

## Change Color to Show Dominant Value

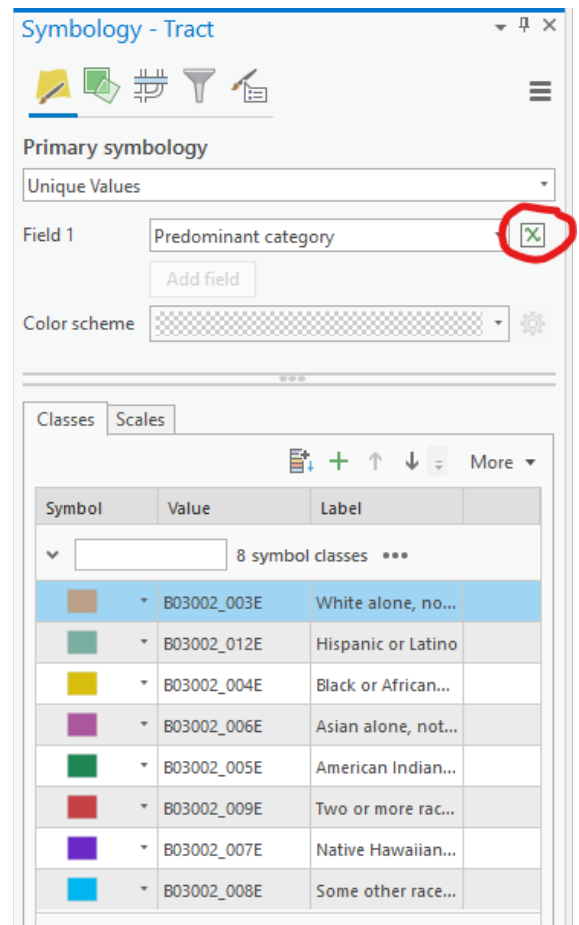
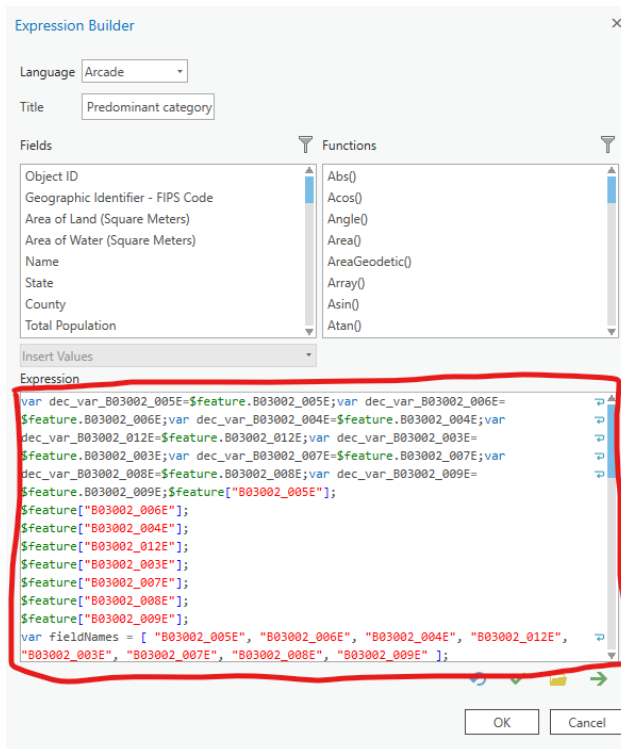
This is a helpful trick if you want to create a map showing the dominant value in some category, and your attribute table is structured with multiple columns showing these values. A common example for this is creating a map showing the dominant race in each census tract using the American Community Survey race data. This is often done automatically when displaying the layer in ArcGIS Online, but disappears once downloaded into ArcGIS Pro.

### In ArcGIS Pro

Open the Symbology for your data layer and make any changes to colors that you want. Click the little X icon next to the Field 1 dropdown.

This will open the Arcade Expression Builder. Arcade is a scripting language specific to ArcGIS software that writes functions for visualizing or labeling data. It's sort of similar to JavaScript coding.

The layer should have an expression already filled in the expression box- long string of code in screenshot below. Copy that entire expression.








Open the symbology for your clipped layer, set it to Unique Values, then open the expression builder next to Unique Values and paste the following code in. You will need to edit it to make

sure that the field names in red (e.g. "B03002\_005", etc.) all correspond to the actual field names of your dataset.

```
var dec_var_B03002_005=$feature.B03002_005;var
dec_var_B03002_006=$feature.B03002_006;var
dec_var_B03002_004=$feature.B03002_004;var
dec_var_B03002_012=$feature.B03002_012;var
dec_var_B03002_003=$feature.B03002_003;var
dec_var_B03002_007=$feature.B03002_007;var
dec_var_B03002_008=$feature.B03002_008;var
dec_var_B03002_009=$feature.B03002_009;$feature["B03002_005"];
$feature["B03002_006"];
$feature["B03002_004"];
$feature["B03002_012"];
$feature["B03002_003"];
$feature["B03002_007"];
$feature["B03002_008"];
$feature["B03002_009"];
var fieldNames = [ "B03002_005", "B03002_006", "B03002_004", "B03002_012",
"B03002_003", "B03002_007", "B03002_008", "B03002_009" ];
var numFields = 8;
var maxValueField = null;
var maxValue = -Infinity;
var value, i, totalValue = null;
for(i = 0; i < numFields; i++) {
value = $feature[fieldNames[i]];
if(value > 0) {
if(value > maxValue) {
maxValue = value;
maxValueField = fieldNames[i];
}
else if (value == maxValue) {
maxValueField = null;
}
}
}
return maxValueField;
```

You will need to click on the symbol patches in the table below to change colors, and double-click into the label value to edit into a more understandable name like below:

Symbol	Value	Label	
Custom 4 symbol classes ...			
	B03002_003	White alone, not Hispanic or Latino	
	B03002_005	B03002_005	
	B03002_009	B03002_009	
	B03002_012	B03002_012	
<all other values>			
	<all other value...>	<all other values>	

If you publish this to ArcGIS Online as a web layer, the symbology changes should (!) carry through.