

ArcGIS Online Data Exploration with Smart Mapping

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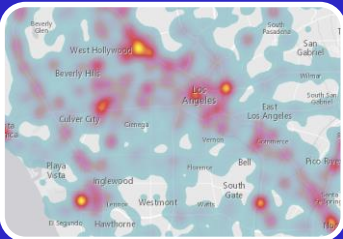
Explore Your Data Like Never Before

No previous knowledge necessary!



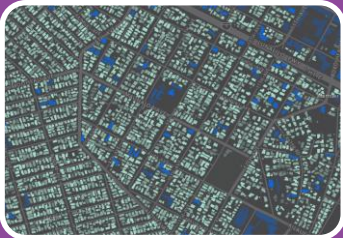
What is smart mapping?

- Where to find it
- How to use it



What rendering options are available?

- When to use each type
- Learn new things about your data as you map



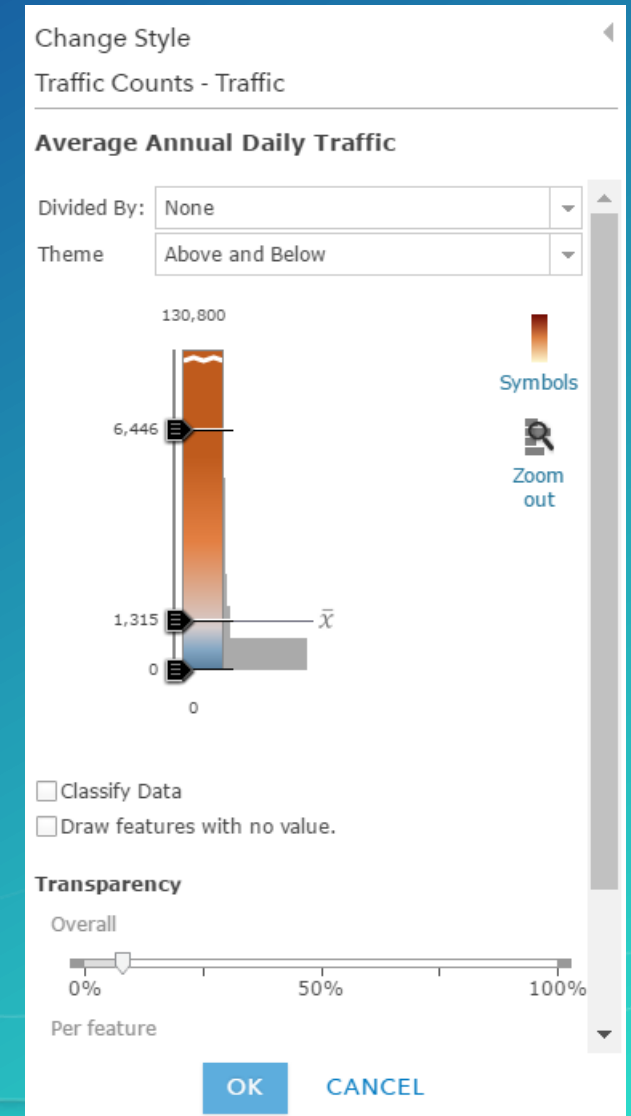
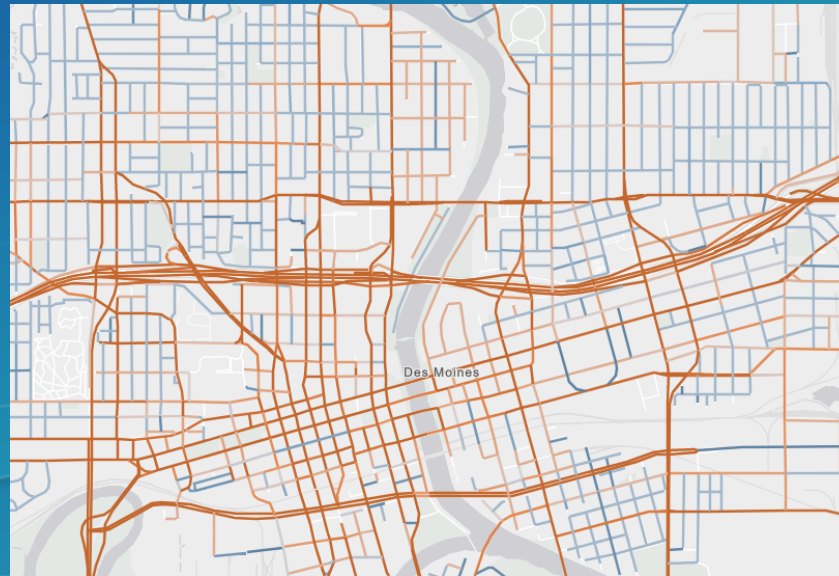
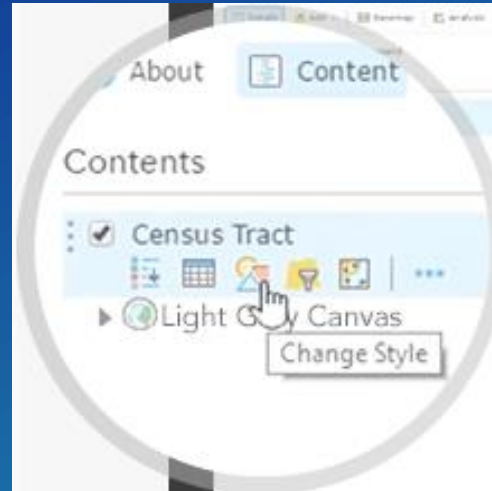
Tips and Tricks

- Make your maps more clear
- Make your maps meaningful

What is smart mapping?

