



TileMill

DEVELOPING WEB TILES

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The screenshot shows the TileMill application interface. On the left is a dark sidebar with icons for Editor, Projects, Manual, Plugins, and Settings. The main area displays a map of Centre Twp. with a zoom level of 11. A tooltip over the map says "Centre Twp. click map for info.". On the right, a "Municipal" style editor window shows a list of layers and a code editor. The code editor contains the following CSS:

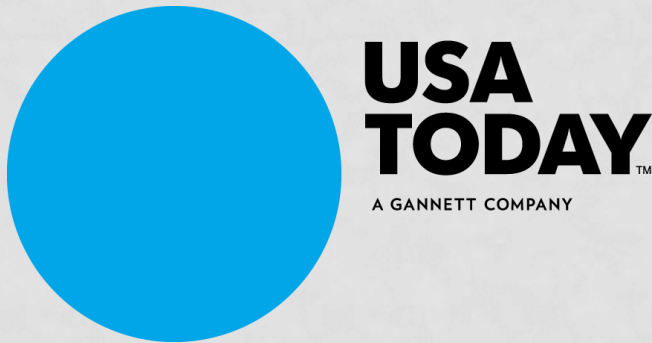
```
120 [OBJECTID=92] { polygon-fill:@g; }
121 [OBJECTID=93] { polygon-fill:@t; }
122 [OBJECTID=94] { polygon-fill:@b; }
123 [OBJECTID=95] { polygon-fill:@pur; }
124 [OBJECTID=96] { polygon-fill:@p; }
125 [OBJECTID=97] { polygon-fill:@t; }
126 [OBJECTID=98] { polygon-fill:@o; }
127 [OBJECTID=99] { polygon-fill:@g; }
128 [OBJECTID=100] { polygon-fill:@g; }
129 [OBJECTID=101] { polygon-fill:@t; }
130 [OBJECTID=102] { polygon-fill:@b; }
131 [OBJECTID=103] { polygon-fill:@pur; }
132 [OBJECTID=104] { polygon-fill:@p; }
133 }
134
135 #municipal::line{
136   [zoom=10] {line-width:1}
137   [zoom=11] {line-width:1.2}
138   [zoom=12] {line-width:1.5}
139   [zoom=13] {line-width:2}
140   [zoom=14] {line-width:3}
141   line-color:@white;
142   line-join:round;
143 }
144
145 /*
146 #munilabel::small[zoom=11]{
147   text-name:"[Muni_Name]";
148   text-fill:#383737;
149   text-face-name:@font;
150   text-size:19;
151 }
```

At the bottom of the code editor is a color palette with various colored swatches.

Below the map, a "Layers" panel is visible, listing the following layers:

