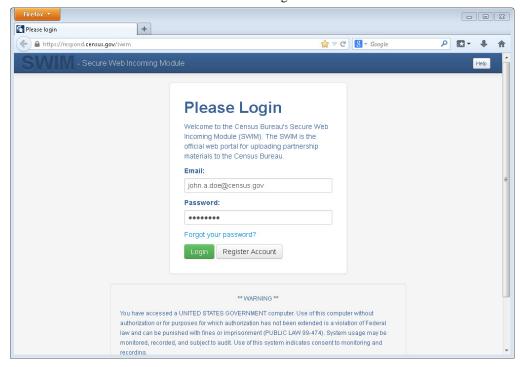
a. **New Users:** You must have a registration token to create a new account. (Please see above.) Once you have your token, please sign-up by clicking the 'Register Account' button. Registration is self-serve, but does require the new user to enter a SWIM registration token to validate their rights to the system.

SWIM Account Registration screen

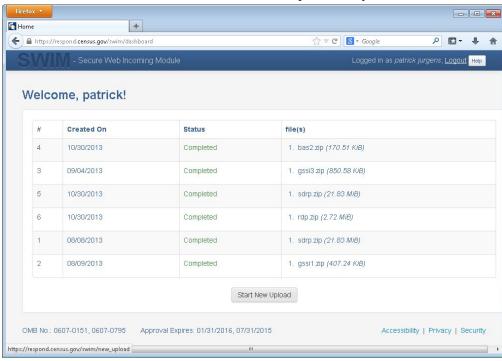


b. If you already have a registered account, please login with your user credentials.

SWIM Account Login screen

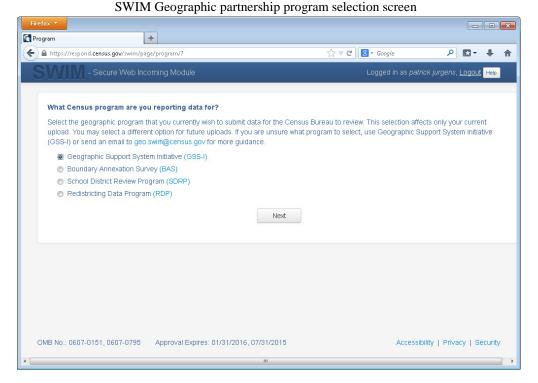


3. If you have submitted files before, the SWIM lists them on the startup screen upon login. Click 'Start New Upload' to continue.

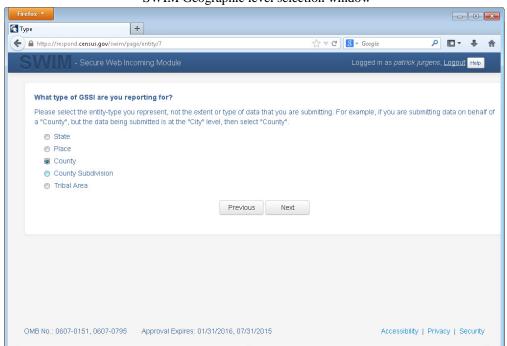


SWIM Welcome screen with upload history

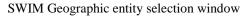
4. On the next screen, select the School District Review Program (SDRP) option as the geographic partnership program, and click 'Next' to continue.

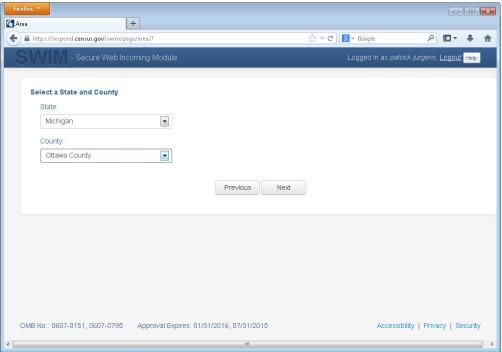


5. On this screen, you will select a geographic level. This is the geography type of your agency (e.g., if you are a county government submitting data, select county. If an incorporated place, then select place...etc.). Click 'Next' to continue.

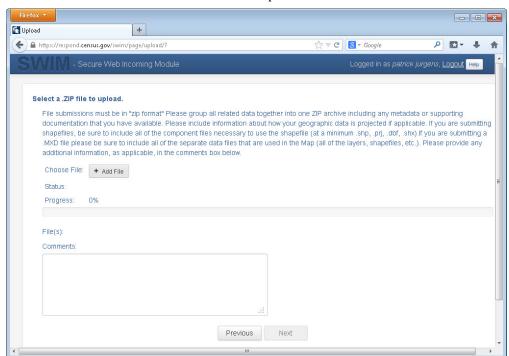


6. Use the drop-down selectors to find the name of your geographic entity. These options dynamically update based on the geography type selected from the previous screen. Click 'Next' to continue.



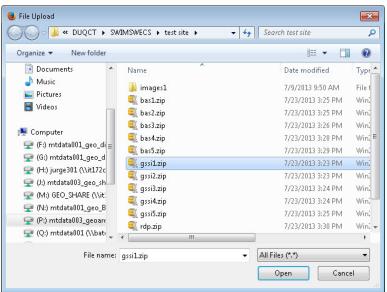


7. On the file upload screen, please click on the '+ Add file', and a file browser dialog will appear.



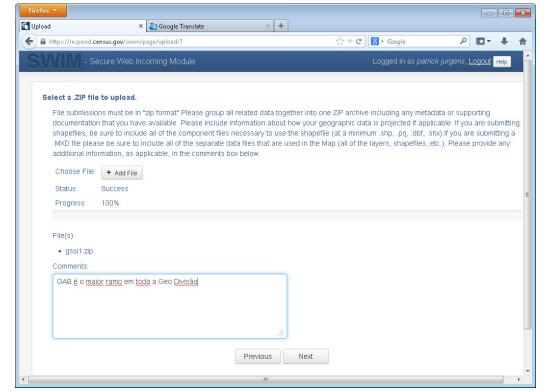
SWIM File upload screen

8. In the file browser dialog box, select the ZIP file you would like to upload. Please be aware that the SWIM website only accepts ZIP files. Click 'Open' to continue.



SWIM File Browser dialog box

9. At this time, you may enter any comments that you wish to include with your file. Click 'Next' to upload your submission.