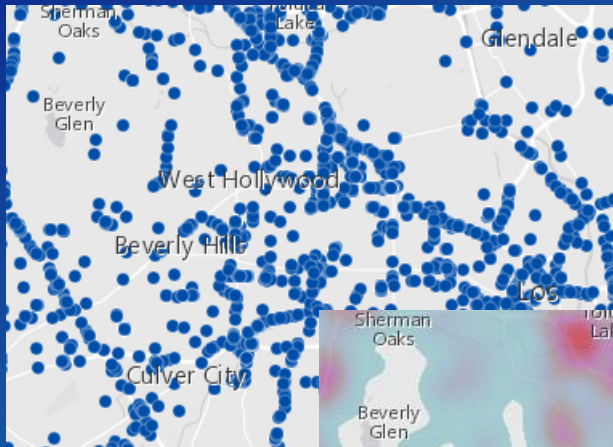
Smart mapping is a tool for setting your cartography

- Looks at your data, and offers mapping types based on the attribute(s) you select
- Allows you to make adjustments and immediately see the map change
- Use as an exploratory tools by trying the different options



Let the Data Speak for Itself

Show Location

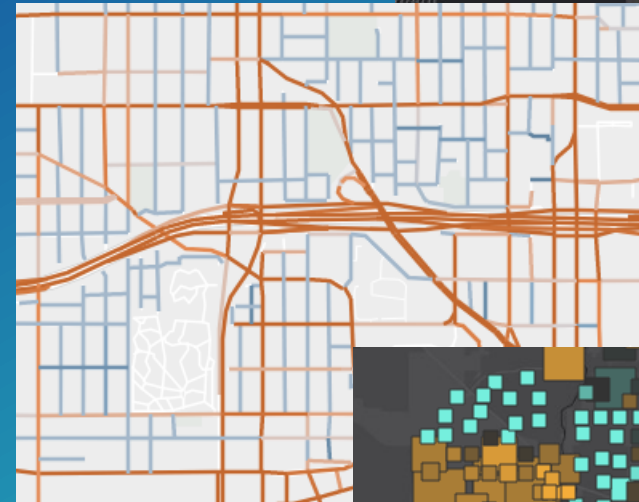


Location only

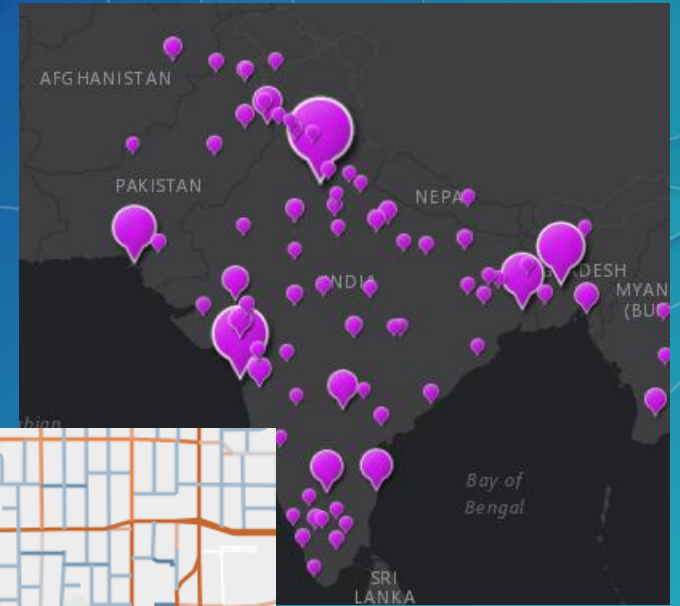


Heat map (points)

