



ArcGIS Maps SDK for JavaScript: Fundamentals

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Agenda

- Bring in your data
- Data-driven styling
- UI components (widgets & map components)
- Editing
- Client-side analysis

Resources

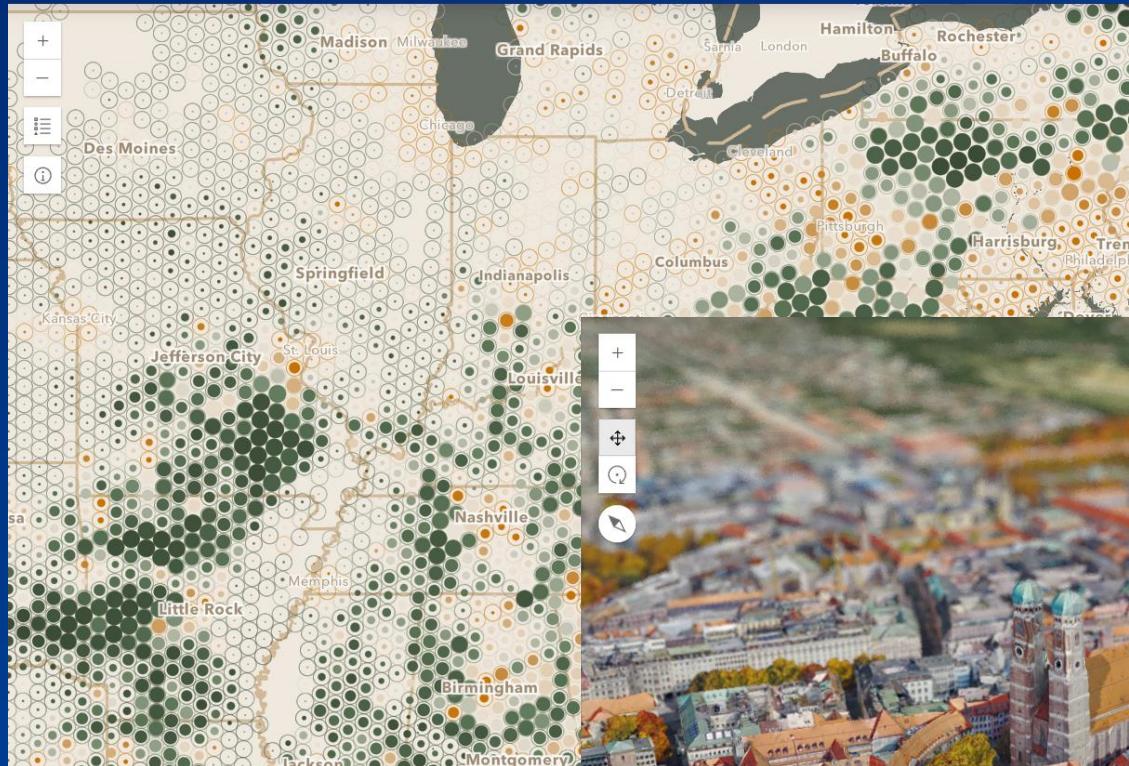
- GitHub shortened link!

Bring in your data



WebMap & WebScene

- ArcGIS Online
- ArcGIS Enterprise



WebMap & WebScene

- ArcGIS Online

```
import WebMap from "esri/WebMap";
import MapView from "esri/views/MapView";
import PortalItem from "esri/portal/PortalItem";

const webMap = new WebMap({
  portalItem: new PortalItem({
    id: "f2e9b762544945f390ca4ac3671cfa72"
  })
});

const view = new MapView({
  container: "viewDiv",
  map: webMap
});
```

WebMap & WebScene

- ArcGIS Enterprise

```
import WebMap from "esri/WebMap";
import MapView from "esri/views/MapView";
import PortalItem from "esri/portal/PortalItem";

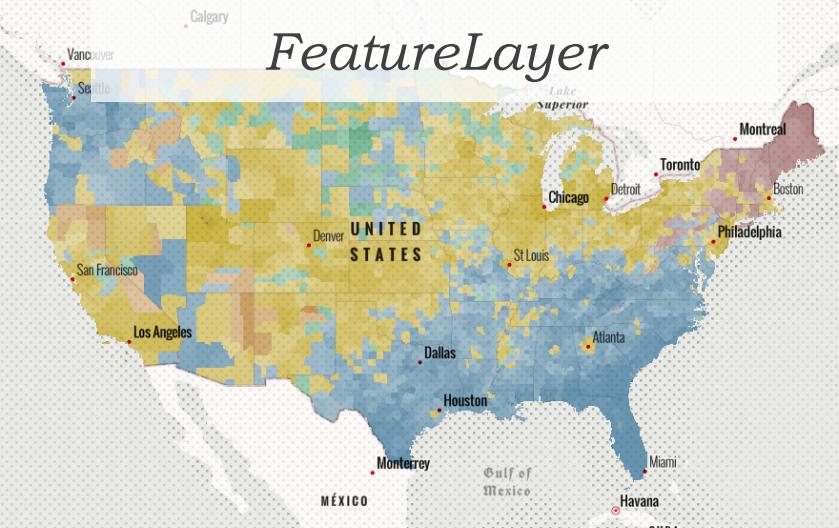
const webMap = new WebMap({
  portalItem: new PortalItem({
    id: "f2e9b762544945f390ca4ac3671cfa72",
    portal: {
      url: "https://server.domain.com/portal"
    }
  })
});

const view = new MapView({
  container: "viewDiv",
  map: webMap
});
```