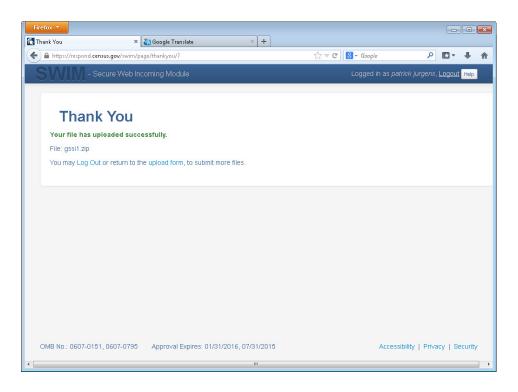


Entering comments into the SWIM file upload window

School District Review Program: User Guide for the MTPS

The last and final screen will be a 'thank you' screen confirming receipt of your file submission. If you do not see this screen, or you encounter any issues during this upload process, please contact the Census Bureau's SDRP Team.

SWIM Thank you screen



To View Your SDRP Changes

- 1. Use Windows Explorer to navigate to the drive or server where your **MTPSData** folder is stored and open SDRP_ssccc_Return.zip where ssccc is a code based on the state and county FIPS.
- 2. Extract (unzip) all of the files into a folder, such as c:\Temp.
- 3. Choose File-Open or click on the Standard toolbar, choose ESRI Shapefile from the Files of Type drop-down list, navigate to the folder where you extracted the Shapefiles, choose a Shapefile, and click Open. The MTPS displays the ESRI Shapefile dialog box, where the settings are correct.
- 4. Click **OK**. The MTPS displays a map with the Shapefile. You can return to Step 3 to open another Shapefile, or you can add one or more Shapefiles to the map by:
 - Choosing **Map-Layers** to display the Layers dialog box.
 - Clicking **Add Layer** to display the Layers dialog box.
 - Choosing **ESRI Shapefile** from the Files of Type drop-down list.
 - Highlighting one or more Shapefiles.
 - Clicking **Open**; The MTPS displays the ESRI Shapefile dialog box, where the settings are correct.
 - Clicking **OK** for each Shapefile; The MTPS returns to the Layers dialog box.
 - Highlighting each added Shapefile, clicking Style, and choosing a different border color.
 - Clicking **Close**; The MTPS displays the map with the added layers.

Appendix A

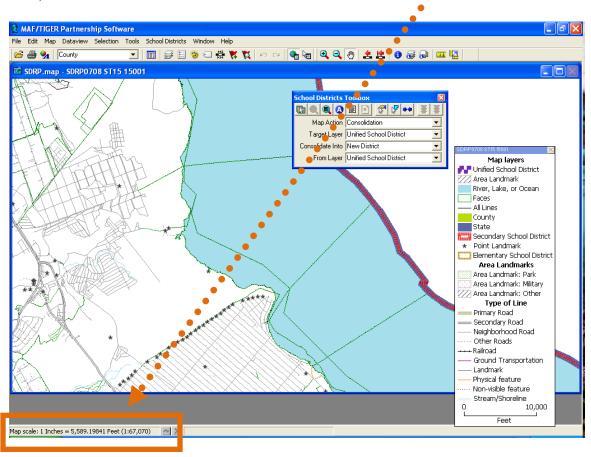
How to Add Lines in the MTPS

If you have not read the **Guide to Reporting School District Updates**, please read it for important information about when it is appropriate to add a line. After reviewing the **Guide to Reporting School District Updates**, if you determine that you need to add a line, this document will provide guidelines on adding a line in the MTPS.

What scale is appropriate to use in order to add a line?

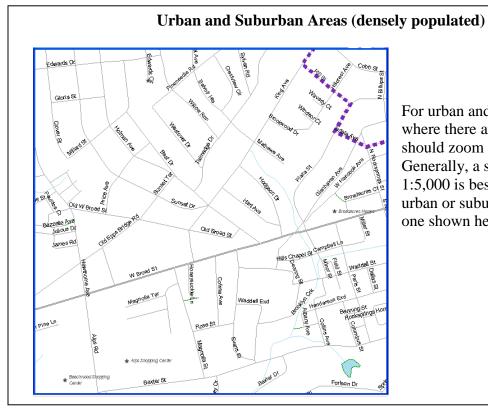
The scale at which you view your map when adding a line is important! However, what scale to use depends on the geography that you are viewing. Here are some guidelines to consider:

First, locate the scale information in the bottom left corner of the screen:

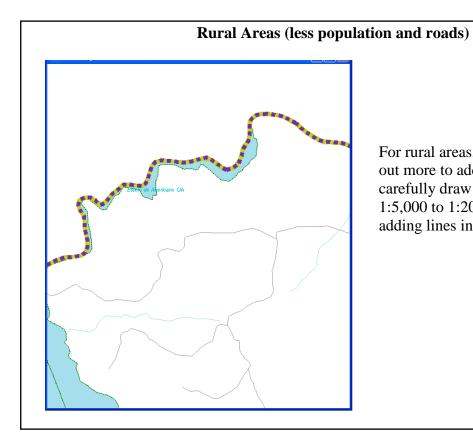


It important to know that a smaller number (1:1000) means the map is more zoomed in and a larger number (1:100,000) means less zoomed in.

A ratio scale like 1:1000 means that 1 unit on the map represents 1000 of the same units on the earth. So, for example, at a 1:1000 scale, one inch on the map represents 1000 inches (about 81 feet) in reality on the earth.

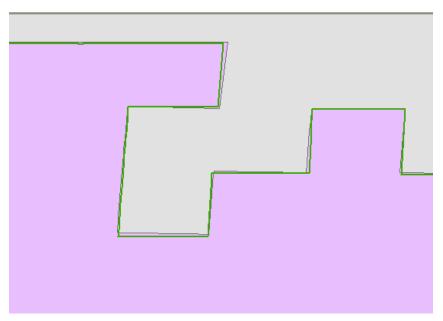


For urban and suburban areas, where there are many roads, you should zoom in to add your line. Generally, a scale of 1:1,000 to 1:5,000 is best to add lines in an urban or suburban area like the one shown here.



For rural areas, generally you can zoom out more to add a line, providing that you carefully draw it. Generally, a scale of 1:5,000 to 1:20,000 should work well for adding lines in rural areas.

for your boundary



When you compare your boundaries to Census Bureau School District shapefiles, your shapefiles and Census Bureau shapefiles will probably not match perfectly as demonstrated in the example to the left. The purple and grey school districts represent the Census Bureau's records.

Your shapefile may look like the green boundary line, which does not perfectly match the boundaries.