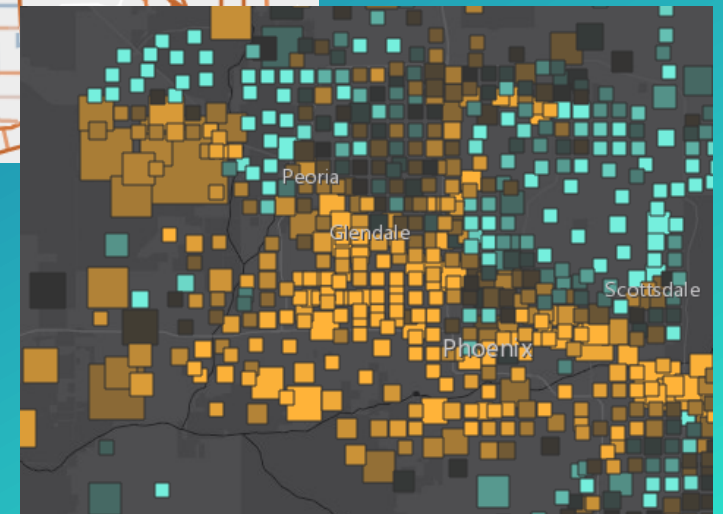
Counts and Amounts



Color



Size



Color and Size

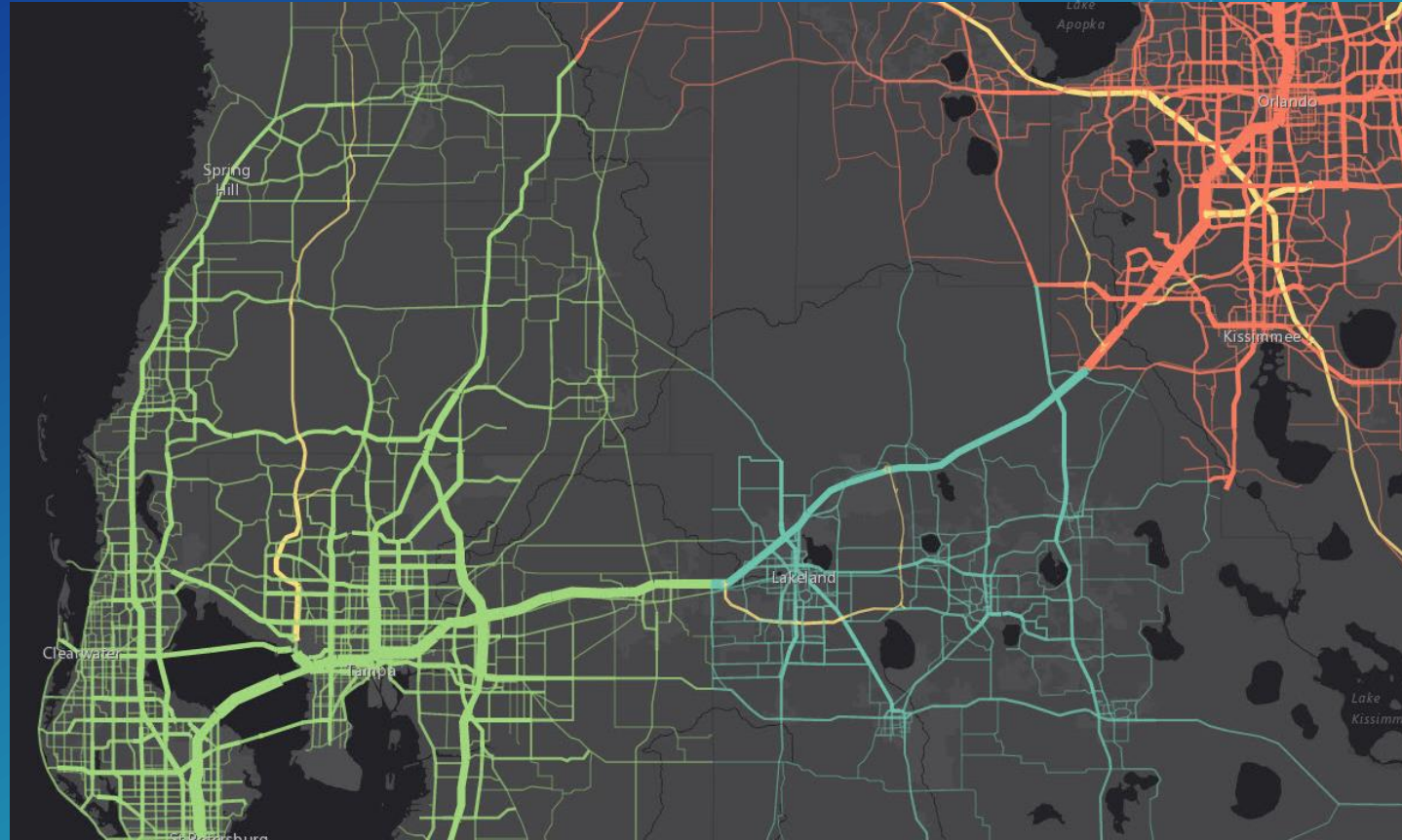
Let the Data Speak for Itself

Unique Symbols and Size

Mapping categorical data alongside meaningful numeric data

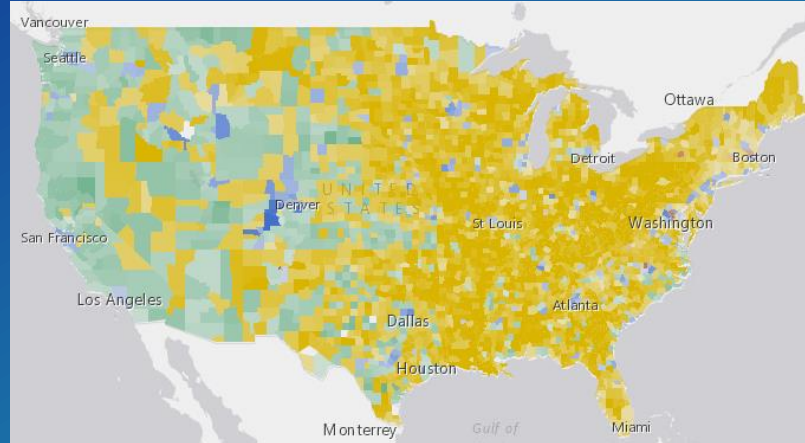
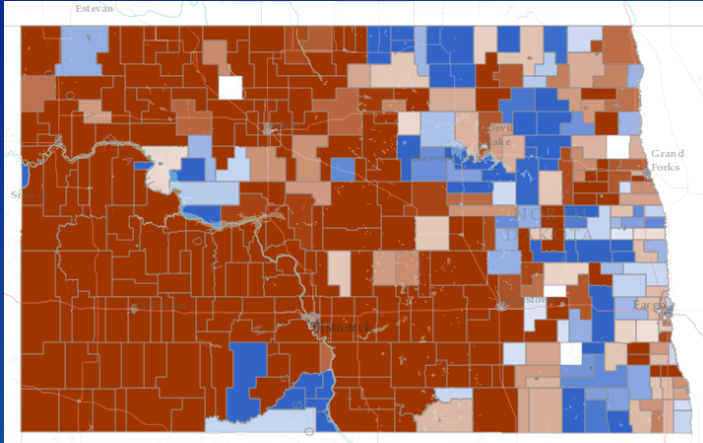
Color and Size

