MAPublisher® 8

for Adobe® Illustrator®

When Map Quality Matters®

MAP LabelPro™ Tutorial

Avenza® MAPublisher® 8 MAP LabelPro™ Tutorial

Welcome

Avenza welcomes you to mapmaking in the 21st century!

Combined with Adobe Illustrator, MAPublisher has revolutionized the art of mapmaking by allowing spatial data files to be used to create maps inside a vector graphics program. MAPublisher allows all your cartographic tasks to be performed where they should be done; in a powerful graphics environment.

MAPublisher LabelPro™ revolutionizes the way users can label map data, including using symbols as labels, conflict resolution, and highly configurable rule-based labelling options. The MAP LabelPro engine uses map data attributes for labelling with styles, rules and controls configured through an intuitive, easy-to-use Graphical User Interface.

This tutorial assumes that the user is familiar with Adobe Illustrator CS3 or CS4, and has at least a basic understanding of MAPublisher functions. This tutorial should be used in conjunction with the MAPublisher 8 User Guide , MAPublisher 8 Tutorial Guide and Quick Start Guide for an understanding of all the other MAPublisher tools.

By following this tutorial, you will learn how to setup and use the MAP LabelPro labelling engine to label your map created in MAPublisher. Working on a provided map, users learn to create rules and styles for labelling in an automated and efficient way.

Not all MAPublisher tools are explained in this document. Exercises related to each individual tool are covered in the full MAPublisher 8 Tutorial Guide.

MAP LabelPro Tutorial Data

This tutorial will use Adobe Illustrator files and MAP LabelPro rules supplied on your MAPublisher 8 CD or in the electronic download. Alternatively, if you have installed the software, you can find the MAP LabelPro Tutorial data in the following location on your hard drive:

Windows XP
C:\Documents and Settings\All Users\Shared Documents\Avenza\MAPublisher 8\MAP LabelPro Tutorial & Data\Data

Windows Vista
C:\Users\Public\Public Documents\Avenza\MAPublisher 8\MAP LabelPro Tutorial & Data\Data

NOTE: This data may be accessed through shortcuts available in the Windows start menu

Mac OS X
/Applications/Avenza/MAPublisher 8/MAPublisher Tutorials/MAP LabelPro Tutorial & Data/Data

You are encouraged to experiment with your own data to gain additional experience with MAPublisher tools and functions.

Tutorial data courtesy of *City and County of San Francisco (San Francisco Enterprise GIS program SFGIS)*.

Contents

Welcome

Contents

0 Preliminaries

0.1 PURPOSE

The purpose of this exercise is to use MAP LabelPro to create labels for a simple map of downtown San Francisco, California, USA. For this exercise, Avenza has prepared the necessary map file created with MAPublisher 8 and Adobe Illustrator, based on City and County of San Francisco GIS data (San Francisco Enterprise GIS program SFGIS). The map contains all the different type of features (point, line and area) for labelling and/or obstacle purpose.

In this exercise, you will start by preparing the file and examining the data to familiarize yourself with the prerequisites to using MAP LabelPro. Then, the labelling will be done in two steps: a main labelling session (labelling public schools, streets, interstates, highways and land areas in one run) and a secondary session (labelling parks only, using the other labels as obstacles). Although the presented settings are valid only for the map data they are based on, the principles are applicable for your own designs.

0.2 KNOW YOUR DATA

The MAP LabelPro Tutorial data folder contains a ready-to-use Adobe Illustrator template file containing a map of downtown San Francisco (*MAPLabelPro_Tutorial.ait*). Here is a description of the layers present in the file and how they will be used during the labelling process.

0.2.1 San Francisco map description

Layer name	Type	Description	Labelling Attribute (label source layers)	Obstacle? session1	session2
Text layers					
LAND_labels	Text	Land labels		-	No
SCHOOL_labels	Text	School labels	-	-	Yes
STREET_labels	Text	Street labels	-	-	Yes
PARK_labels	Text	Park labels	-	-	-
HIGHWAY_INTERSTATE_labels	Text	Labels for highways and interstates	-	-	Yes
SUPPRESSED_labels	Text	Labels that couldn't be placed based on the specified rules.	-	-	No
MAP_TITLE	Text	Map title (San Francisco)	-	Yes	No
MAP Layers					
Public_Schools_point	Point	Public school locations	SCHOOL_NAME	Yes	Yes
Post_Offices_point	Point	Post office locations	-	Yes	Yes
Highways_line	Line	Highway roads	HIGHWAY_NUMBER	Yes	Yes
Interstates_line	Line	Interstate roads	INTERSTATE_NUMBER	Yes	Yes
Ramp_line	Line	Ramps to highways	-	No	No
Streets_line	Line	San Francisco street network	STREETNAME	No	No
Land_area	Area	Land areas	AREA_NAME	No	No
Parks_area	Area	Park areas	PARK_NAME	Yes	No

Layer name	Type	Description	Labelling Attribute (label source layers)	Obstacle? session1 | session2
Other Layers				
Scale_Bar	Legend	Scale bar	-	-
background		Blue background to represent the sea	-	-

All MAP Layers were imported from City and County of San Francisco GIS data (San Francisco Enterprise GIS program SFGIS) in ESRI shapefile format and cropped to the area of interest. The map design (symbols and line styles) was created by Avenza.

0.2.2 Styles and Rules

MAPublisher has been installed with predefined styles and rules to use for the MAP LabelPro settings in this tutorial. These configuration files are saved to one of three folders depending on the data type layer, **A** Area, **L** Line or **P** Point, they are associated with.

Layer Name	Type	Style \LabelPro\Styles	Rule \LabelPro\Rules
Public_Schools_point	*Points*	School_Label_Style	School_Label_Rule
Interstates_line	*Lines*	Interstate_Label_Style	Interstate_Label_Rule
Highways_line	*Lines*	Highway_Label_Style	Highway_Label_Rule
Streets_line	*Lines*	Street_Label Style	Street_Label Rule
Parks_area	*Areas*	-	-
Land_area	*Areas*	Land_Label_Style	Land_Label_Rule

The style and rules for the *Parks_area* layer will be created during the second labelling session of this exercise.