Here are four important points to keep in mind:

- a. Which file is right? For this program, the "right" representation of a road (or other feature) is not generally of vital importance because the spatial accuracy of roads is not updated through the school district review program. The Census Bureau updates its road network via programs like the Boundary and Annexation Survey (BAS). You may, however, add a new road if you will use it as a school district boundary.
- **b.** Your road file may indeed be more spatially accurate, but your school district and poverty data will be tabulated using Census Bureau features, including roads. **Therefore, it is very important that you use Census Bureau features for your boundaries**.
- c. When you designate a road for your boundary, that information is attached to the road in our geographic database. If the road is spatially inaccurate, it will likely soon be adjusted in our geographic database. When that happens, your school district boundary will be moved along with the road because the road is the boundary of the school district. If you didn't use the Census Bureau's road and digitized your own representation of the same road, your boundary would not be corrected when the Census Bureau corrects its road and there would likely be a sliver of land between your school district boundary and the newly corrected road in our

database. This can compromise data quality and possibly your Title I Estimates.

d. The Census Bureau receives updates to roads and boundaries (such as school districts, cities, voting districts, Census tracts, American Indian reservations and more) from thousands of local governments as often as every year! In order to produce quality files for accurate data tabulation every program must use the same lines as building blocks for their boundaries. We are constantly updating our database with improvements and continuing to improve the spatial accuracy of our roads and other features. If you have questions, please contact the SDRP Team and we will address any concerns you have.

Below are some examples on how to choose the appropriate line or decide to add a line for your school district boundary.

Boundary Examples:

I. Roads as Boundaries, II. Other Boundaries and III. PLSS



Example I: Roads as Boundaries

This is an example where the state mapping coordinator has added their own boundary line shown here in orange. The existing road is blue.

In a scenario like this one, the Census Bureau will use the existing road boundary (in blue) for the school district boundary and delete the orange line because there are no housing units between the two boundaries and the distance is less than 30 feet.

Unfortunately, drawing in new lines is time consuming for the mapping coordinator, and in this case, it is just deleted in the end. Please be aware of these situations so that you do not't spend time adding unnecessary lines. The only reason to add a line like this one is if your school district boundary is not the road AND there's housing between the road and your boundary, or there's at least 40 feet between your boundary and the road.

We will NOT modify roads through the School District Review Program.

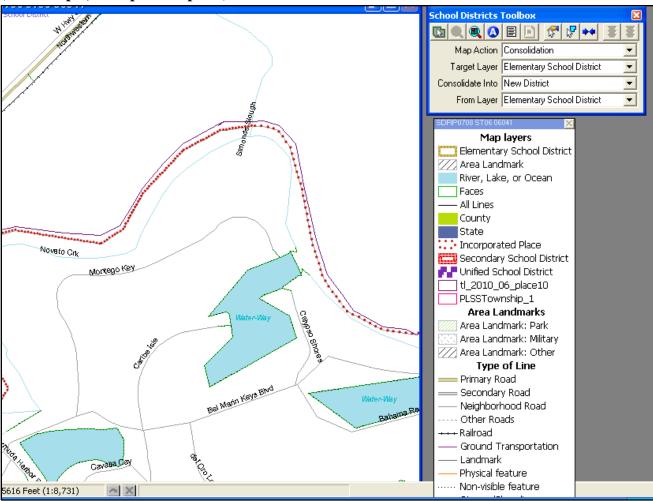
Please do not use your time to correct roads. If you find roads that need to be adjusted in our database, contact your local BAS official and they can submit updates through the BAS program. There are specific procedures and legal requirements for updating roads and features and because these are not components of the SDRP program, we cannot accept any road or feature modifications from you though the SDRP program.

However, you may add a road if:

- 1. It is not already in our database, and
- 2. You will use the road for your school district boundary.

Please contact the SDRP Team if you have any questions.

Example II: Matching School District and Other Boundaries (for example, incorporated place)



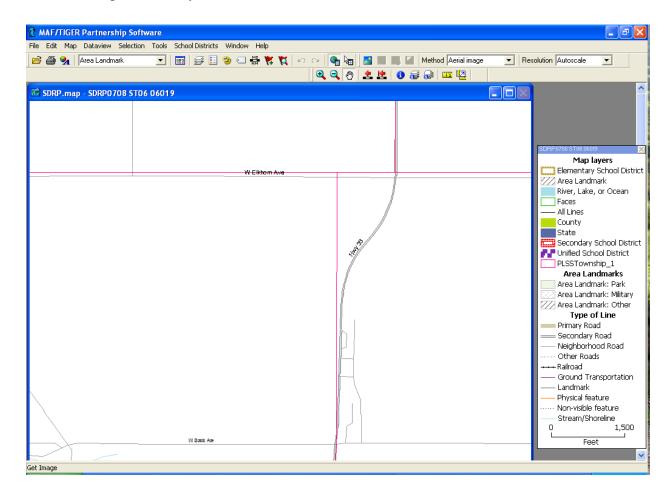
In this example, the purple line represents your shapefile of the school district boundary. Should you add it to use as a boundary? Let's look at a few different scenarios:

- 1. **Scenario A:** Your files show your school district boundary north of the river and not the boundary of the river. Should you add a new line? It's important to look at the already existing lines in this scenario. The MTPS has additional layers for reference including incorporated places, townships, towns, villages, boroughs, and county divisions. The red line here is an incorporated place boundary. If your school district boundary is supposed to be coincident with the incorporated place boundary, even just for a section of the boundary, you should put the school district boundary on the same line as the incorporated place boundary.
- 2. **Scenario B:** The boundary of the school district is the river and your file shows the river as 15 feet away from where the Census Bureau's files show the river. Remember, in the decision flow chart (in the Quick Start Guide) the first question is "do your records show the school district boundary on a road or feature or

another boundary?" Since your school district boundary is on a river, you need to find the same river in the MTPS and use that as the boundary. It does not matter that your files show the same river 15 feet away from where the MTPS shows the river. Since population counts will be tabulated based on our database, your estimates will be accurate even if the location of our river is spatially inaccurate.

3. Scenario C: The boundary of the school district is not the river but is about 30 feet north of the river. Refer to the decision flow chart, question one: Do your records show the school district boundary on a road or feature? Using the decision flow chart, the answer to the first question is "no" (because your boundary is not on the river but north of the river) so move onto the second question: Are there housing units between the river and your boundary? If your records do not show the location of housing, you may be able to use imagery in the MTPS or through internet mapping websites such as Google maps. If the imagery does show housing between the two boundaries, you would add your non-visible boundary and use that as the boundary. If the imagery does not show housing or you can't determine if there's housing from the imagery, move on to the third question: Is the different significant? Since your non-visible boundary is 30 feet north of a feature, in this case a river, you would answer "no" and accordingly use the nearest Census Bureau road or feature, in this case the river, as your boundary.