Mapping two numeric attributes together

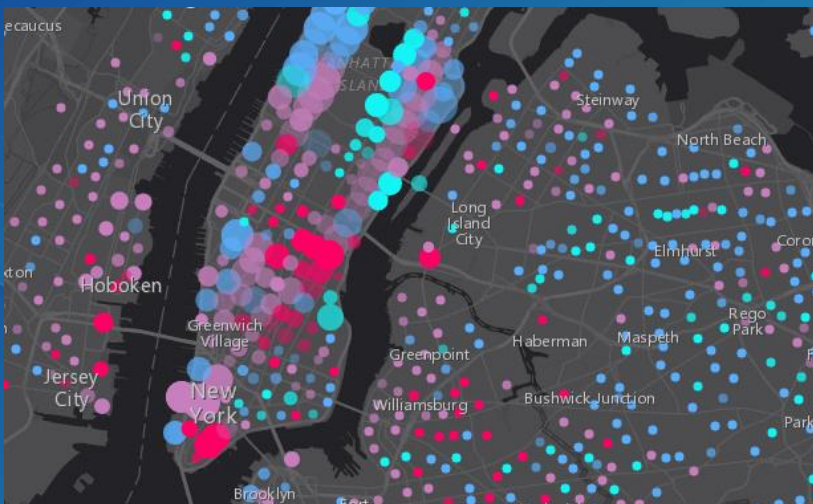


Predominance

What is the largest value between multiple fields?



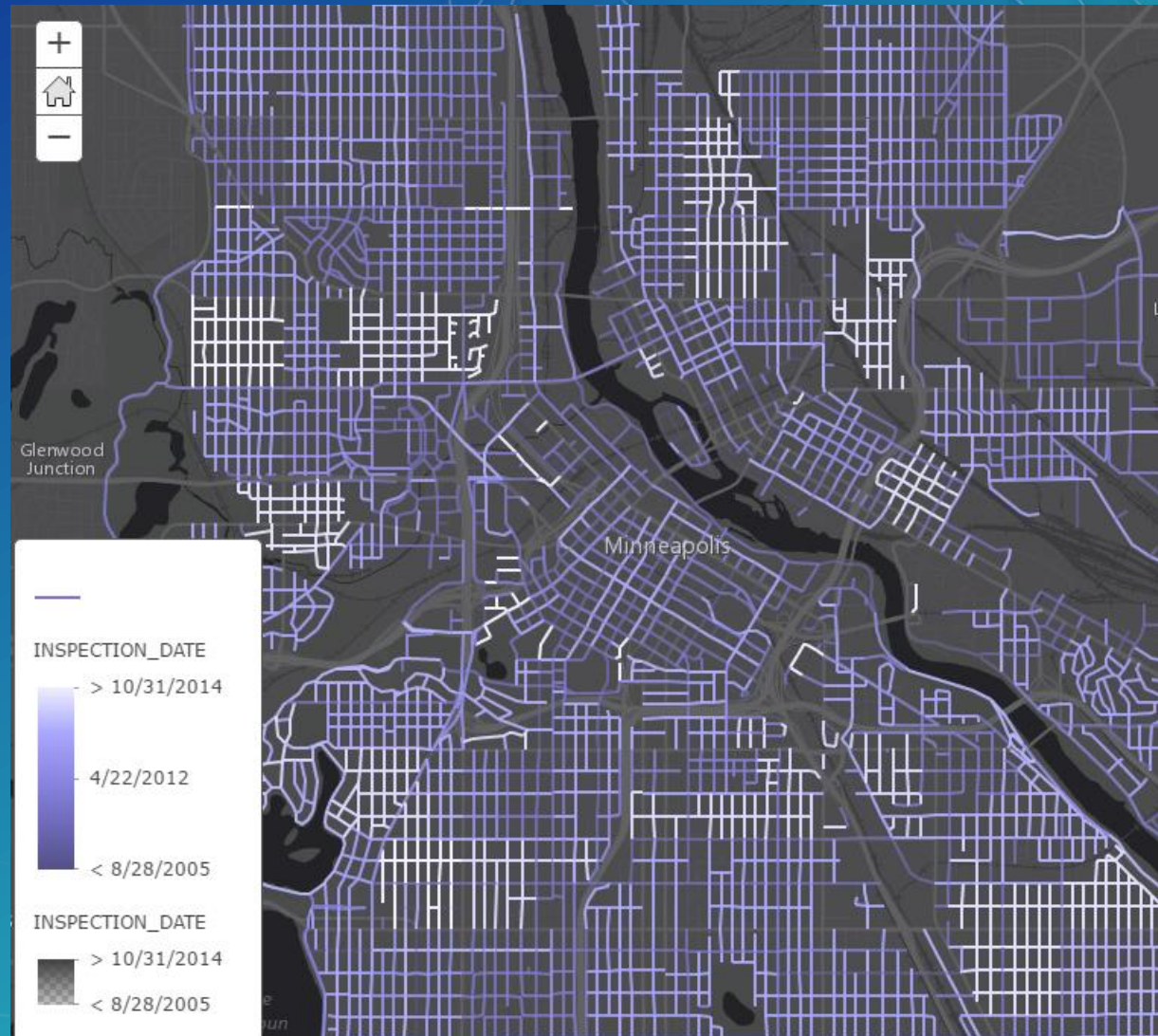
What is the sum value of those fields?