NOTE: The default location of the Rules and Styles folders is:

Windows XP: C:\Documents and Settings\All Users\Application Data\Avenza\MAPublisher 8\LabelPro\Rules
Windows Vista: C:\ProgramData\Avenza\MAPublisher 8\LabelPro\Rules
Mac OS X: Applications/Avenza/MAPublisher 8/MAPublisher Plug-In/LabelPro/Rules

> The MAP LabelPro tutorial data folder also contains a backup for these rules and styles

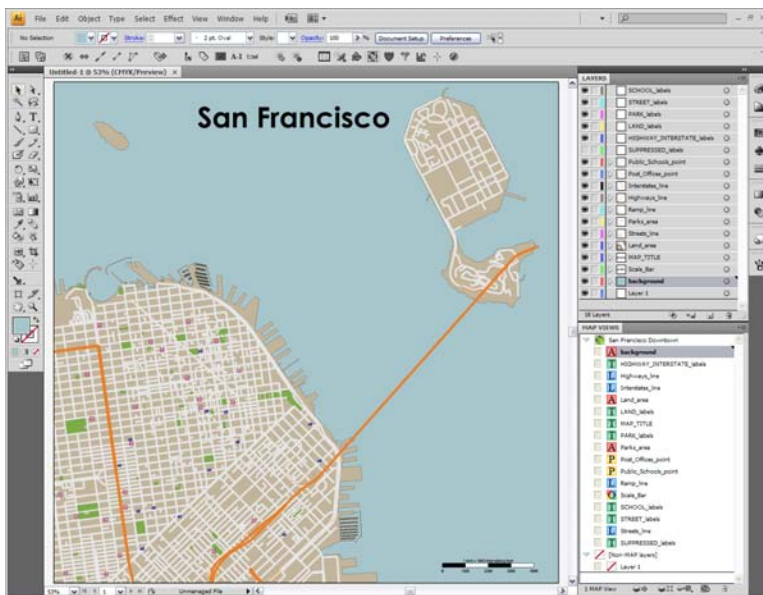## 0.2.3 Important note for MAPublisher LabelPro evaluation users

The evaluation version of MAPublisher LabelPro scrambles the text of placed labels but preserves the case, spacing and punctuation, so that the results give a sense of how actual labels would be placed. Therefore, evaluation users will experience a different result with the MAP LabelPro settings of this tutorial than the licensed users. Throughout this document, both results will be shown and differences explained.

NOTE: In evaluation mode, the scrambling process noticeably slows the speed of labelling.

1 Getting Started

1.1 OPEN TUTORIAL DOCUMENT

1. In the Adobe Illustrator main menu, click **File> Open** and select the template file **MAPLabelPro_Tutorial.ait** located in
    MAPublisher 8\MAPLabelPro Tutorial&Data\Data.

An artboard containing a map of San Francisco opens. All the data information to be used for labelling is present, except for the text labels. Please see the table in the Preliminaries chapter for the description of the layers.

2. Because the file was opened from a template, a new untitled document was created. Choose from the Adobe Illustrator main menu *File > Save As* to save the file as *SanFrancisco.ai*.

NOTE: Customize the Adobe Illustrator workspace to make it easier to access panels. It may look different than the image above. Read *Customizing the workspace* in the Adobe Illustrator help guide for more information. Review also MAPublisher Preferences in the MAPublisher User Guide.

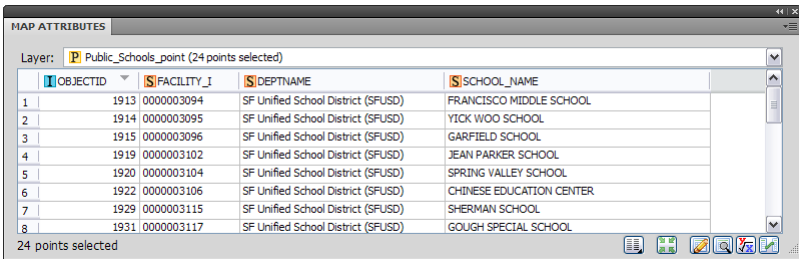## 1.2 EXAMINE MAP ATTRIBUTES AVAILABLE FOR LABELLING

For each MAP Layer to be labelled, MAP LabelPro extracts the label data from its attribute table. Therefore, it is good practice and often required to examine and eventually edit the attribute information in the MAP Attributes panel. Edits can include: creating a new column to enter attribute values, joining tables to import additional attribute information from an external file, correcting spelling, changing the case of text and more.

For this exercise, all attributes are ready to use for labelling. Follow the steps here to examine them and familiarize yourself with the data.

NOTE: For more information on the MAP Attributes panel, please refer to the MAPublisher 8 User Guide, chapter 5. For more exercises using this tool, please go through the MAPublisher Quick Start Guide and MAPublisher Tutorial Guide.
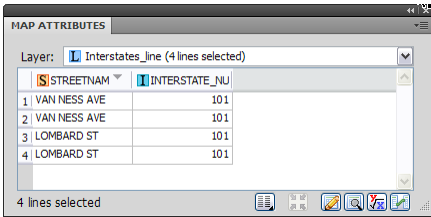
1. In the Adobe Illustrator **Layers panel**, click the target button ⊙ next to the *Public_Schools_point* layer to select all artwork on the layer.
2. Open the **MAP Attributes** panel (from the Adobe Illustrator main menu, choose *Window > MAPublisher> MAP Attributes* or click the **Map Attributes** button on the MAPublisher toolbar. 🔳).

The *Public_Schools_point* layer contains four visible attribute columns: OBJECTID, FACILITY_I, DEPTNAME and SCHOOL_NAME. The SCHOOL_NAME attribute column will be used for labelling the school points.

3. Select all artwork on the *Interstates_Line* layer and view the attributes in the MAP Attributes panel.

The INTERSTATE_NUMBER attribute column will be used for labelling these roads.

NOTE: Notice that the INTERSTATE_NUMBER attribute is of type integer 🅸. All types of attributes may be used for labelling with MAP LabelPro.

4. Select all on the *Highways_line* layer and view the attributes in the MAP Attributes panel. HIGHWAY_NUMBER will be used for labelling.
5. Select all on the *Streets_line* layer and view the attributes in the MAP Attributes panel. STREETNAME will be used for labelling.
6. Select all on the *Parks_area* layer and view the attributes in the MAP Attributes panel. PARK_NAME will be used for labelling.
7. Select all on the *Land_area* layer and view the attributes in the MAP Attributes panel. AREA_NAME will be used for labelling.
8. The MAP Attributes table may be closed for the rest of the exercise.