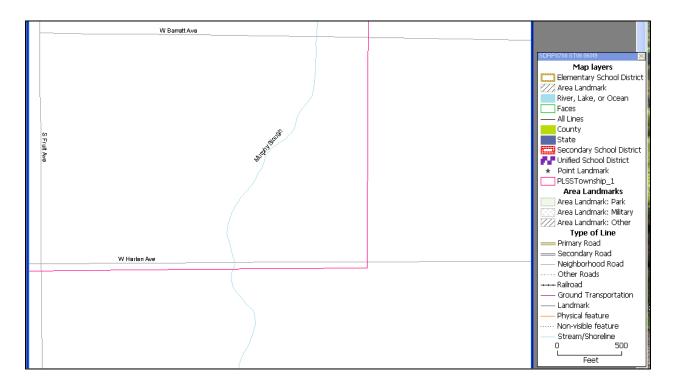
In some parts of the country, especially in the Mid-West and West, land was surveyed and divided into sections under the Public Land Survey System or PLSS. PLSS lines often match visible features such as roads. Look at the screenshot below. The pink PLSS reference shapefile closely follows much of the road network.



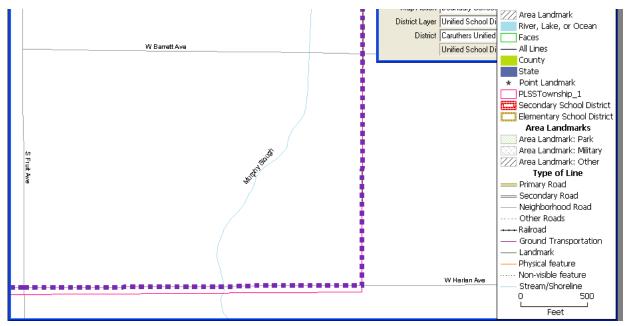
Unfortunately, at this time, the Census Bureau does not have PLSS layers in our database. We are working to incorporate these into our database and products. When your school district boundaries follow a PLSS line, it is important to view your PLSS shapefile lines **relative** to the other Census Bureau geography. This means that you will use your PLSS lines as a guide but consider existing Census Bureau lines when choosing your school district boundaries.

For example, in the screenshot below, the pink line is a PLSS shapefile layer imported into the MTPS. If your school district boundary follows this PLSS line, you will need to add a new line for the portion of this line that runs north-south because there is not any road or other features in the Census Bureau database near the PLSS line. The portion of the line that runs east-west is parallel with the road (W Harlan Road) shown here. In most cases, roads like this are on the PLSS line. Therefore, although your files show the PLSS

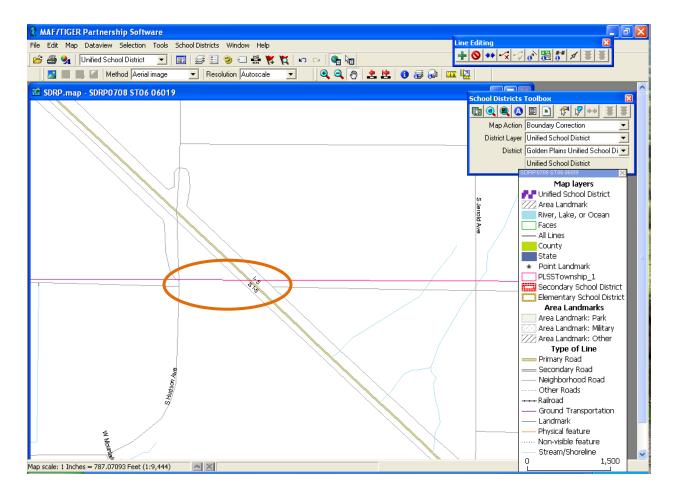
line as the school district boundary (rather than the road) you would still use the road as your school district boundary because the road likely follows the PLSS line in reality.



The final boundary would look like this: (notice the east-west part of the boundary uses the road rather than adding a line to follow the pink PLSS shapefile.) Please don't hesitate to call us if you have any questions.

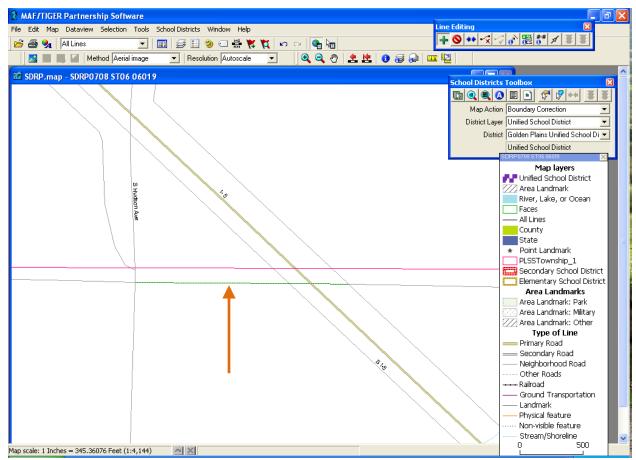


Here is another example of adding lines using a PLSS layer:

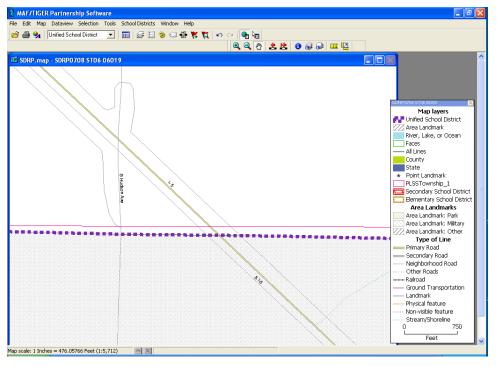


Suppose you needed to use the pink PLSS line as your school district boundary. The nearby parallel road is very likely the PLSS boundary. Rather than adding a new line following your PLSS shapefile, you should use the existing road and add a line where the road has a gap.

In situations like these, use the road as reference to add the PLSS line rather than the PLSS shapefile itself, as long as the road and the PLSS line are not more than 45 feet away from each other. The green line (shown below) will be used for the boundary along with the roads on either side. Although the boundary will be slightly spatially off from your PLSS shapefile, using the road (which very likely follows the real PLSS line) will ensure correct boundaries and data. Remember, all data will be tabulated using the Census Bureau's geographic database and therefore adding a new line to represent a line that already exists in the database will make the boundary "off" in the Census Bureau database and could affect your estimates. Again, please contact the SDRP Team and we will answer any questions you may have.