Time

Show patterns of time

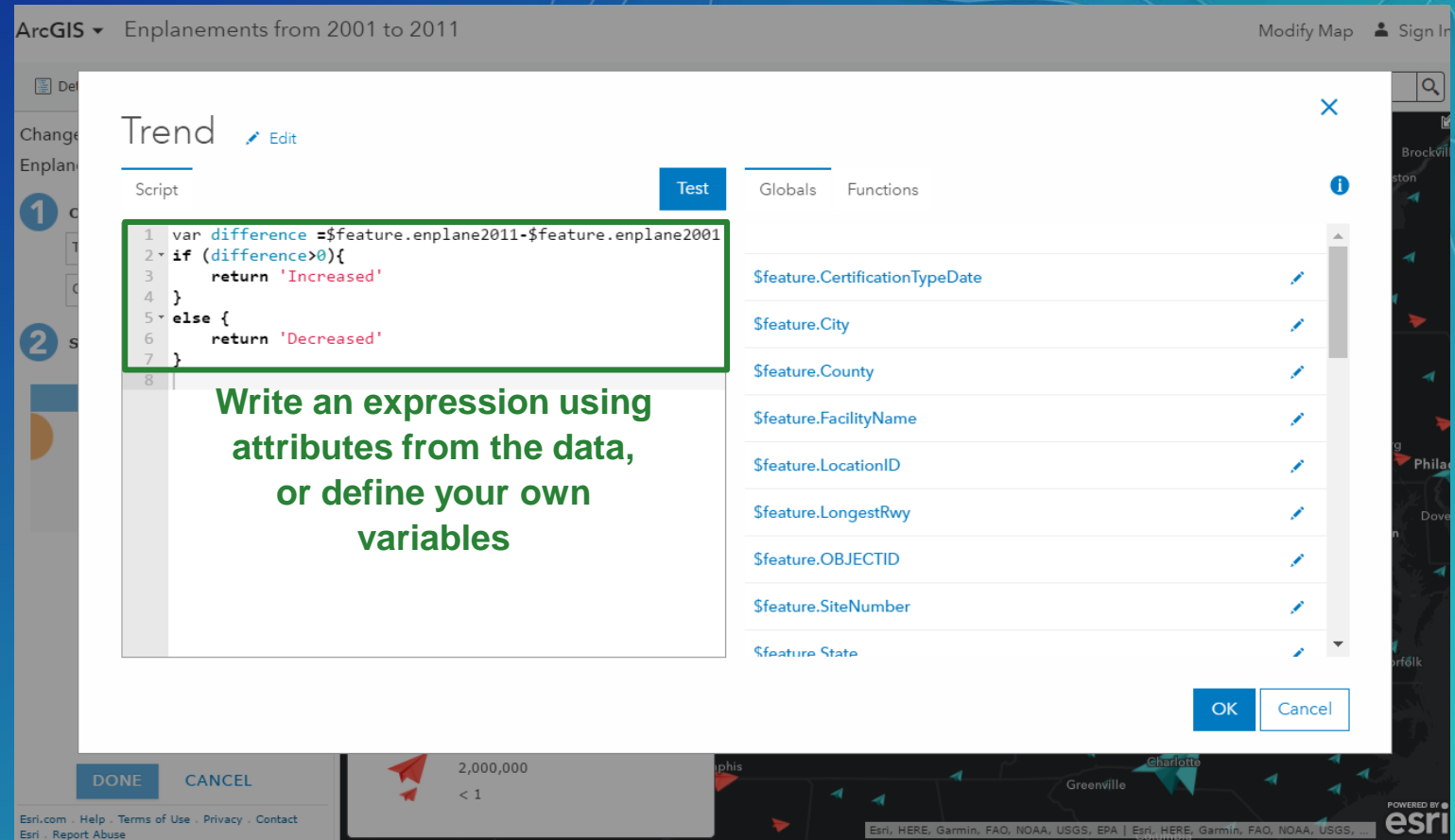
- Time over a continuous spectrum
- Time by age from a certain date
- Use time for the color or the size of the features



Continuous Time (color)

Arcade Expressions

- Full customization
- Map attributes you don't have
- Calculate values on the fly (even if you don't own the layer!)
- Use in your symbology, transparency, pop-up, rotation, labels



1 Choose an attribute to show

Trend (Expression)

Change in Enplanements between 2001 and 2011 (Expression)

Attribute Expressions

Adding expressions allows you to create new information from existing fields for use in pop-ups.

ADD

Custom

☒ Rotate symbols (degrees)

Custom (Expression)

☐ Clockwise from 12

☒ Counterclockwise from 3

☒ Label Features

Text: Custom (Expression)