MapView & SceneView

- Data is stored on the Map
 - Basemap layers
 - Operational / editable layers
 - Tables
- The view renders the map
- The view provides map interaction and navigation

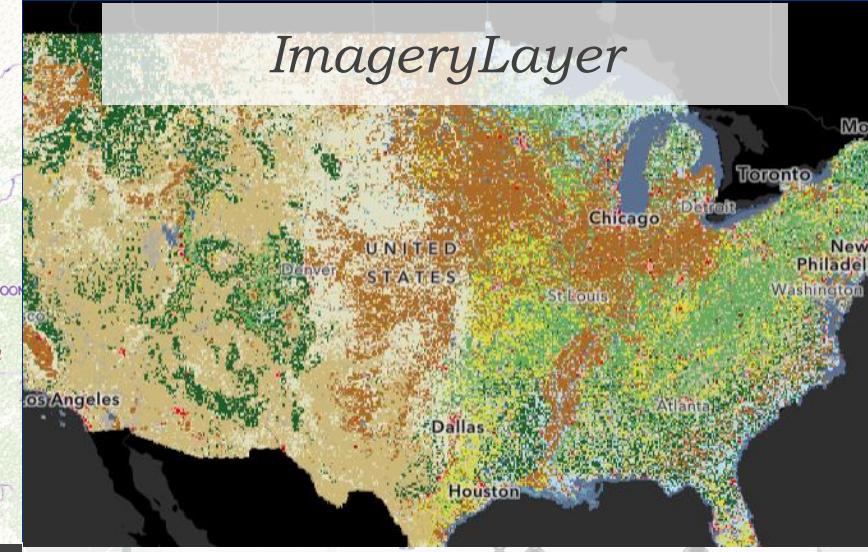
```
const webScene = new WebScene({  
  portalItem: {  
    id: "579f97b2f3b94d4a8e48a5f140a6639b"  
  }  
});  
  
const view = new SceneView({  
  map: webScene,  
  container: "viewDiv"  
});
```