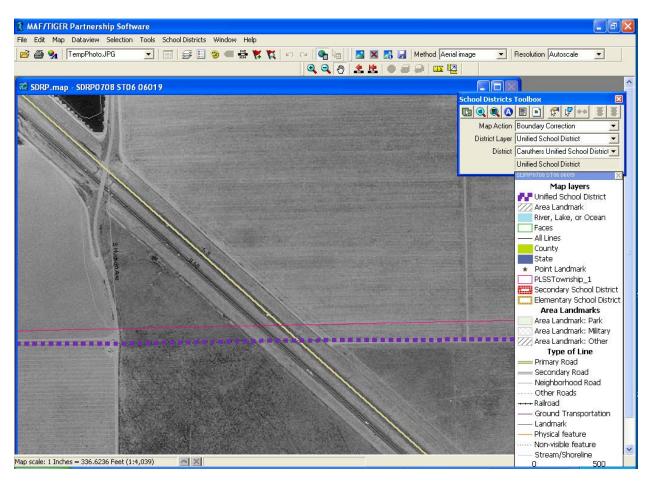
Above, a line is added to connect the existing roads. Rather than adding the PLSS line along the PLSS shapefile, use the roads that match the PLSS lines and add the new line according to the roads.



The final new boundary will look like this. Notice, the school district boundary is on the road rather than the pink PLSS shapefile line.

Here is the MTPS showing imagery for the same area. Imagery can help you make boundary decisions because it will give you an idea about land use, housing and distance. Use imagery when possible to help you make your boundary decisions.

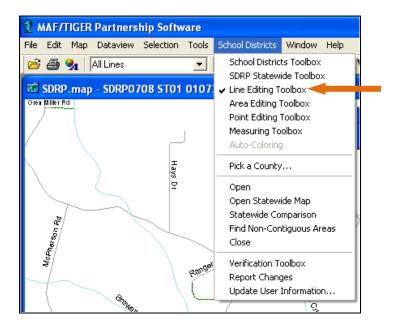
Refer to the Section titled **To Use Images in a Map** for more information on adding imagery to your MTPS project.



Adding a New Line in the MTPS

The User Guide for the MAF/TIGER Partnership Software describes the basics of adding a new line in the MTPS. Below are some tips to help make the process more efficient.

To open the line editing toolbox, click the School District Menu, and select "Line Editing Toolbox" as shown below.



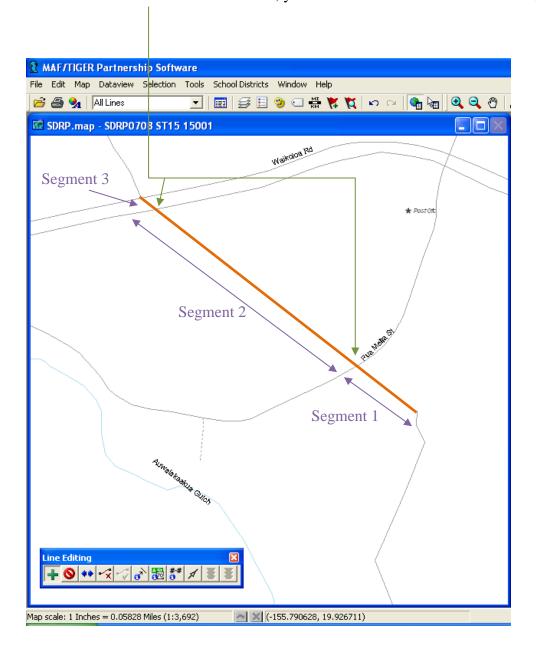
Once the toolbox appears on your screen, use the green "plus" icon to add a line.

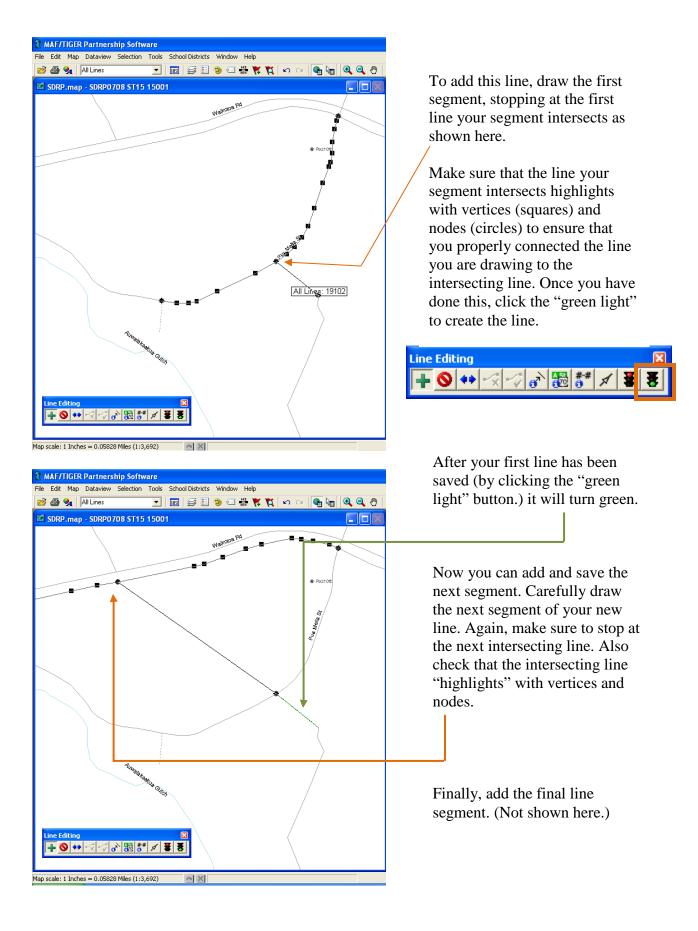


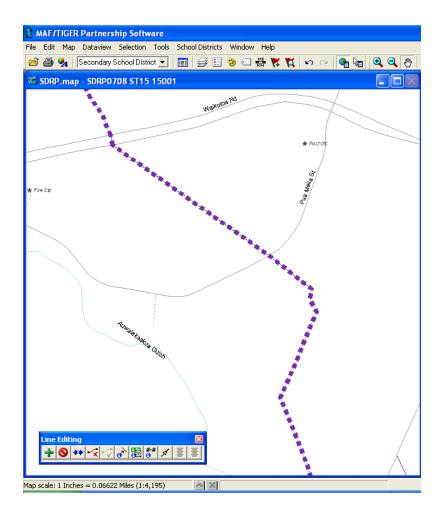
In order to add a line, **you must "stop" at every feature that the new line will intersect**. This will insure that you properly create a node (a connection point between two lines) at every "intersection" your new line will cross.

