Working with the Labeling Toolbar

In this Chapter you will learn

- How to turn on and off labels using the Label Manager and Maplex
- How to specify label weights to make sure the labels you want are on your map
- How to lock label sizes as you zoom in and out of your map

Exercise 1: Turning labels on and off using the Label Manager

- 1. Start ArcMap and open Exercise1.mxd in the Topic3_6 folder.
- 2. Click on "Customize" along the top of your screen. Then click on Toolbars and click on "Labeling" as shown on the right. A check in front of the name of your toolbar means it has been added to your ArcMap interface.
- 3. Note the Labeling toolbar in ArcMap:





Labeling

ISTC Topic:

3.

- 4. Click on "Bookmarks" along the top of your screen and choose "Boise Downtown Roads".
- 5. First, let's examine how the labels are set up for this roads layer. Open the properties for the Roads layer and go to the "Labels" tab. Note how there are three classes ("Default", "Main Roads" and "Roads") which each have their unique labeling style.

Layer Propertie	s			1		2/ 3	2.	N 1 3	
General Sou	rce	Selection	Display	Symbology	Fields	Definition Query	Labels	Joins & Relates	Time
☑ Label features in this layer									
Method:		Define	e classes o	of features an	d label ea	ach class differentl	y. – 👻		
Class: Default					🗸 🔲 Label featu	el features in this class			
Add.	Defa Main	ult Roads				QL Query	G	iet Symbol Classes	
- Text Strir	Road	is							
Label Field:		FU	FULLNAME				•	Expression	

6. Click on the "Main Roads" class and then click on the SQL Query button. Note that all the roads with RTTYP = U are classified as "Main Road" and are labeled with a larger font.

- 7. Close the properties dialog box.
- 8. Click on the Label Manager button on your Labeling toolbar. Position the label manager dialog box so that you can see both the dialog box and some of the roads on your screen.
- 9. Click on the Main Roads and note that you can see the font, font size and placement options for all the roads that are classified as a main road. Note that you can also change the font, scale range and placement properties for each of the classes, right from this dialog box.

☑ Roads ☑ Default ☑ Main Roads	Text String Label Field: FULLNAME Expression				
····· M Roads	Text Symbol				
	AaBbYyZz B X U Symbol				
	Placement Properties				
	Orientation Position				
	Parallel Properties				
	Curved Below				
	Perpendicular Offset: 0 map units				
	Scale Range SQL Query Label Styles				

- 10. Click the check box in front of "Roads" to turn of the labels for all the roads, except the major roads. Click Apply.
- 11. Turn the labels for the "Roads" back on and then turn off the "Main Roads" to see what happens.
- 12. Turn off "Roads" and "Main Roads". Click on "Default" to turn all road labels on. When you click on the SQL Query button you can see that no query is set and ALL the labels, regardless of RTTYP are being labelled the same way.
- 13. Finally turn all three classes (Default, Main Roads and Roads) on. Close the Label Manager and zoom closer to a couple of roads. As you can see it is important to turn the default class off when you are defining your own labeling classes. Otherwise, you will see duplicate labels as shown on the right.



Exercise 2: Locking label sizes using the Label Manager

- 1. Go to the bookmark for "Boise Downtown Roads".
- 2. Click on the Lock Labels button.
- 3. Zoom in and note the size of your labels
- 4. Click again on the Lock Labels button and observe the changes to your labels.

Labeling 🔻 🖈 🍇 🍇 🏹 🍂 Fast 👻

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Lock Labels

Hold the position of placed labels for the current map extent. Label positions remain constant as you pan and zoom within the original map extent.

Exercise 3: Comparing Maplex and Standard Label Engines

- 1. Open Exercise3.mxd in the Topic3_6 folder.
- 2. Go to the bookmark labeled "Statewide" to make sure you can see all the counties in Idaho.
- 3. Note the placement and overlap of the labels for the names of all the counties. (If you don't see any labels then right-click on the Counties layer and click on "Label Features".)
- 4. Currently the labels are generated by the "Standard Label Engine". Click on "Labeling" on the Labeling Toolbar and click on Use Maplex Label Engine.
- 5. Note the change in alignment and placement of the labels. What do you think?
- Turn off the Maplex Label Engine by clicking on "Labeling" > Use Maplex Label Engine" again. Click "Yes" on the "Switch Label Engine" dialog box.



Exercise 4: Setting priorities using the Standard Label Engine

- 1. Open Exercise4.mxd.
- 2. Zoom to the "Earthquakes" bookmark.
- 3. Open the Label Manager 🚈
- 4. Note that four different labeling classes, in addition to the default class, have been defined for the Earthquakes layer. Click on one of the classes, and then click on the SQL Query button. For example the query for the LargEarthQuake class is as follows:

```
SELECT * FROM Earthquakes WHERE:
"MAG" >=5 AND "MAG" <6
```

- 5. Also note that larger earthquakes are labeled with larger fonts. For example, earthquakes with a magnitude smaller than 4 are labeled with a font size of 6, while very large earthquakes, those with a magnitude greater than 6, are labeling with font size 12.
- 6. Note a cluster of earthquakes in the top-right hand side of your screen near the border with Lemhi County.
- 7. Click on the Label Priority Ranking button 4





8. Use the arrows on the right-hand side to change the priority lists so it matches the figure below:

Label Priority Ranking	×
Label Priority	
Rank label classes in priority order: Labels at the top of the list have the highest priority.	
Earthquakes - VeryLargeEarthquake Earthquakes - LargeEarthQuake Earthquakes - MediumEarthQuake Earthquakes - SmallEarthQuake	Ŧ
Counties - Default Counties - Zoomed In Counties - Zoomed Out	1
Earthquakes - Default	

9. Click "Apply" to see the effect of the Label Priority Ranking. For example, in comparing the "before" figure (three medium and one large earthquakes are labeling) on the previous page and the "after" figure on the right you can see two medium and two large earthquakes that have been labeled.



10. Turn on the Maplex Labeling Engine (hint: click on Labeling > Use Maplex Label Engine). Note the changes. Also note that you still have access to all the same buttons on your Labeling toolbar, even though the options have changed in some of them. All in all, the Maplex Label Engine does a better job at placing labels than the Standard Label Engine.