Knowing this information, we are ready to use the MAP LabelPro function to generate map labels for the San Francisco downtown map.
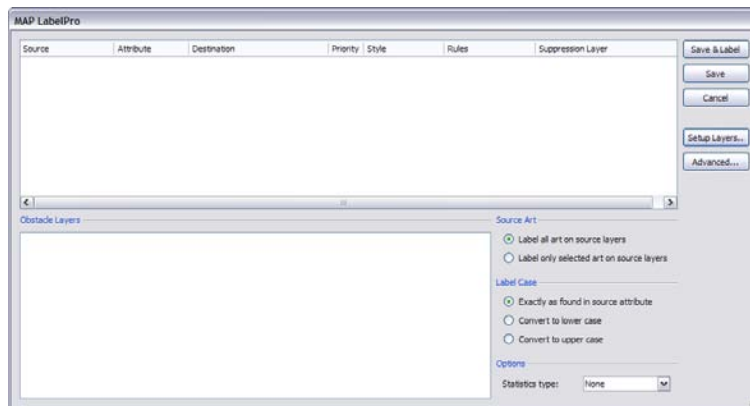
2 Main Labelling Session

In this first main labelling session, multiple layers will be labelled in a single run of the MAP LabelPro function. The objectives are to:

- Add labels for school as a first priority (source layer *Public_Schools_point*).
- Label the interstate roads with interstate shield symbols containing the interstate number (source layer *Interstates_line*).
- Label the highway roads with highway shield symbols containing the highway number (source layer *Highways_line*).
- Add street names (source layer *Streets_line*).
- Add names for land areas, written in the sea to make the map more readable (source layer *Land_area*).
- Make sure that the school and road names do not overlap with the post office and school symbols and park area, and do not cross highways and interstates line (obstacle layers: *Post_Offices_point*, *Public_Schools_point*, *Parks_area*, *Interstates_line* and *Highways_line*).

To start the MAP LabelPro Editor, click the MAP LabelPro button on the MAPublisher Toolbar or choose the menu *Object > Filters > MAP LabelPro > MAP LabelPro...* (Adobe Illustrator CS4) or *Filter > MAP LabelPro > MAP LabelPro...* (Adobe Illustrator CS3).

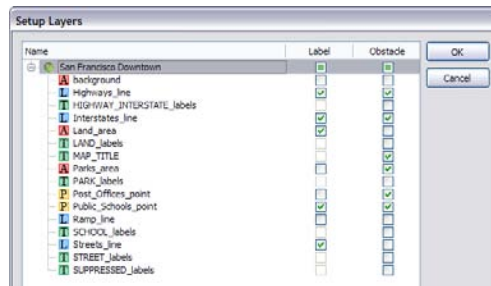**MAP LabelPro**

The MAP LabelPro dialog box opens.

The workflow steps are to first setup the layers to be used as sources for labelling and/or as an obstacle, to specify the labelling extents, and finally label destination layers, styles and rules will be set.

NOTE: All layers have to be configured before labelling with MAP LabelPro (Save & Label button). If the dialog box is closed before all configurations are done, make sure to click the *Save* button to save the configuration. If labelling has been executed and an Undo action is used afterwards, the configurations in MAP LabelPro will revert to the configuration before the labelling was executed. To ensure that your configuration is saved, click the *Save* button.
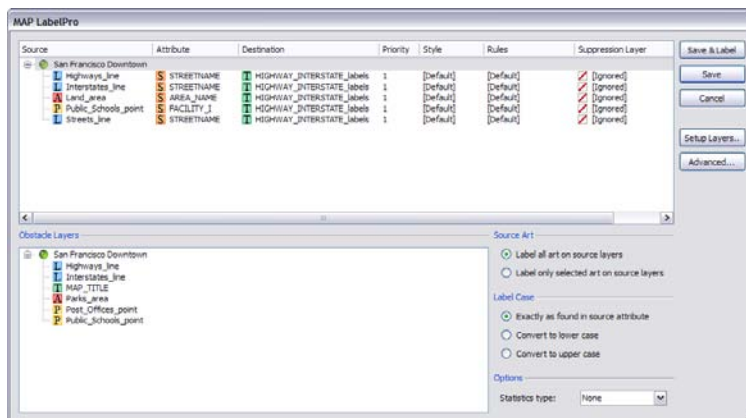
2.1 LAYERS AND OBSTACLES SETUP

1. In the **MAP LabelPro Editor**, click the **Setup Layers** button to select the source and obstacle layers.
2. In the **Setup Layers** dialog box, click the **Label** check box of the following layers to enable them as source layers:
   - *Highways_line*
   - *Interstates_line*
   - *Land_area*
   - *Public_Schools_point*
   - *Streets_line*
3. Then, click the **Obstacle** check box of the following layers to enable them as obstacle layers:
   - *Highways_line*
   - *Interstates_line*
   - *MAP_TITLE*
   - *Parks_area*
   - *Post_Offices_point*
   - *Public_Schools_point*

4. Make sure that the settings match the image above and click **OK**.

The MAP LabelPro dialog box gets updated according to the layers settings. Selected layers for labelling are added to the **Source** list and selected layers for obstacles are added in the **Obstacle layers** list.
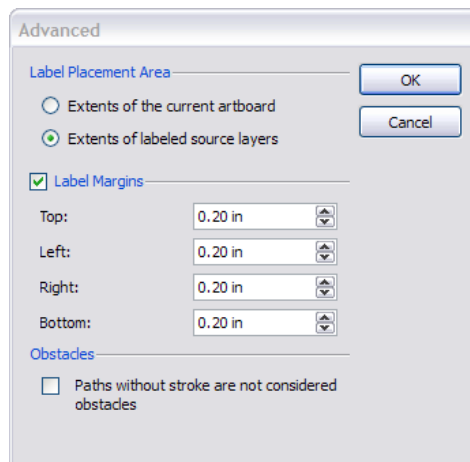
2.2 LABELLING EXTENTS SETUP

The configuration described in this exercise will limit the creation of labels to the extent of the selected source layers for labelling, with a margin of 0.2 inches on each side.

1. Click the **Advanced** button in the **MAP LabelPro** dialog box.
2. In the **Label Placement Area** frame, select the option **Extents of labeled source layers**.
3. Click the **Label Margins** check box to enable its settings. Set the **Top, Left, Right** and **Bottom** drop-down lists to *0.2 in*.
4. In the **Obstacles** frame, do not select the option **Paths without stroke are not considered obstacles**.

NOTE: If the option *Paths without stroke are not considered obstacles* is enabled, areas that have no stroke will not be used as an obstacle in the labelling process, allowing generated labels to overlap with them.

5. Make sure that the settings match the image above and click **OK**.

The label styles and rules of each source layer are now ready to be set.

2.3 POINT LAYER LABEL SETTINGS

1. In the **MAP LabelPro** dialog box, click the *Public_Schools_point* layer name in the **Source** column to highlight the row.

By default, the attribute to use as a label is set to FACILITY_I, the first string attribute column of the *Public_Schools_point* layer. It needs to be changed to SCHOOL_NAME.