13 **B** *I* U

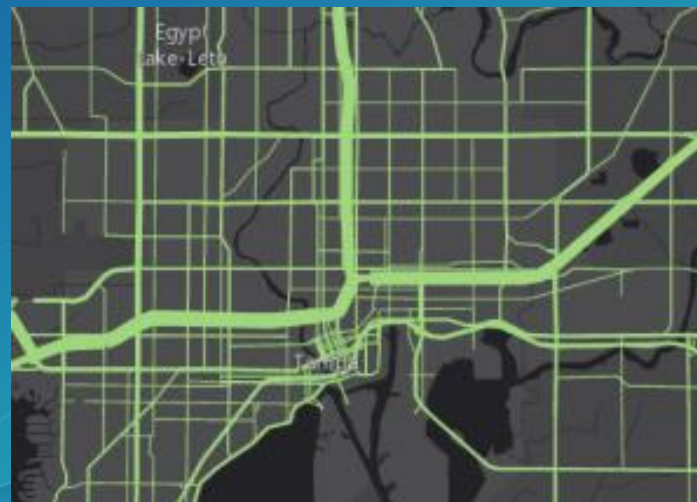
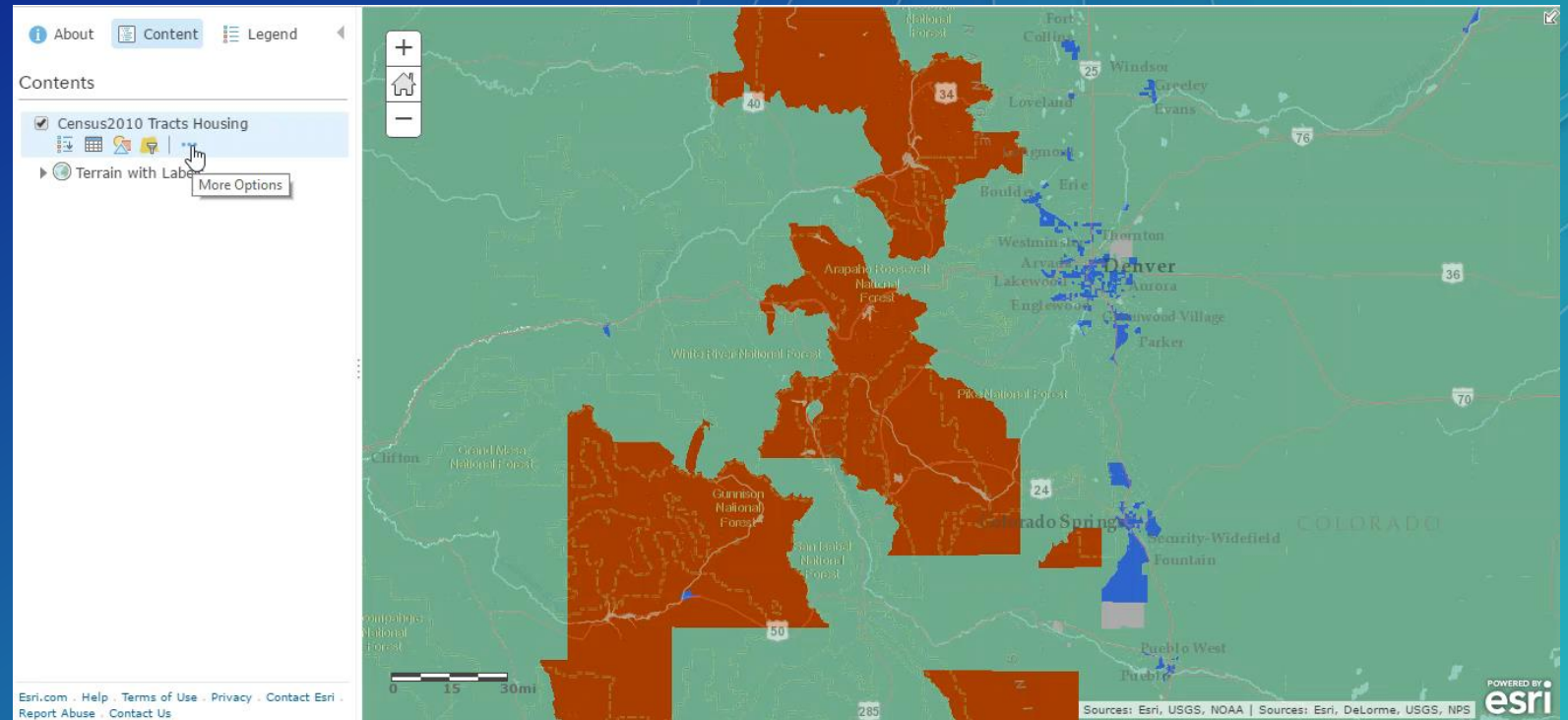
Apply transparency to each feature based on the attribute values in a field or an expression.

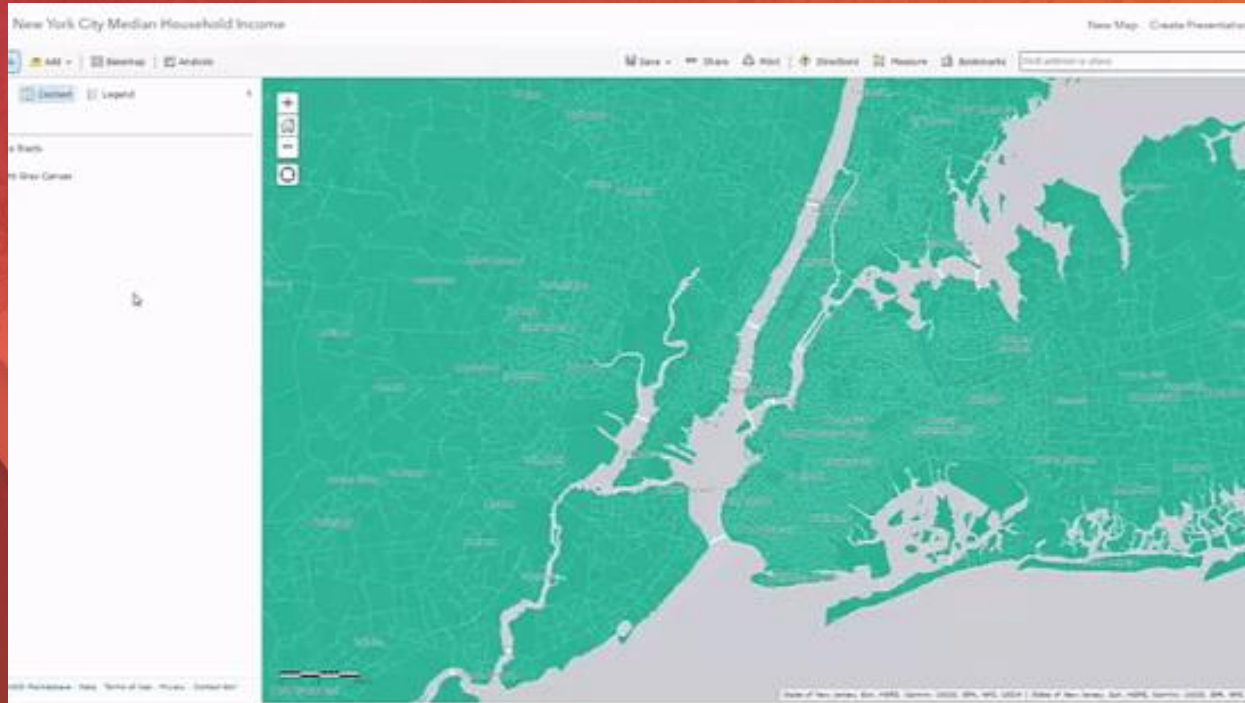
Field: Custom (Expression)