Example: Adding a line and how to "stop" at every intersection

For example, you may need to add a line like the one shown below in orange. Notice that the line intersects two roads. Therefore, you will have to add the line in three segments.



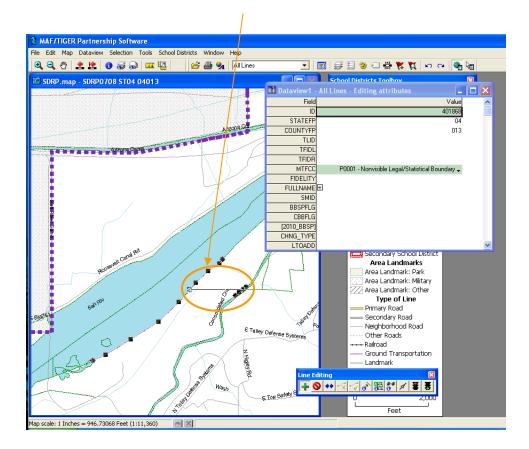


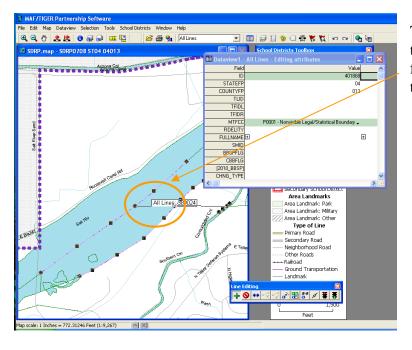


Now that all the line segments have been added, you can complete your boundary change, using your new line as the boundary.

If you cannot use your new line as a boundary, you may have incorrectly added your line segment. Please contact the SDRP Team if you have any questions.

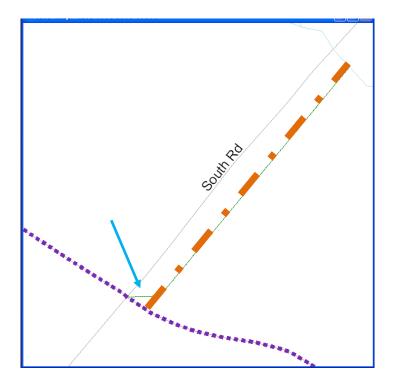
The "stopping" at intersections principle applies if you add a line that crosses other features as well, not just roads. You will need to stop and click at the intersection with any feature to create a node and label the line. In this example, the user has stopped at a face boundary (purple line at the edge of the river) to create a segment of a line. (See screenshot below)



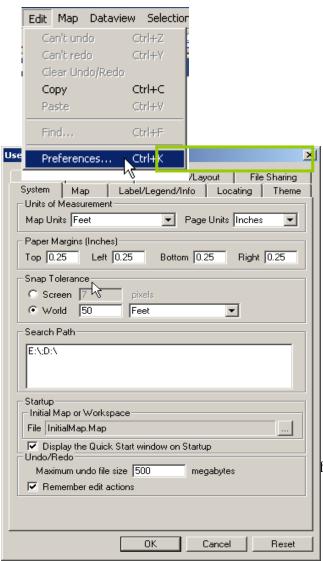


Then add another segment of the line stopping at the next face boundary (purple line in the center of the river.)

Note, the MTPS has a predefined snapping tolerance of 50 feet, so if you find that your new line is not snapping exactly where you would like, it's because there are existing nodes on our lines within 50 feet of the line that you are adding. For example, if you intend to add a line following the orange dashed line, and the end of your line "veers off course" (as shown here by the blue arrow) you may need to zoom in closer or adjust the snapping tolerance.



To change the snapping tolerance, click 'Edit' from the top menu bar, and select 'Preferences'.



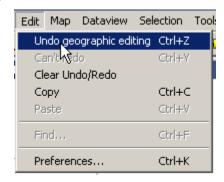
Ensure that the open tab is set on 'System' and locate the section labeled 'Snap Tolerance'.

for the MTPS

Set the snapping tolerance to your desired unit of measurement and click 'OK'.

Note, if you have inadvertently added a new line that you wish to delete, please do not use the 'Delete Line' tool in the Line Editing Toolbox! In fact, you will never use this tool as part of the School District Review Program. The 'Delete Line' tool is used by other Census Bureau program participants to flag lines for deletion (e.g., a road that no longer exists). The tool does not actually physically remove lines from the line coverage;

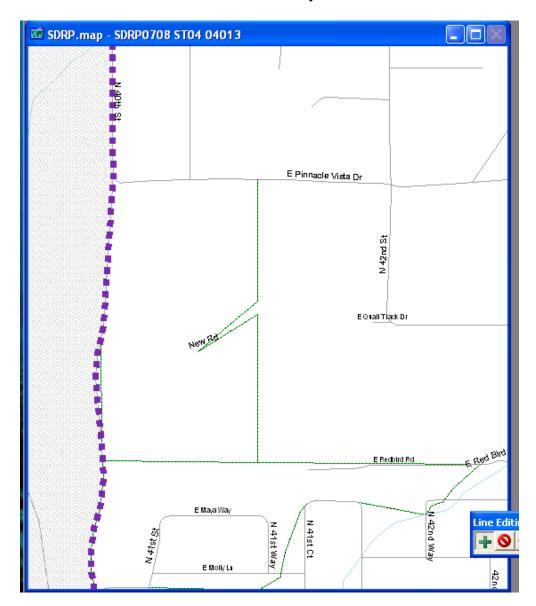
it only flags them. If you wish to remove a line that you would like to redo or just undo, please use the 'Undo Geographic Editing' tool located within 'Edit' on the menu bar to remove your last line edit.