- #building
- #munilabel
- #tcrbound
- #municipal

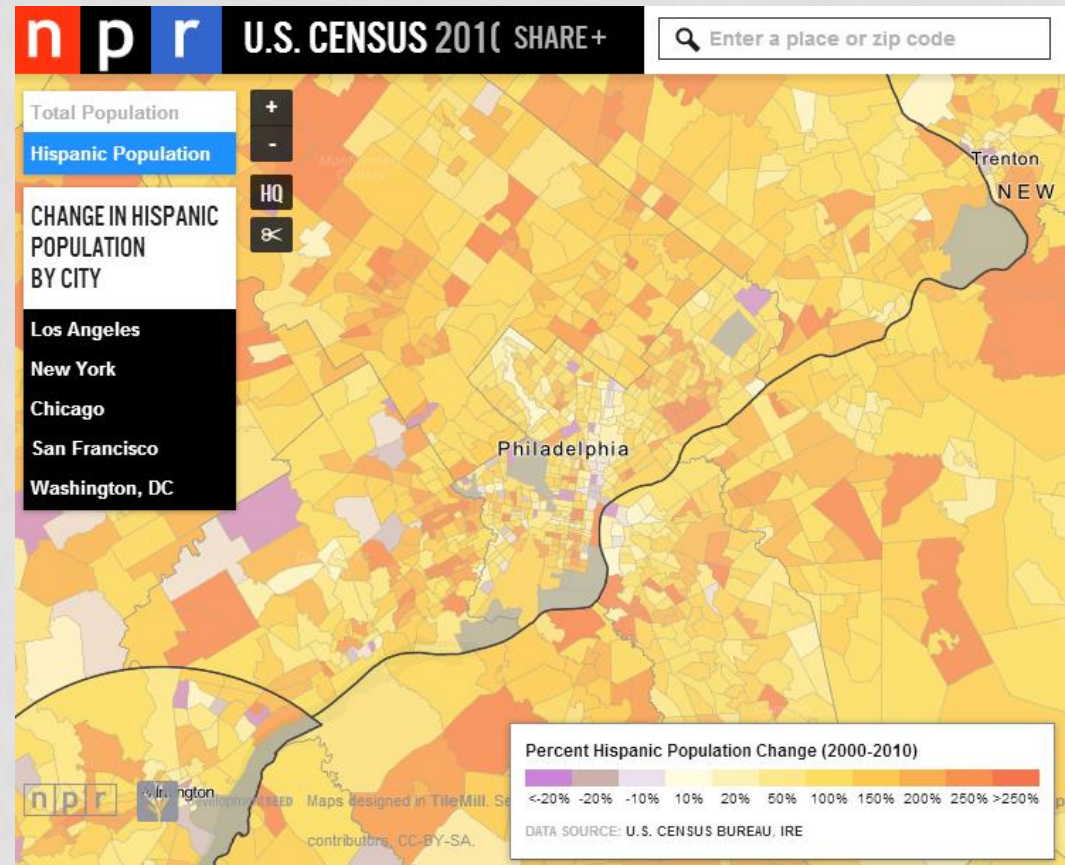
CSS for Maps



PROS OF WEB TILES



- Speed
- Cross Browser
- Design Control!
- Multi-scale
- Easy integration with applications
 - Leaflet, Mapbox, ArcGIS Online



CONS OF WEB TILES



- Data not Dynamic
 - Data updates require exporting a new tile file.
- Large scale range = large file size
 - Limit scale range
- TileMill 2: In development on GitHub, vector tiles!

ADD TILE TO ARCGIS ONLINE

- My Map
- Add layer from web.
- A tile layer
- Enter URL with your mapID.
- Sub domains: a, b, c, d

Add Layer from Web

What type of data are you referencing?

A Tile Layer

The tile layer URL must contain the level, column and row placeholders. The subdomain placeholder is optional.
(e.g., `http://{subDomain}.domain.com/<path>/{level}/{col}/{row}.jpg`)

URL: `http://{subDomain}.tiles.mapbox.com/v3/MAPID/{level}/{col}/{row}.png`

Use as Basemap

Title: Your Title Here!

Credits:

Subdomains: a, b, c, d

Subdomains must contain a comma-separated list of subdomain labels (e.g., a,b,c).

Extent: SET TILE COVERAGE

Having trouble displaying your Tile layer? Help us improve this site by sending us the URL via the Contact Us link.

ADD LAYER CANCEL

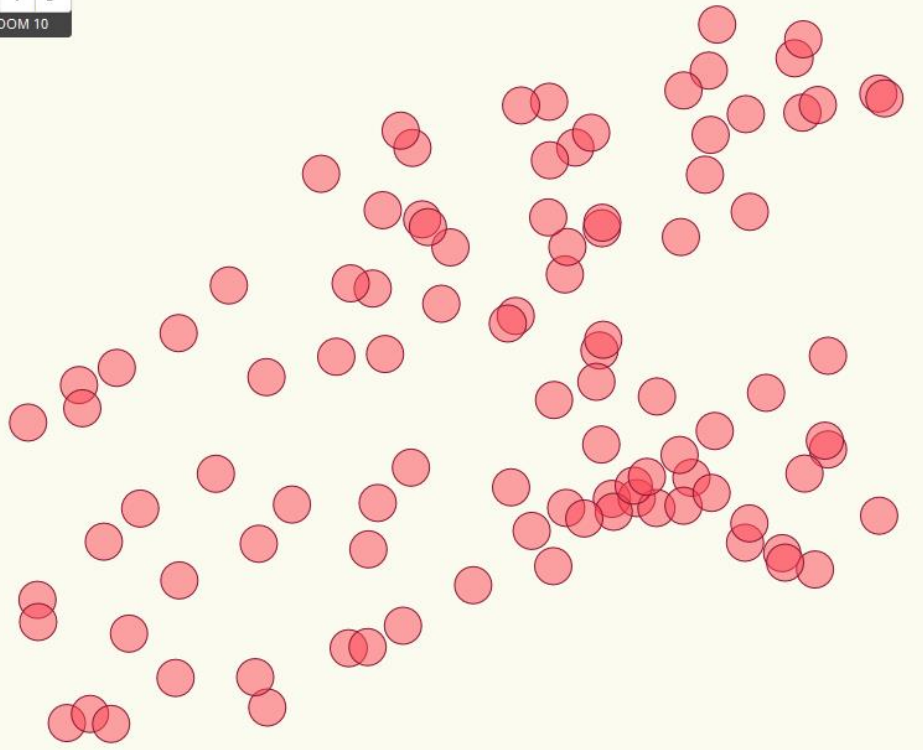
EXAMPLES

- Bi-Variate map. Poverty and Median Income
- Radon
- Portland Building footprint Age
- Netherlands Building footprint Age
- Washington Post
- National Parks