2. Click FACILITY_I in the **Attribute** column. This enables a drop-down list with all the attributes of the *Public_Schools_point* layer. Click SCHOOL_NAME in the list.

NOTE: You may have to increase the width of the Attribute column to see the full name of attributes.

3. In the **Destination** column, change the destination text layer selected by default (*HIGHWAY_INTERSTATE_labels*) to *SCHOOL_labels.*
4. Leave the **Priority** column set to 1. The *Public_Schools_point* will be labelled as a first priority, all the others will be of second priority.

5. In the **Style** column, click *[Default]* and select *School_Label_Style* in the drop-down list. This style has been predefined by Avenza, click the **Edit** button to open the Style dialog box and examine these settings.

NOTE: The second labelling session will show how to create a new style from scratch.

6. In the **Style** dialog box, click **OK**.
7. In the **MAP LabelPro** dialog box, under the **Rules** column, click *[Default]* and select *School_Label_Rule* in the drop-down list. This rule has been predefined by Avenza, click the **Edit** button to open the Point Rules dialog box and examine these settings.

These point settings will force the labels to be placed below the symbols:
- • When possible, the text will be placed lower-middle to the symbol.
- • If this is not possible due to space constrictions, text will be placed to the lower-right, and then to the lower-left.
- • If none of the options can be applied, the text will be placed on the suppression layer (or ignored if no suppression layer was specified).

Text stacking and font reduction have also been enabled to add flexibility to the placement rules.

NOTE: More information on the available labelling options can be found in the MAPublisher User Guide, chapter 18.

8. Click **OK** in the **Point Rules** dialog box to close the window.
9. In the **Suppression Layer** column, click the text *[Ignored]* and select *SUPPRESSED_labels* in the drop-down list. Labels that can not be placed using MAP LabelPro will be copied to this layer.

NOTE: You might have to scroll to the right of the MAP LabelPro dialog box to see the *Suppression Layer* column.
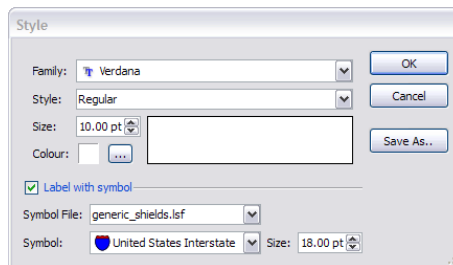
This finalizes the configuration for the labelling of the *Public_Schools_point* layer. **Do not close** the MAP LabelPro dialog box as the configuration of the roads and land layers still have to be done.

2.4 LINE LAYERS LABEL SETTINGS

This section covers the labelling configuration for the source layers *Highways_line, Interstates_line* and *Streets_line*. Highways and interstates will be labelled using highway and interstate symbol shields—notice that these layers contain double-lines for each road (divided highways).
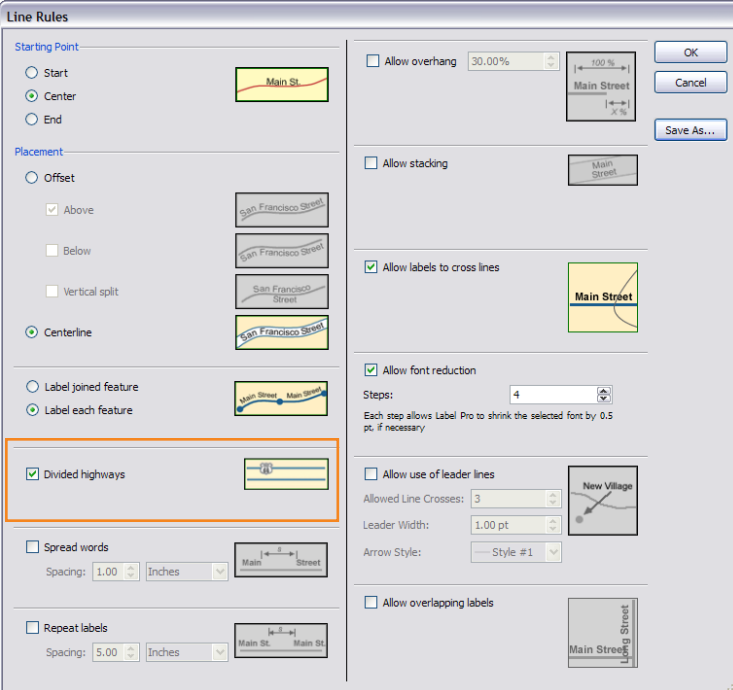
2.4.1 Label lines with symbols

1. In the **MAP LabelPro** dialog box, click the *Highways_line* layer name in the **Source** column to highlight the row.
2. Click STREETNAME in the **Attribute** column, to enable the attribute drop-down list. Select HIGHWAY_NUMBER in the list.
3. In the **Destination** column, keep the destination text layer selected by default (*HIGHWAY_INTERSTATE_labels*).
4. Set the **Priority** column to *2*.
5. In the **Style** column, click *[Default]* and select *Highway_Label_Style* in the drop-down list. This style has been predefined by Avenza, click the **Edit** button to open the Style dialog box and examine these settings.

In addition to the regular font settings, line labels can also be labelled with symbols. In this case, the **Label with symbol** option is enabled. Symbol files (*.lsf) contain a series of symbols. In the example above, the *United States Interstate* symbol is selected from the *generic_shields.lsf* symbol file. The symbol size is set to 18.00 pt (different from the font size). The font color is set to white to be readable on the blue symbol.

6. In the **Style** dialog box, click **OK**.

7. In the **MAP LabelPro** dialog box, in the **Rules** column, click *[Default]* and select *Highway_Label_Rule* in the drop-down list. This rule has been predefined by Avenza, click the **Edit** button 🖉 to open the Line Rules dialog box and examine these settings.

With these settings, the highway labels (and shields) will be placed in the middle of each line length and on the centerline, with an eventual font reduction if necessary. The **Divided Highways** option recognizes lines that share the same name (as specified by the selected attribute) and that are parallel; in such cases it places only one symbol. This explains also why the **Allow labels to cross lines** option needs to be enabled in this case, because the double highway lines are very close to each other the labels will have to cross the lines. More information on the available line labelling rules can be found in the MAPublisher User Guide, chapter 18.

NOTE: Evaluation users will see a different result than a licensed user. Because of the text scrambling, the divided highways cannot be recognized. Here is an example with the interstates:

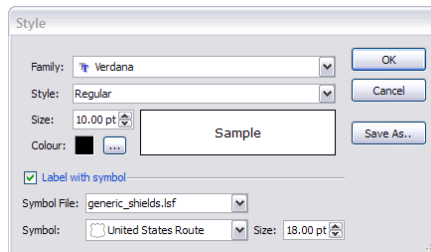Result with license: Result with evaluation:

8. Click **OK** in the **Line Rules** dialog box to close the window.

9. Back in the **MAP LabelPro** dialog box, In the **Suppression Layer** column, click the text *[Ignored]* and select *SUPPRESSED_labels* in the drop-down list.