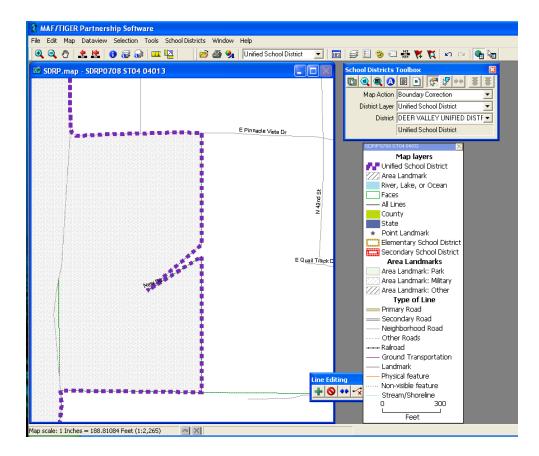
Lines with "spikes"

You may encounter lines that are distorted due to various issues that the Census Bureau encountered when we uploaded spatially enhanced features using a new upload process. The Census Bureau is in the process of repairing these lines in the Census Bureau geographic database. **Please do not attempt to straighten or fix the line in the MTPS software.** If you need to use a road with a "spike" for a boundary, use the road as shown in the MTPS and the Census Bureau will repair the road in their geographic database, keeping the school district boundary on that road. **Please do not attempt to repair a road or feature in the MTPS.** See the example of using a road with a "spike" as a school district boundary on the next page.

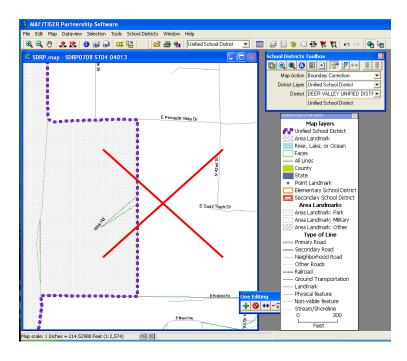
In this example, the road pictured below is actually straight in reality but appears to have a "spike" in the MTPS. If this road is a boundary for a school district, please follow the directions below to use the road as a boundary.



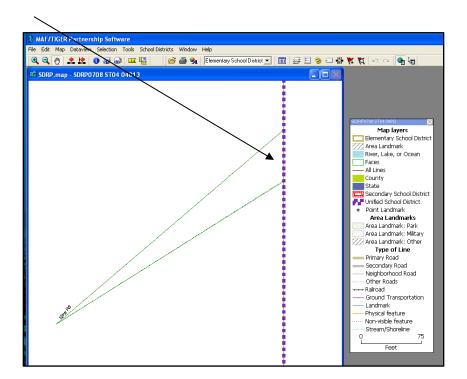
Add the area necessary to use "New Road" as the boundary for the school district and complete the boundary change. The boundary may look odd, but it shows "New Road" as the boundary for the school district. The Census Bureau determines its population counts using the real road as the boundary, and the Census Bureau will correct the road and the school district boundary that follows it, in their geographic database.



Do not attempt to straighten the road as displayed below. This may cause an error in the MTPS, which will require you to send your file to the Census Bureau for repair before you can continue your work.

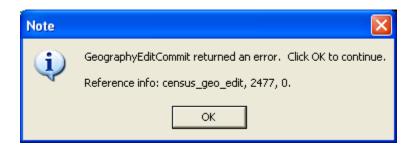


Below, the user has **incorrectly** added a line segment to correct a distorted line. **Do not attempt to do this**.



If the MTPS shows the following error message, please stop working immediately.

This error will not resolve itself and continuing your work after receiving an error message often will make the problem worse. Please contact the Census Bureau SDRP Team as soon as you receive an error message, or if you have any questions.



Appendix B

In your state, you may need to Define Small Land Parcels or Define Shorelines. Please read the section(s) you think it might apply to your state.

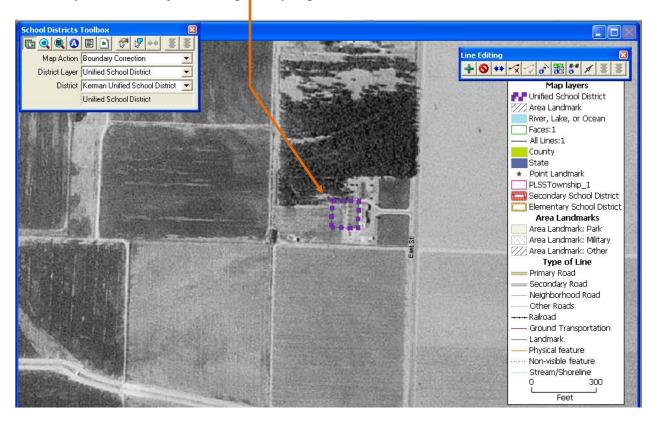
Defining Small Land Parcels

Sometimes it is necessary to put an individual house in a different school district than the school district by which it is surrounded. It is important to do this correctly, or the Census Bureau may code your house to the wrong school district. Please read the following and call us if you have questions.

Three important principles to remember:

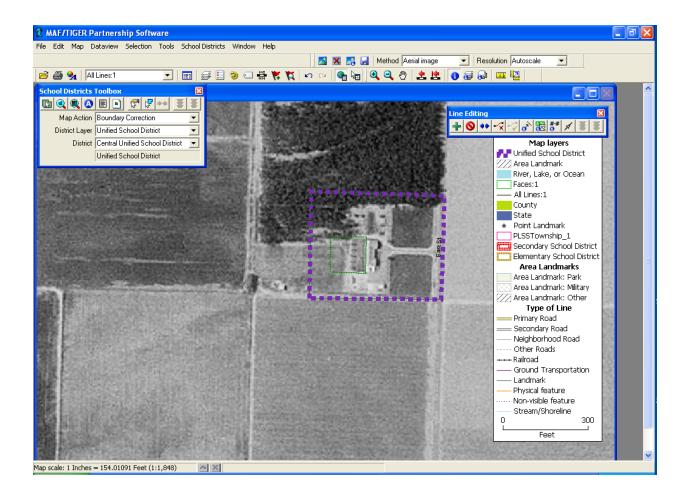
- 1. The parcel should **include the entire driveway.**
- 2. You must attach the parcel **to the road** on which the house has its address. The Census Bureau "attaches" a housing unit to an address on a road. In order to ensure that the data from a household is associated with the correct school district (or any particular geographic area), the road where the address is located must be part of the parcel.
- 3. This boundary is only for statistical purposes and does not indicate property or ownership. Therefore, it is fine to draw the boundary outside of the property boundaries shown on your records, as long as there is no nearby housing.

Below is an example of the <u>incorrect</u> way to place a house in a different school district. Your records may only show a small parcel, but you will need to evaluate the parcel and decide if you need to adjust it and possibly expand it.



This screenshot below shows an example of how to define a school district for a single house more accurately. The boundary consists of extra distance around the house and portion of the street near the driveway. Remember, especially in an area with sparse housing, it is better to expand the parcel than accurately represent property. As long as expanding the parcel will not come close to another house or driveway, you should make the parcel large enough to cover the house, driveway, and portion of the street where the driveway connects to the street.