TileMill

Editor

ZOOM 10



Projects

Manual

Plugins

Settings

Layers

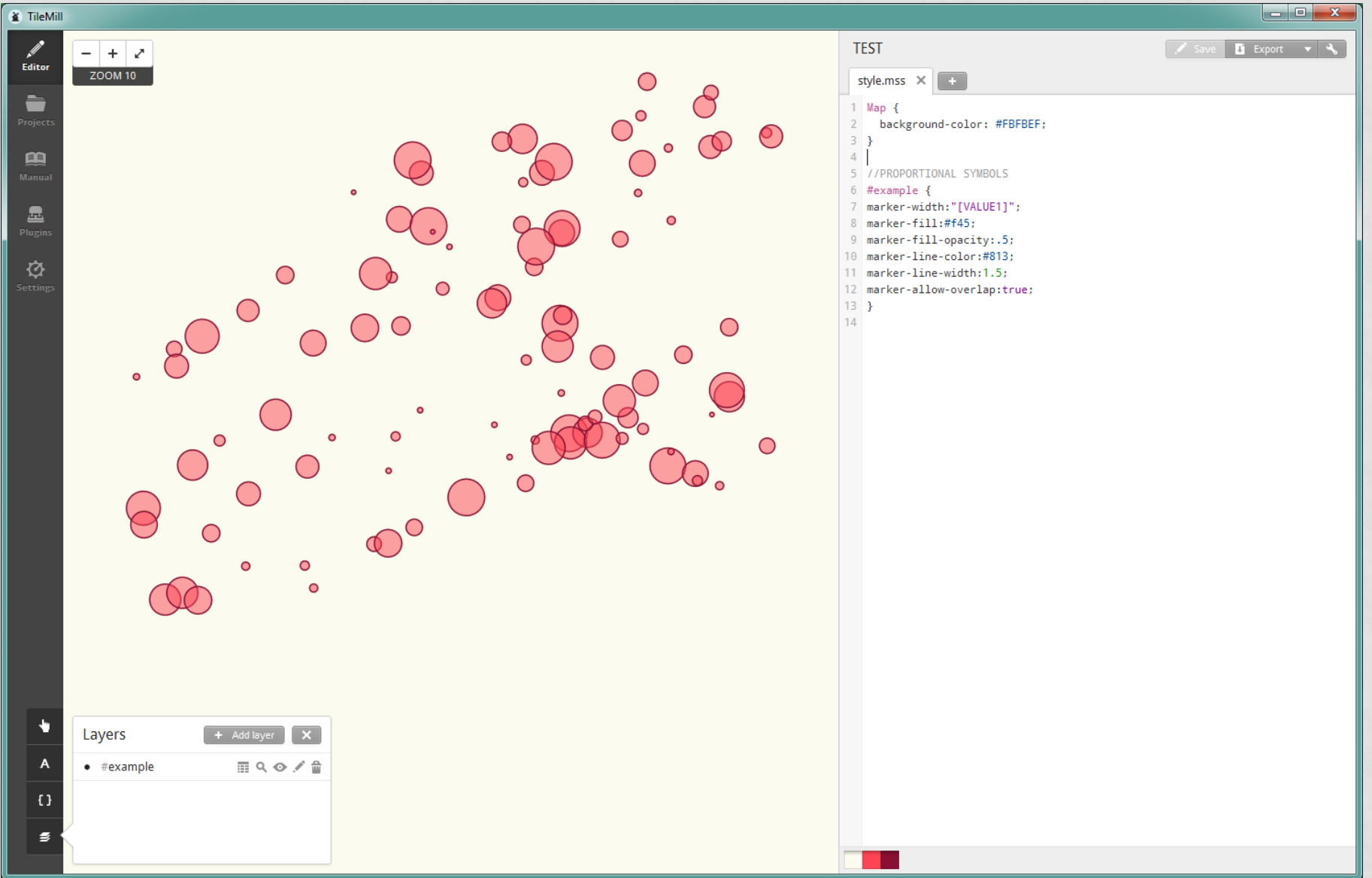
+ Add layer

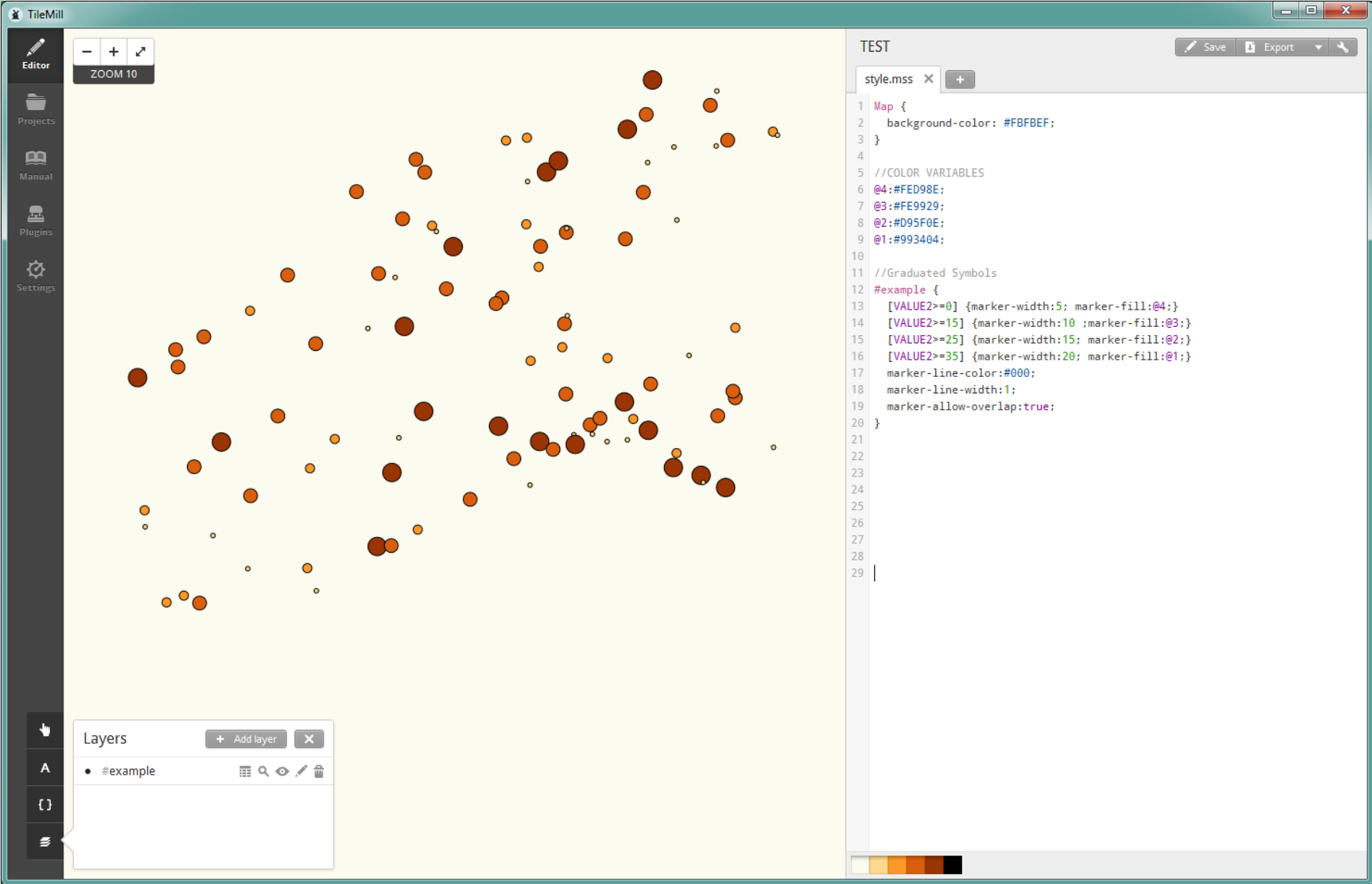
- #example

TEST

style.mss

```
1 Map {
2   background-color: #FBFBFB;
3 }
4
5 //SIMPLE EXAMPLE
6 #example {
7   marker-width:30;
8   marker-fill:#f45;
9   marker-fill-opacity:.5;
10  marker-line-color:#813;
11  marker-allow-overlap:true;
12 }
13
```