Transparency

When to use transparency

- Showcase something in the basemap
- Soften the colors in the map
- Using an attribute to drive transparency value
 - Adds emphasis
 - Shows a pattern



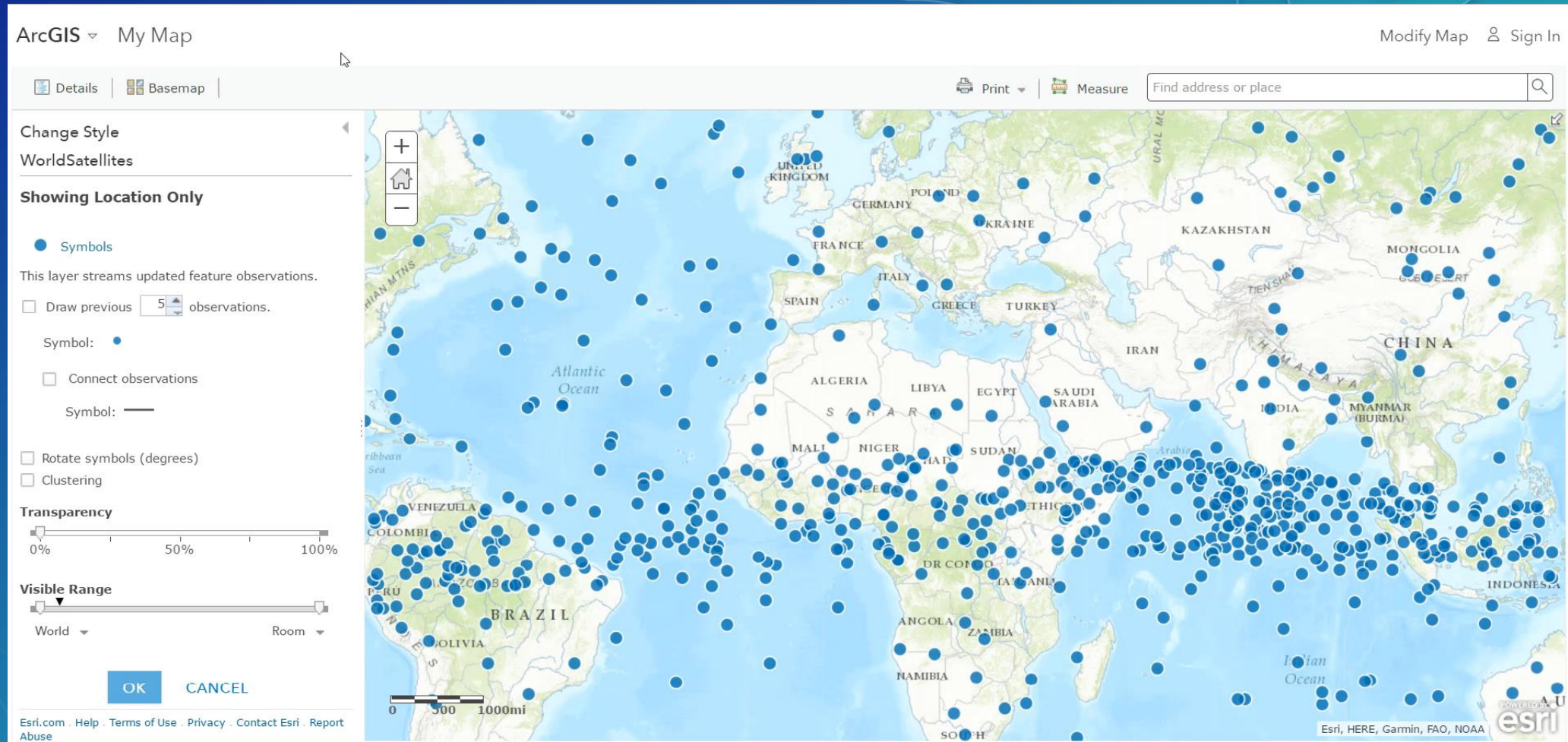


Explore your
data with
Smart
Mapping

What's Coming?

Clustering
(end of
2017)

Remove
the clutter
from your
point maps



Resources

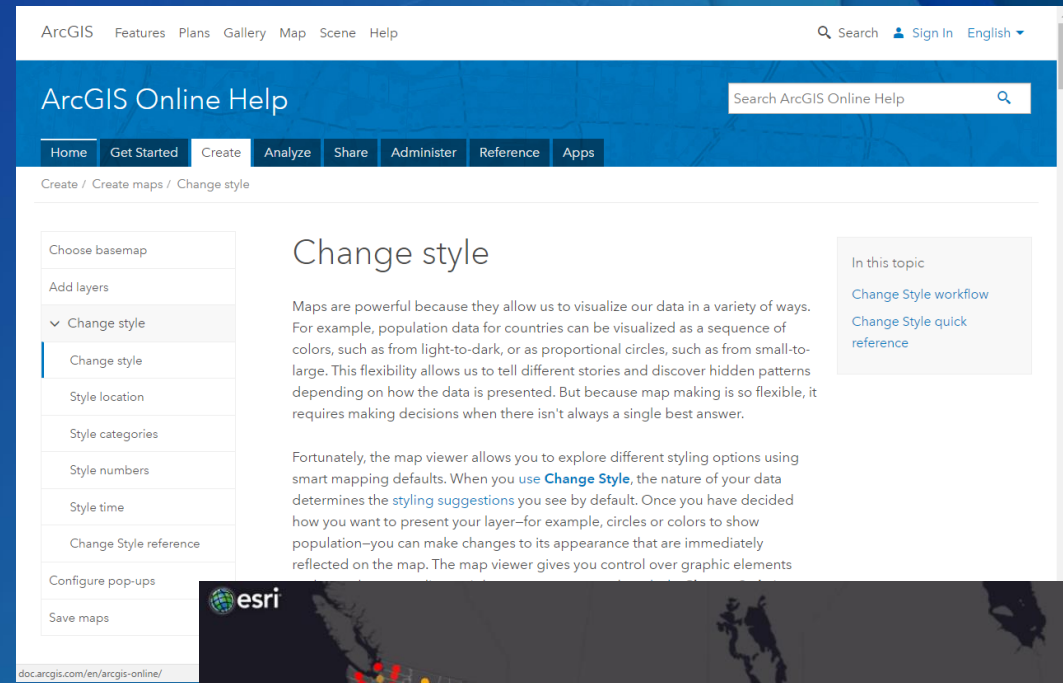
Check these out later!