The settings for the *Highways_line* layer are completed; continuing with the settings for the *Interstates_line* layer.

10. Click the *Interstates_line* layer name in the **Source** column to highlight the row.
11. Click STREETNAME in the **Attribute** column, to enable the attribute drop-down list. Select INTERSTATE_NUMBER in the list.
12. In the **Destination** column, keep the destination text layer selected by default (*HIGHWAY_INTERSTATE_labels*).
13. Set the **Priority** column to 2.
14. In the **Style** column, click *[Default]* and select *Interstate_Label_Style* in the drop-down list. This style has been predefined by Avenza, click the **Edit** button 🖉 to open the Style dialog box and examine these settings.

The *United States Route* symbol is selected from the *generic_shields.lsf* symbol file. The symbol size is set to 18.00 pt (different from the font size).

15. In the **Style** dialog box, click **OK**.
16. In the **MAP LabelPro** dialog box, in the **Rules** column, click *[Default]* and select *Interstate_Label_Rule* in the drop-down list. This rule has been predefined by Avenza, click the **Edit** button 🖉 to open the Line Rules dialog box and examine these settings.
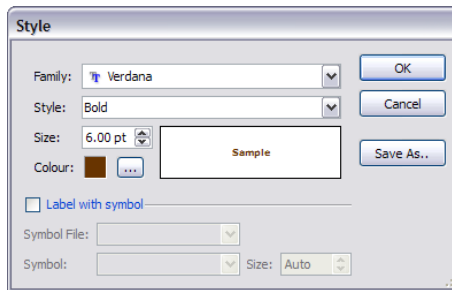
The labelling rules for the interstates are the same as for the highways. The previous note applies for evaluation users.

17. Click **OK** in the **Line Rules** dialog box to close the window.
18. In the **Suppression Layer** column, click the text *[Ignored]* and select *SUPPRESSED_labels* in the drop-down list. Labels that will not be able to be placed using the MAP LabelPro will be copied to this layer.

The label settings for the interstate roads are now complete, continuing on with the street labels.
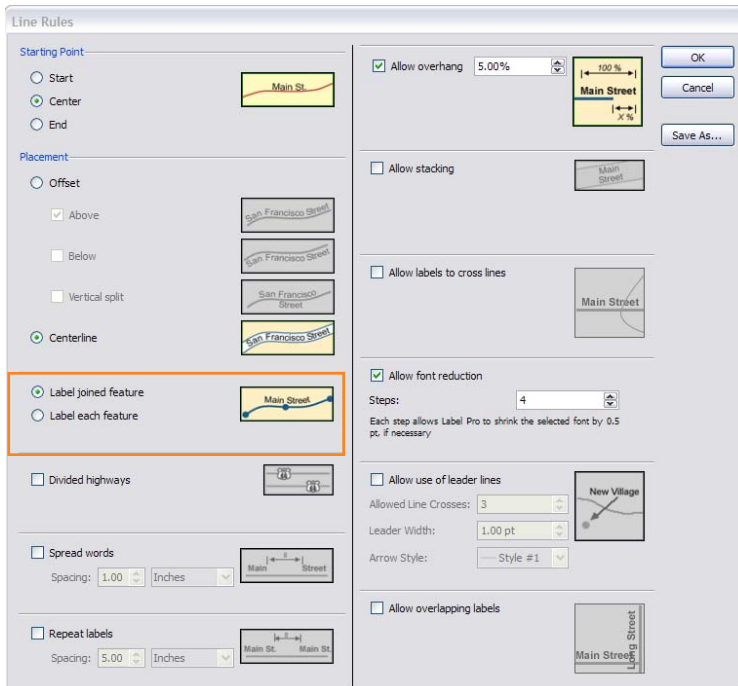
2.4.2 Label lines with text only

1. Back in the **MAP LabelPro** dialog box, click the *Streets_line* layer name in the **Source** column to highlight the row.
2. In the **Attribute** column, keep STREETNAME as selected attribute for labelling.
3. In the **Destination** column, change the destination text layer selected by default (*HIGHWAY_INTERSTATE_labels*) to *STREET_labels*.
4. Set the **Priority** column to 2.
5. In the **Style** column, click *[Default]* and select *Street_Label_Style* in the drop-down list. This style has been predefined by Avenza, click the **Edit** button 🖉 to open the Style dialog box and examine these settings.

Notice that this time the **Label with symbol** option is disabled.

6. In the **Style** dialog box, click **OK**.

7. In the **MAP LabelPro** dialog box, in the **Rules** column, click *[Default]* and select *Street_Label_Rule* in the drop-down list. This rule has been predefined by Avenza, click the **Edit** button 🖉 to open the Line Rules dialog box and examine these settings.
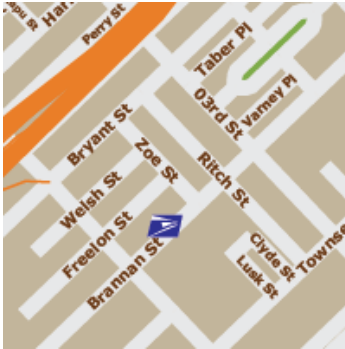

Like highway and interstate labels, street labels will be placed in the middle of each line length and on the centerline, with an eventual font reduction if necessary. The ability to overhang is also enabled (**Allow overhang**).
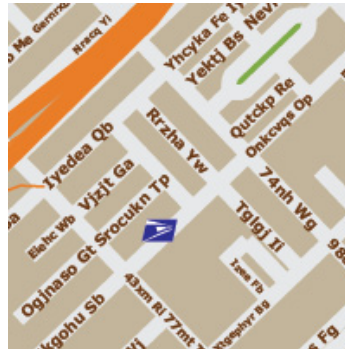
The street lines in this file are not joined, i.e. each street is made of many line segments that all share the same STREETNAME attribute. To avoid repeating the name of connecting lines, the option **Label joined feature** has been enabled. MAP LabelPro will recognize that connecting lines sharing a same name need to be labelled only once.

NOTE: Evaluation users will see a different result than a licensed user. Because of the text scrambling, the names are not recognized as being the same, therefore a label will get created for each line segment rather than one per street.