FeatureLayer



VectorTileLayer



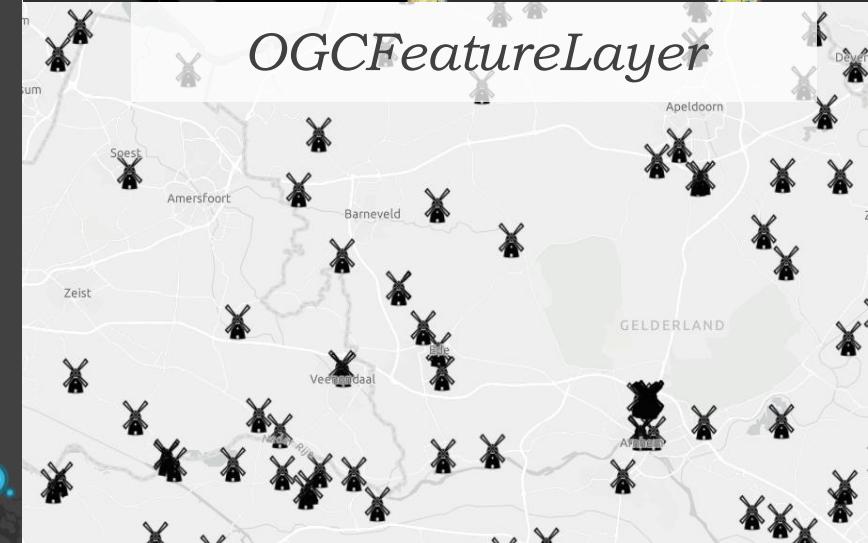
ImageryLayer



SceneLayer



GeoJSONLayer



OGCFeatureLayer

- CSV
- BUILDINGSCENE
- INTEGRATEDMESH
- MAPIMAGE
- STREAM

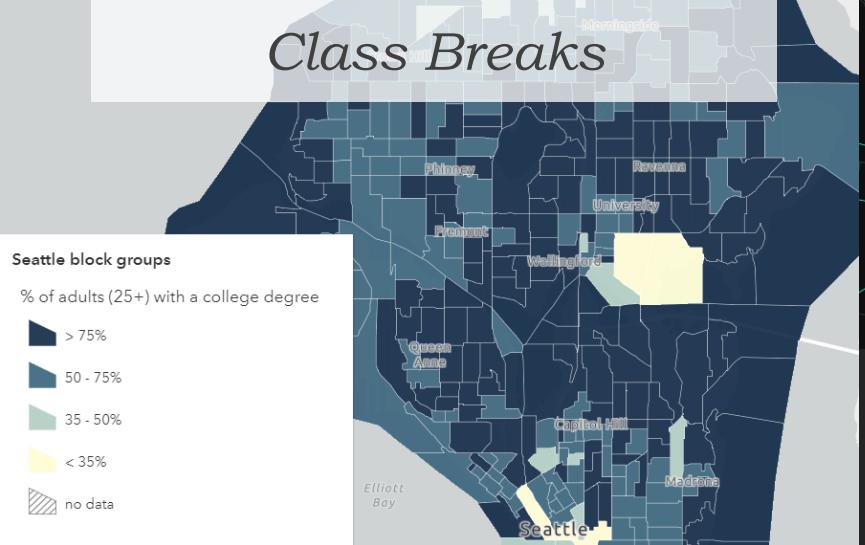
- OPENSTREETMAP
- KNOWLEDGE-GRAPH
- WFS
- WMS
- ...