[Change Style Help Pages](#)

[Smart Mapping](#)

[How to Smart Map series](#)

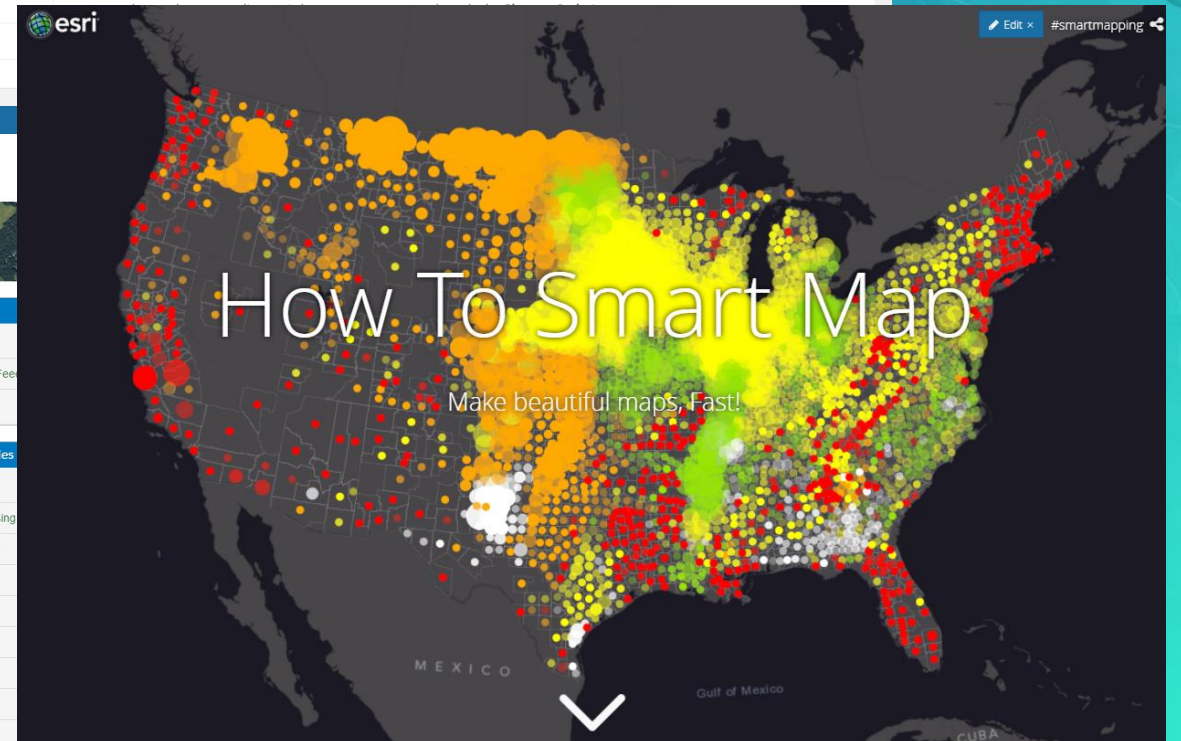
[6 Easy Ways to Improve Your Maps](#)



The screenshot shows the ArcGIS Online Help interface. At the top, there's a navigation bar with links: ArcGIS, Features, Plans, Gallery, Map, Scene, Help. A search bar is on the right. Below this is the 'ArcGIS Online Help' header with a search input field. A secondary navigation bar contains tabs: Home, Get Started, Create, Analyze, Share, Administer, Reference, Apps. The main content area is titled 'Create / Create maps / Change style'. On the left, a sidebar lists options: Choose basemap, Add layers, Change style (selected), Style location, Style categories, Style numbers, Style time, Change Style reference, Configure pop-ups, and Save maps. The main text area is titled 'Change style' and explains that maps are powerful for visualizing data in various ways, such as by color or proportional circles. It mentions that the map viewer allows exploring different styling options using smart mapping defaults. On the right, a 'In this topic' section lists links for 'Change Style workflow' and 'Change Style quick reference'.



The screenshot shows the ArcGIS Blog page. The header includes the Esri logo and navigation links: Industries, Products, Support & Services, About, Community. A search bar is present. The main heading is 'ARCGIS BLOG'. Below it, the article title '6 Easy Ways to Improve Your Maps' is displayed, along with the author 'by Lisa Berry on April 12, 2016' and social sharing icons. The article text begins by explaining that ArcGIS allows exploring data and making useful maps, and that the 'Change Style' feature provides suggestions based on data fields and values. It mentions that these defaults can help produce an effective map quickly, but adjustments can be made for more subtle changes. A small map thumbnail is shown. The article continues with tips and tricks for getting the most out of the smart mapping experience. The first tip is '1) Think About Color', which explains that ArcGIS contains many basemap-specific color ramps to help showcase data, including color-blind friendly ones. It suggests starting with the Light and Dark Gray Canvas basemaps and choosing an alternative color ramp that matches the data context. An example is given of a map showing change in water usage in Atascadero, CA, where blue indicates more water and brown indicates less.



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