Result with license: **Result with evaluation:**
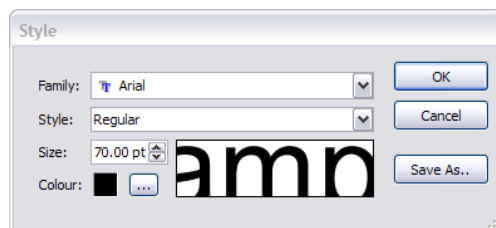

8. Click **OK** in the **Line Rules** dialog box to close the window.
9. In the **MAP LabelPro** dialog box, in the **Suppression Layer** column, click the text *[Ignored]* and select *SUPPRESSED_labels* in the drop-down list.

This completes the label settings for all line layers. **Do not close** the MAP LabelPro dialog box as the configuration of the *Land_area* layer still has to be done.
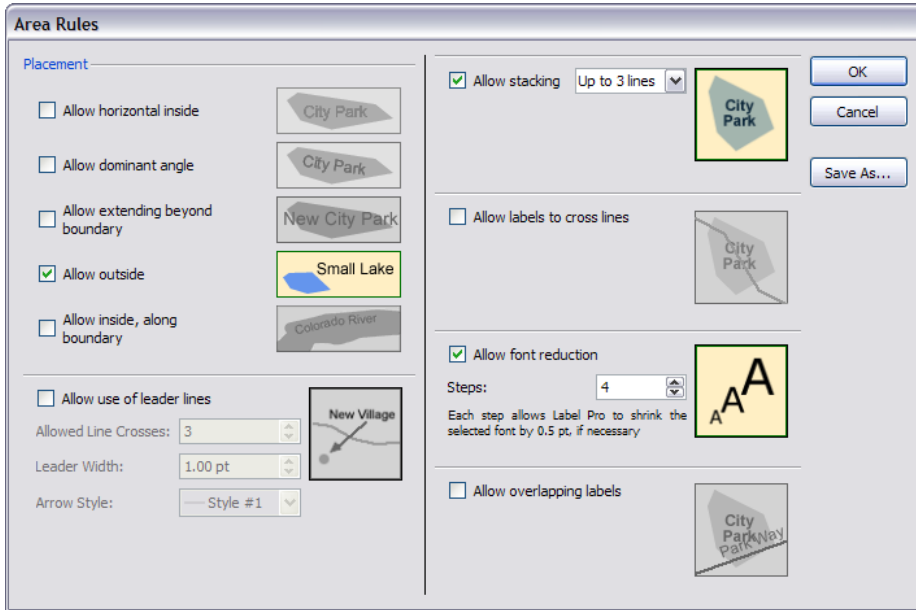
2.5 AREA LAYER LABEL SETTINGS

This section covers the labelling configuration for the source layers *Land_area*. The goal is to add large labels for the land areas of the map (downtown area, Treasure and Alcatraz Islands).

1. In the **MAP LabelPro** dialog box, click the *Land_area* layer name in the **Source** column to highlight the row.
2. In the **Attribute** column, keep AREA_NAME as the selected attribute for labelling.
3. In the **Destination** column, change the destination text layer selected by default (*HIGHWAY_INTERSTATE_labels*) to *LAND_labels*.
4. Set the **Priority** column to 2.
5. In the **Style** column, click *[Default]* and select *Land_Label_Style* in the drop-down list. This style has been predefined by Avenza, click the **Edit** button to open the Style dialog box and examine these settings.

NOTE: The sample text is truncated because the font size is set to 70 pt

6. In the **Style** dialog box, click **OK**.
7. In the **MAP LabelPro** dialog box, under the **Rules** column, click *[Default]* and select *Land_Label_Rule* in the drop-down list. This rule has been predefined by Avenza, click the **Edit** button ✎ to open the Area Rules dialog box and examine these settings.

The main requirement for labels created from the *land_area* layer is that labels are placed in the water area. Therefore, the option **Allow outside** is the only placement option enabled. Stacking and font reduction option are also enabled to give more flexibility to the rule. More information on the available area labelling rules can be found in the MAPublisher User Guide, chapter 18.
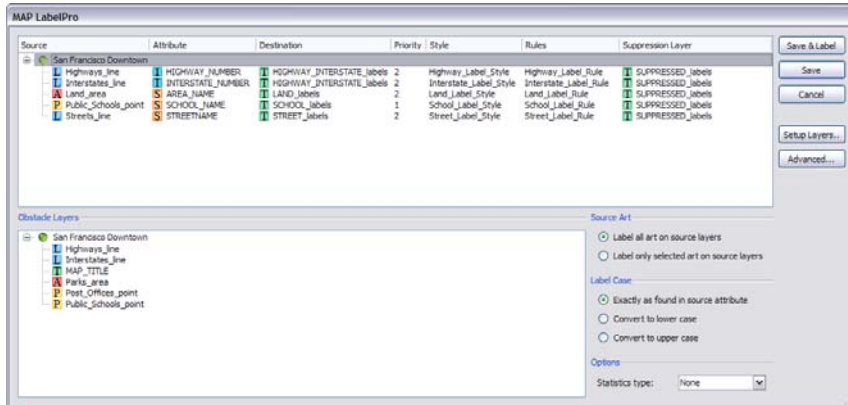
NOTE: The second labelling session will explain the creation of area rules from scratch for the *Parks_area* layer.

8. Click **OK** in the **Area Rules** dialog box to close the window.
9. In the **MAP LabelPro** dialog box, in the **Suppression Layer** column, click the text *[Ignored]* and select *SUPPRESSED_labels* in the drop-down list.

All layers have been now configured for the first main labelling session.
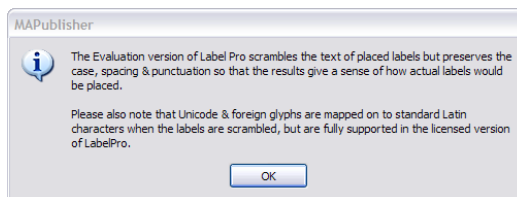
2.6 EXECUTE LABELLING WITH MAP LABELPRO

1. Make sure that all the layers have been configured to match the image below and click the **Save & Label** button.

NOTE: For this session, the other labelling options will be kept as default:

*   **Source Art:** Option to label all the source layers or label only the selected art on each source layer. In the example above, all objects will be labelled exactly as found in the source attributes.
*   **Label Case:** Option to change the case of all the labels at once—to upper or lower case. In this exercise, the option is kept as *Exactly as found in source attribute*.
*   **Statistics:** Option displays a report on placed and non-placed objects. It will be used in the *Additional Labelling Session*. For this example, the option is set to *None*.

2. (*Evaluation users only*) Click **OK** in the MAPublisher warning message.