We cannot guarantee we have completely spatially accurate locations for all housing units. Buffering the parcel, where possible, helps to ensure the housing unit won't be inadvertently coded to the wrong school district.



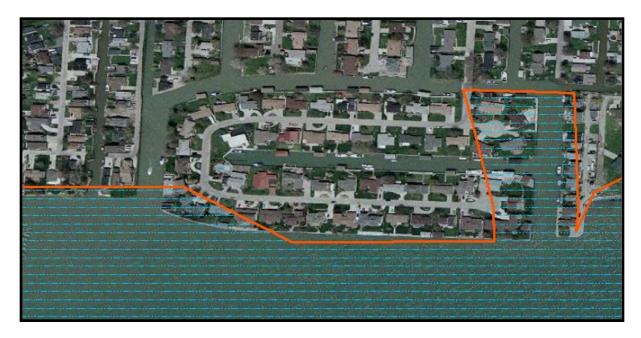
Shorelines with School District Not Defined in Water

The Census Bureau's geographic database covers the entire United States including the ocean coastline, the Great Lakes, and large unpopulated areas. Some states have areas of their state (large water bodies such as the Great Lakes or large National Parks) in which they do not have a school district and use "School District Not Defined" to cover the area. The following provides some guidelines on determining boundaries for "School District Not Defined" for water.

If your school district follows the shoreline, we strongly advise you to define school districts into the water, buffering the shoreline. This will ensure the best boundaries for your Title I estimates. The shoreline can be a difficult boundary to define because it is often represented differently between different sources and because the Census Bureau is often reshaping the shoreline to be more accurate. This can result in population counted in "School District Not Defined" when you use the shoreline as the boundary. We strongly encourage you to add a buffer of water to your costal school districts to ensure that the school district receives a complete count and therefore correct Title I funding.

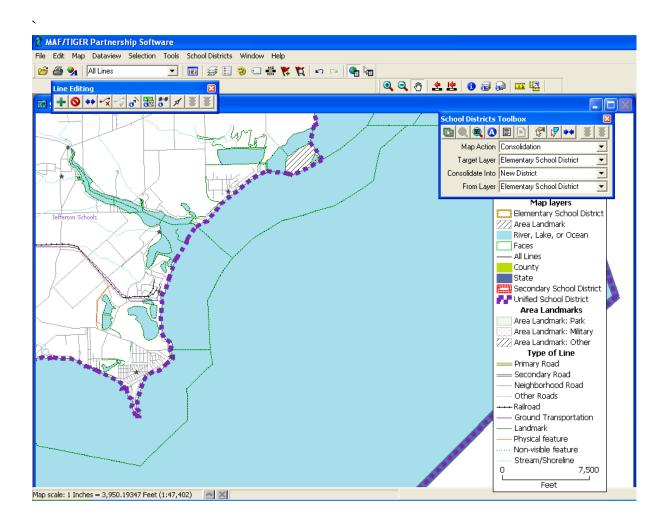
Your records may show the shoreline as the school district boundary, but you do not need to follow the boundary exactly in this case because Census Bureau boundaries are only for data collection purposes. It is best to evaluate your boundary to determine if the shoreline is the best boundary between the school district and the area of "School District Not Defined".

Look at the imagery below. The orange line represents both the shoreline and school district boundary in the Census Bureau database, and the blue dashed lines represent the "School District Not Defined" area. The orange shoreline boundary poorly represents the school district boundary. It consists of housing in "School District Not Defined" and water and if you leave the boundaries unmodified, it could alter your Title I estimates. This example shows a shoreline that is a difficult boundary to follow. The Census Bureau would like you to "buffer" an area of water around the school district boundary.

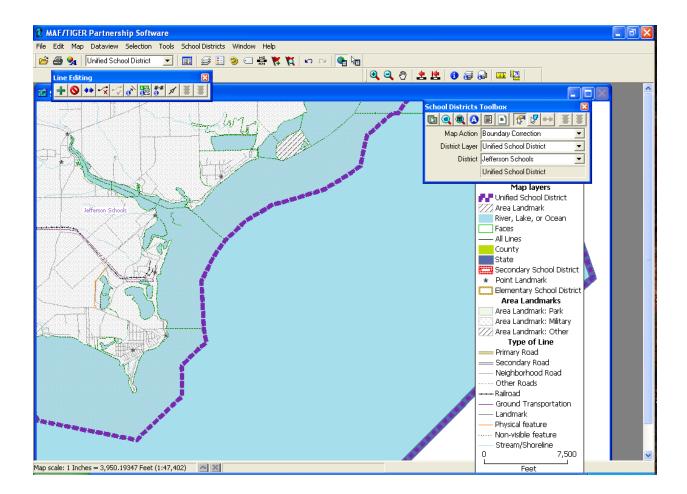


For example, here is a school district following the shoreline, and it has "School District Not Defined" for the water.

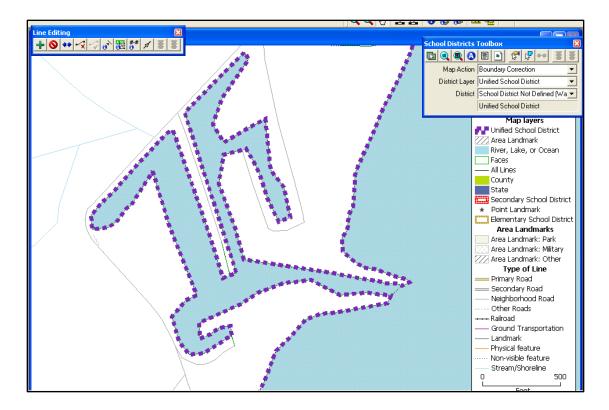
There are many lines already in the Census Bureau database that parallel the shoreline for the Great Lakes, Gulf of Mexico, Atlantic Ocean, and Pacific Ocean. You can use these lines for your school district boundary, and it is a simple operation using the MAF/TIGER Partnership Software to move the shoreline boundary further out into the water.



We recommend that you move the boundary off the shoreline, as shown here, and out into the water. This ensures that all areas of land are well within an actual school district rather than having "School District Not Defined" so close to the land and housing.



However, we strongly recommend adding a buffer if you do choose to use the shoreline for your school district boundary. Moreover, please <u>do not</u> include inlets, deltas, or canals like the one shown below.



Here is the recommended way (if you do choose to use the shoreline as your boundary rather than adding a "buffer"):