TileMill

Editor

Projects

Manual

Plugins

Settings

ZOOM 10

Layers

+ Add layer X

• #example

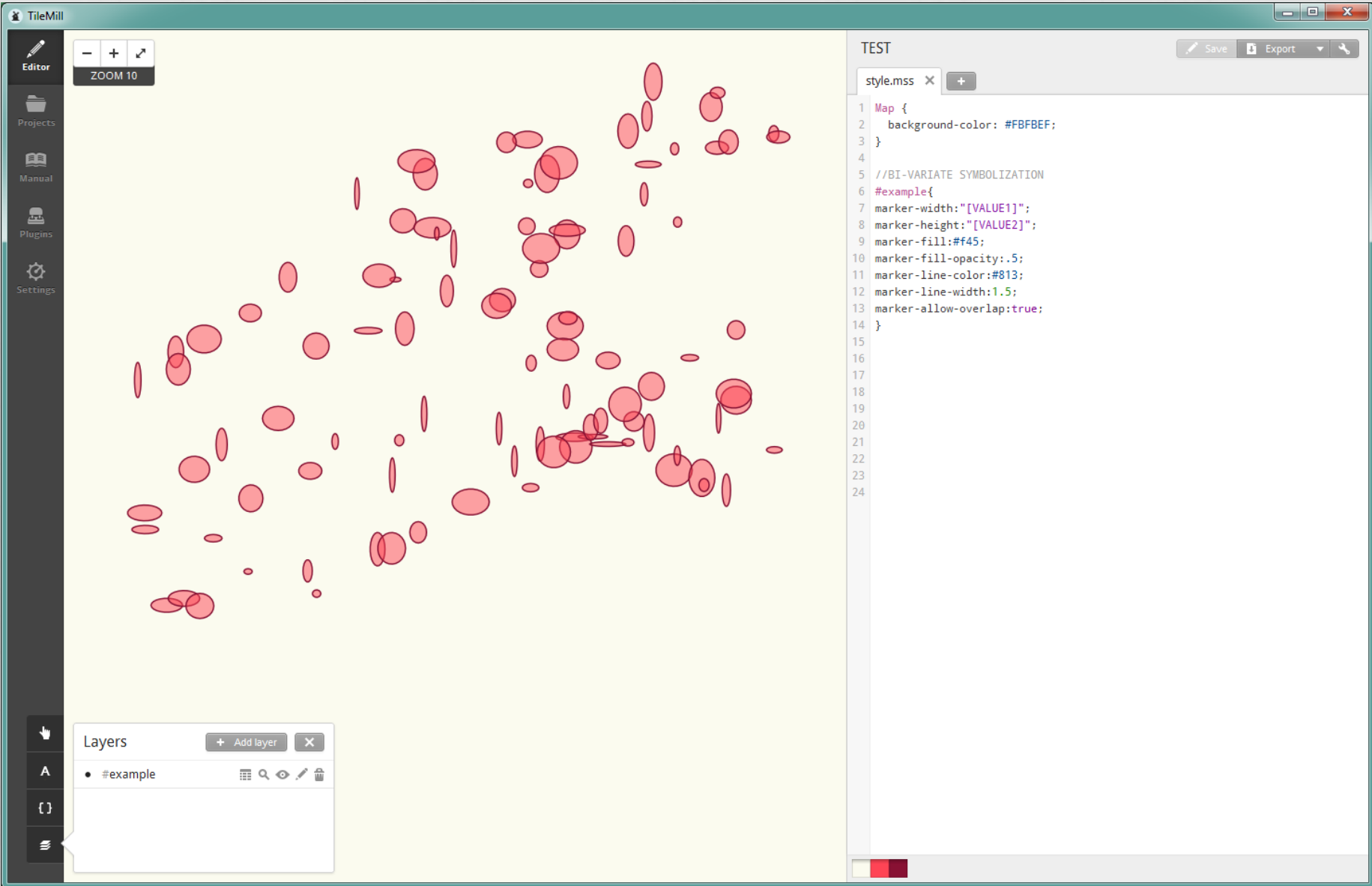
TEST

Save Export

style.mss X +

```
1 Map {
2   background-color: #FBFBFB;
3 }
4
5 //COLOR VARIABLES
6 @4:#FED98E;
7 @3:#FE9929;
8 @2:#D95F0E;
9 @1:#993404;
10
11 //Graduated Symbols
12 #example {
13   [VALUE2>=0] {marker-width:5; marker-fill:@4;}
14   [VALUE2>=15] {marker-width:10; marker-fill:@3;}
15   [VALUE2>=25] {marker-width:15; marker-fill:@2;}
16   [VALUE2>=35] {marker-width:20; marker-fill:@1;}
17   marker-line-color:#000;
18   marker-line-width:1;
19   marker-allow-overlap:true;
20 }
21
22
23
24
25
26
27
28
29
```





QUESTIONS

- Contact Steve Cline
 - spcline@mccormicktaylor.com
- Download TileMill
 - <https://www.mapbox.com/tilemill/>
- Getting Started with CartoCSS
 - www.mapbox.com/tilemill/docs/crashcourse/introduction/
- Tip
 - Open sample .mss files in a text editor like notepad to view the code. Copy paste to TileMill to modify and use your own data.