3. Wait for the process to end to visualize the results (see next page).

NOTE: Make the layer *SUPPRESSED_labels* visible to show labels that couldn't be placed with the specified rules.

4. Save the file and leave it open to continue on with the second labelling session.

Result with full license:

Result with evaluation license:

NOTE: The evaluation users will observe many more labels being placed on the map. The *Label joined feature* option in the street label rules fails to recognize similar street names due to the text scrambling. Similarly, highway and interstate roads are getting two shields with different numbers.

3 Additional Labelling Session

In this second labelling session, continuing with the same file, only the parks will be labelled in a single run of the MAP LabelPro function. The objectives are to:
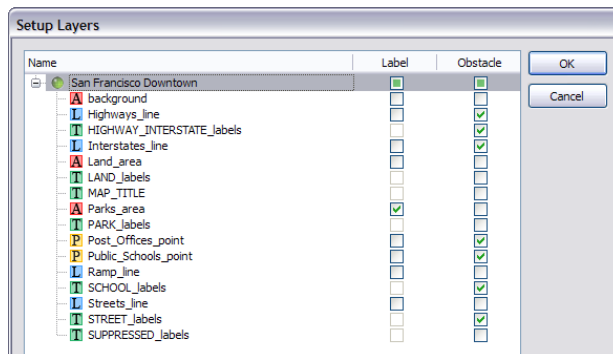
- Create a new area label style for park labels.
- Create a new area label rule for park labels.
- Make sure that the park labels do not overlap with the other labels and with the post office and school symbols, and do not cross highway and interstate lines.

To start MAP LabelPro, click the MAP LabelPro button [icon] on the MAPublisher Toolbar or choose the menu *Object > Filters > MAP LabelPro > MAP LabelPro...* (Adobe Illustrator CS4) or *Filter > MAP LabelPro > MAP LabelPro...* (Adobe Illustrator CS3).

The settings from the previous labelling session are remembered. For the new session, the layer setup has to be changed to match the new objective of this exercise. However, the label extents remain the same as before.
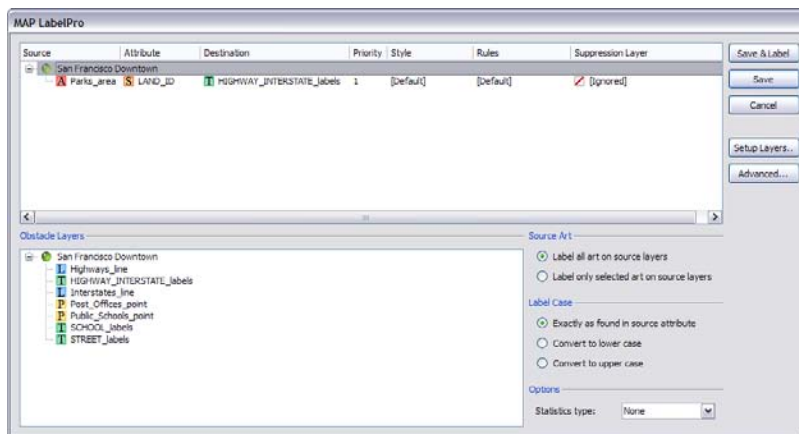
3.1 LAYERS AND OBSTACLES SETUP

1. In the **MAP LabelPro Editor**, click the **Setup Layers** button to start setting up the source and obstacle layers.
2. In the **Setup Layers** dialog box, click the very top **Label** check box (at the level of the *San Francisco Downtown* MAP View). The Label check boxes of each layer are enabled.
3. Click again the very top **Label** check box. This time, all the Label check boxes are cleared
4. Click the **Label** check box of the *Parks_area* layer only.
5. Then, make sure that only the following layers are set as **Obstacle** (you may need to uncheck *MAP_Title* and *Parks_area*):
   - *Highways_line*
   - *HIGHWAY_INTERSTATE_labels*
   - *Interstates_line*
   - *Post_Office_point*
   - *Public_School_point*
   - *SCHOOL_labels*
   - *STREET_labels*

6. Make sure that the settings match the image above and click **OK**.

The MAP LabelPro dialog box is updated with the new selected layer setup.
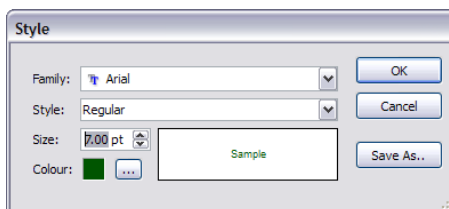

3.2 ADDITIONAL AREA LAYER LABEL SETTINGS

This section covers the labelling configuration for the source layer *Parks_area*. The goal is to add labels for the parks on the map, allowing the use of leader lines and font reduction. In this exercise, style and rules are created from scratch.

1. In the **MAP LabelPro** dialog box, click the *Parks_area* layer name in the **Source** column to highlight the row.
2. Click LAND_ID in the **Attribute** column to enable the attribute drop-down list. Click PARK_NAME in the list.
3. In the **Destination** column, change the destination text layer selected by default (*HIGHWAY_INTERSTATE_labels*) to *PARK_labels*.
4. Keep the **Priority** column set to 1. When labelling a single layer, the priority is irrelevant.
5. In the **Style** column, click *[Default]* and then the **Edit** button [✐] to open the Style dialog box.
6. Make sure that *Arial* is selected in the **Family** drop-down list.
7. Make sure that *Regular* is selected in the **Style** drop-down list.
8. In the **Size** drop-down list, set the font size to *7.00 pt*
9. Click the [...] button in the **Color** settings.
10. In the **Setup color** dialog box, pick a dark green color (e.g. R=0, G=85, B=0).
11. Click **OK** to accept the color and return to the **Style** dialog box.
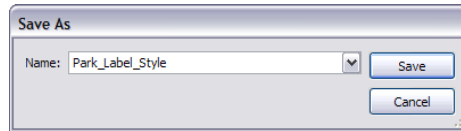
NOTE: The Select Color dialog box may look different depending on the operating system in use.

12. Make sure that the **Style** dialog box is setup as below and click **Save As.**

13. In the **Save As** dialog box, type *Park_Label_Style* in the **Name** field and click **Save**.

14. In the **Style** dialog box, click **OK** to close it.

In the MAP LabelPro dialog box, the Style column now displays the text *Park_Label_Style*. The style is saved in the directory specified in the MAPublisher Preferences (see exercise 1.2).

15. In the **MAP LabelPro** dialog box, under the **Rules** column, click *[Default]* and then the **Edit** button to open the Area Rules dialog box.
16. In the **Area Rules** dialog box, in the **Placement** frame, enable only the two options: **Allow horizontal inside** and **Allow extending beyond boundary.**
17. Enable the option **Allow use of leader line** by clicking the check box. Keep the default parameters:
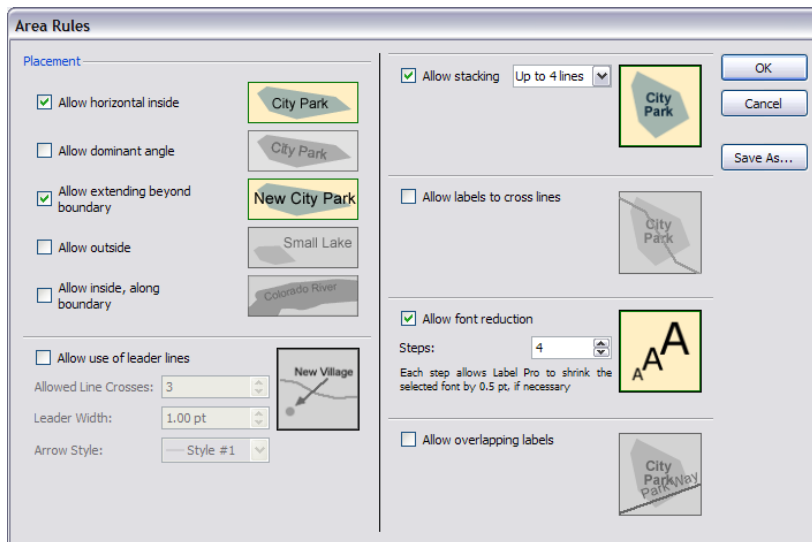   - **Allowed Line Crosses:** *3*
    - **Leader Width:** *1 pt*
    - **Arrow Style:** *Style #1*
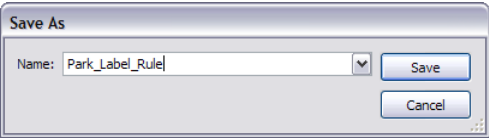18. Make sure that the option **Allow stacking** is enabled and select *Up to 4* in the drop-down list.
19. Disable the option **Allow labels to cross lines**.
20. Make sure that the option **Allow font reduction** is enabled and set to *4* steps.
21. Make sure that the settings are matching the image below and click **Save As**.

22. In the **Save As** dialog box, type *Park_Label_Rule* in the **Name** field and click **Save**.
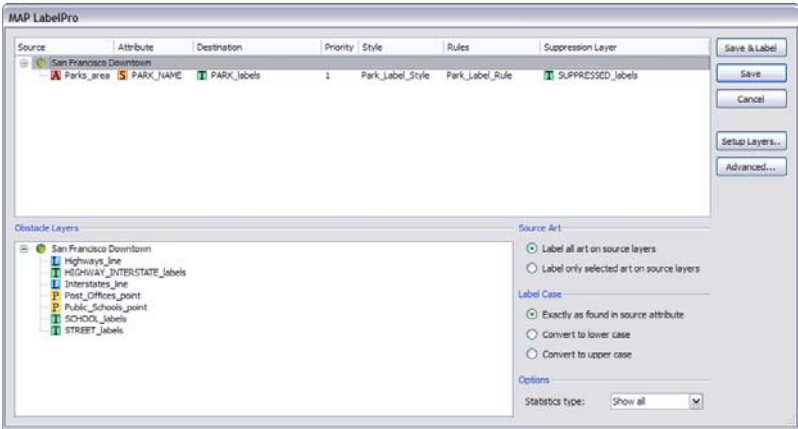

23. In the **Area Rules** dialog box, click **OK** to close it.
24. In the **Suppression Layer** column, click the text *[Ignored]* and select *SUPPRESSED_labels* in the drop-down list.

In the MAP LabelPro dialog box, the Rules column now displays the text *Park_Label_Rule*. The rule is saved in the directory specified in the MAPublisher Preferences (see exercise 1.2).

3.3 EXECUTE LABELLING WITH MAP LABELPRO

1. In the MAP LabelPro dialog box, in the **Options** frame, set the **Statistics** drop-down list to *Show All*.
2. Make sure that all the layers have been configured as below and click the **Save & Label** button

A MAP LabelPro message displays the statistics of the label placement (results might vary for evaluation users).
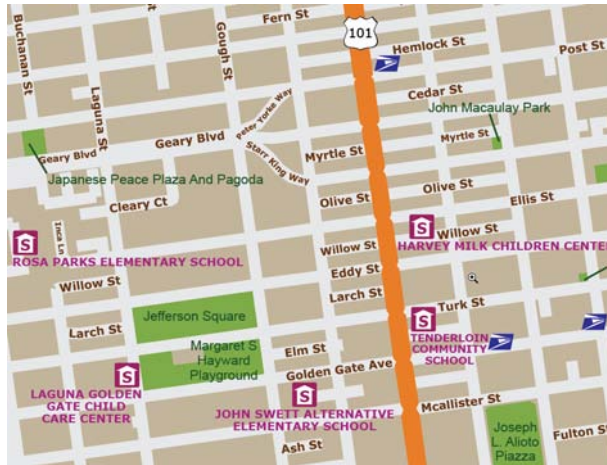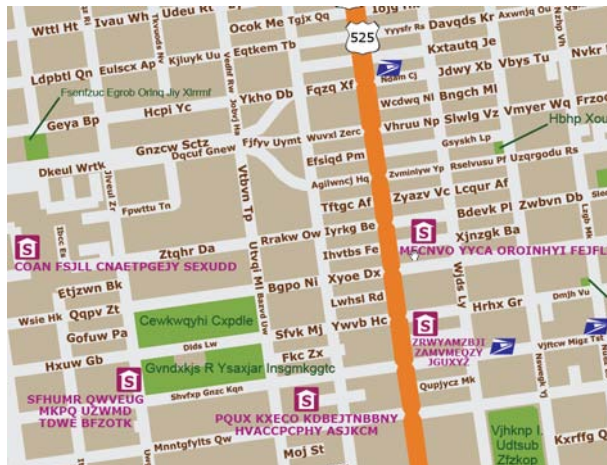

Statistics with full license

Statistic with evaluation license

3. Click **Close** in the **MAP LabelPro Messages**.

Result with full license:

Result with evaluation license:

Congratulations, you have completed the MAPublisher 8 MAP LabelPro tutorial. For more in-depth information on MAPublisher tools and features, please take a look at the MAPublisher 8 User Guide , MAPublisher 8 Tutorial Guide and Quick Start Guide. These documents are installed with MAPublisher 8 or can be downloaded from *http://www.avenza. com/support.documentation.html*