LAYERS

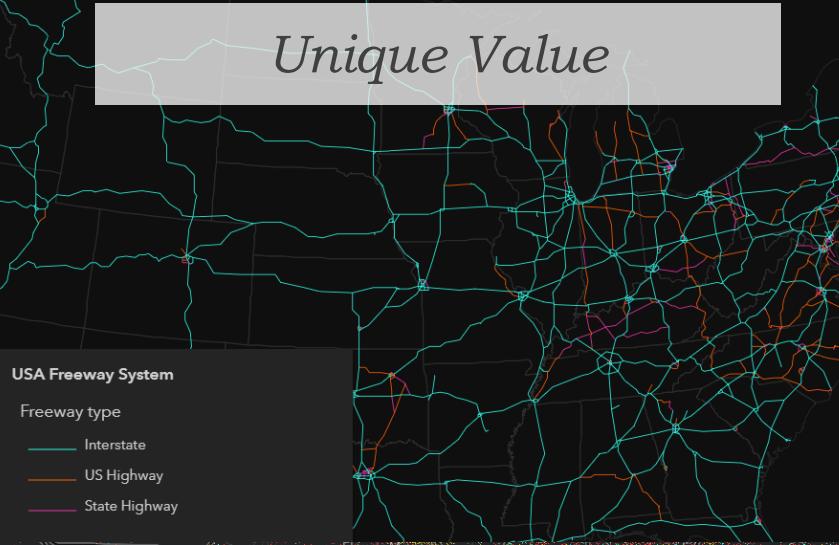
Data-driven styling



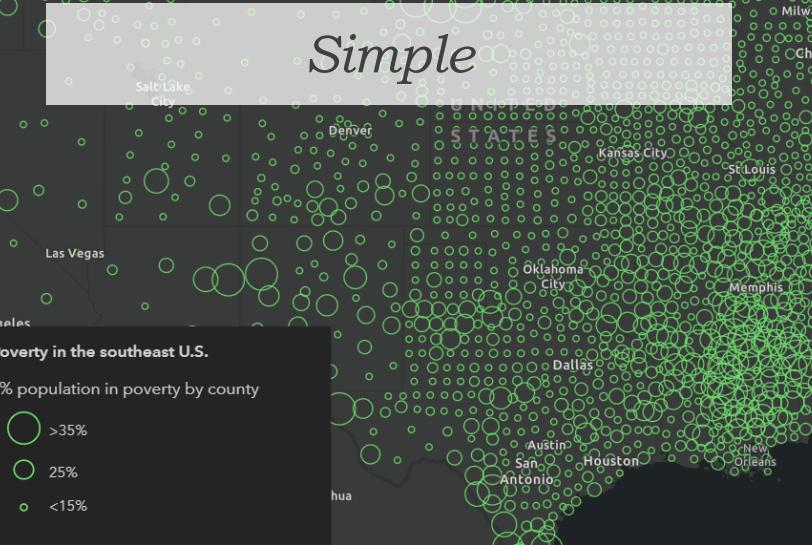
Class Breaks



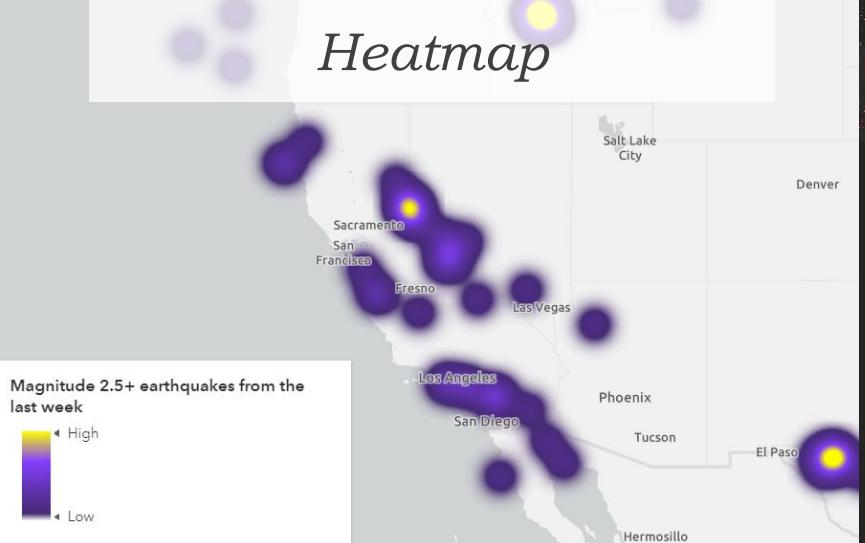
Unique Value



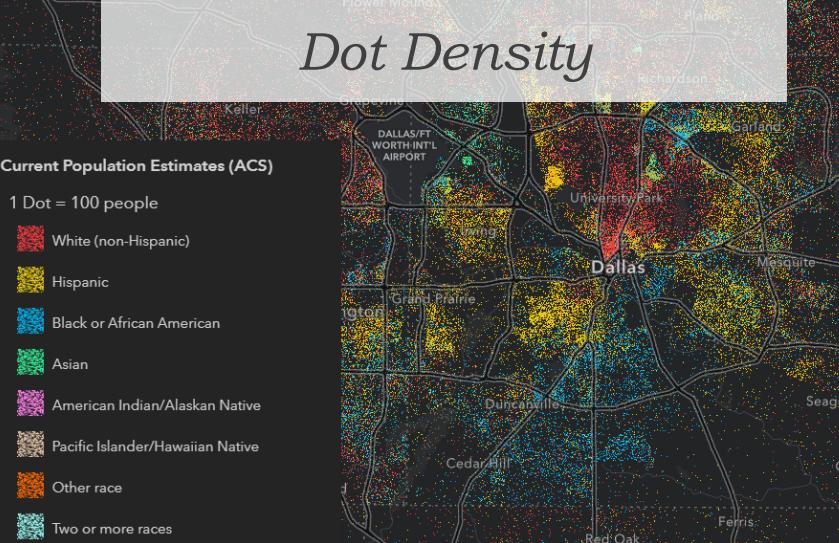
Simple



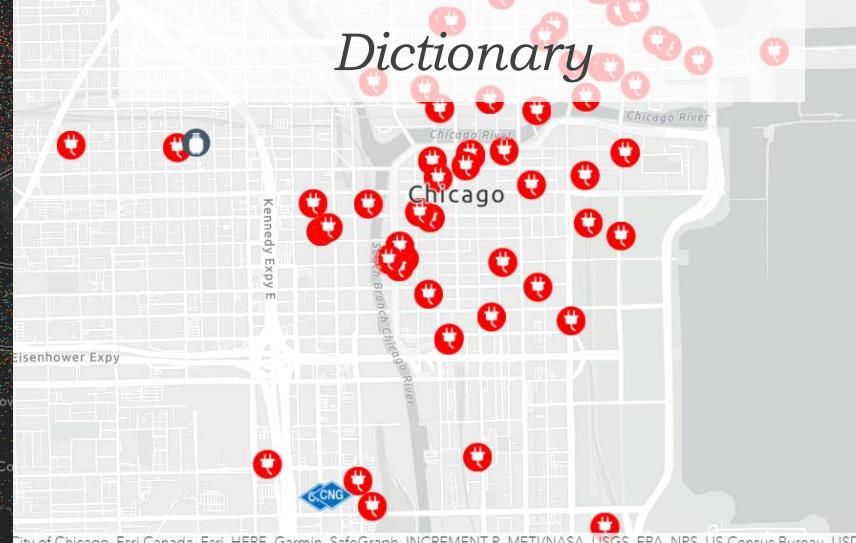
Heatmap



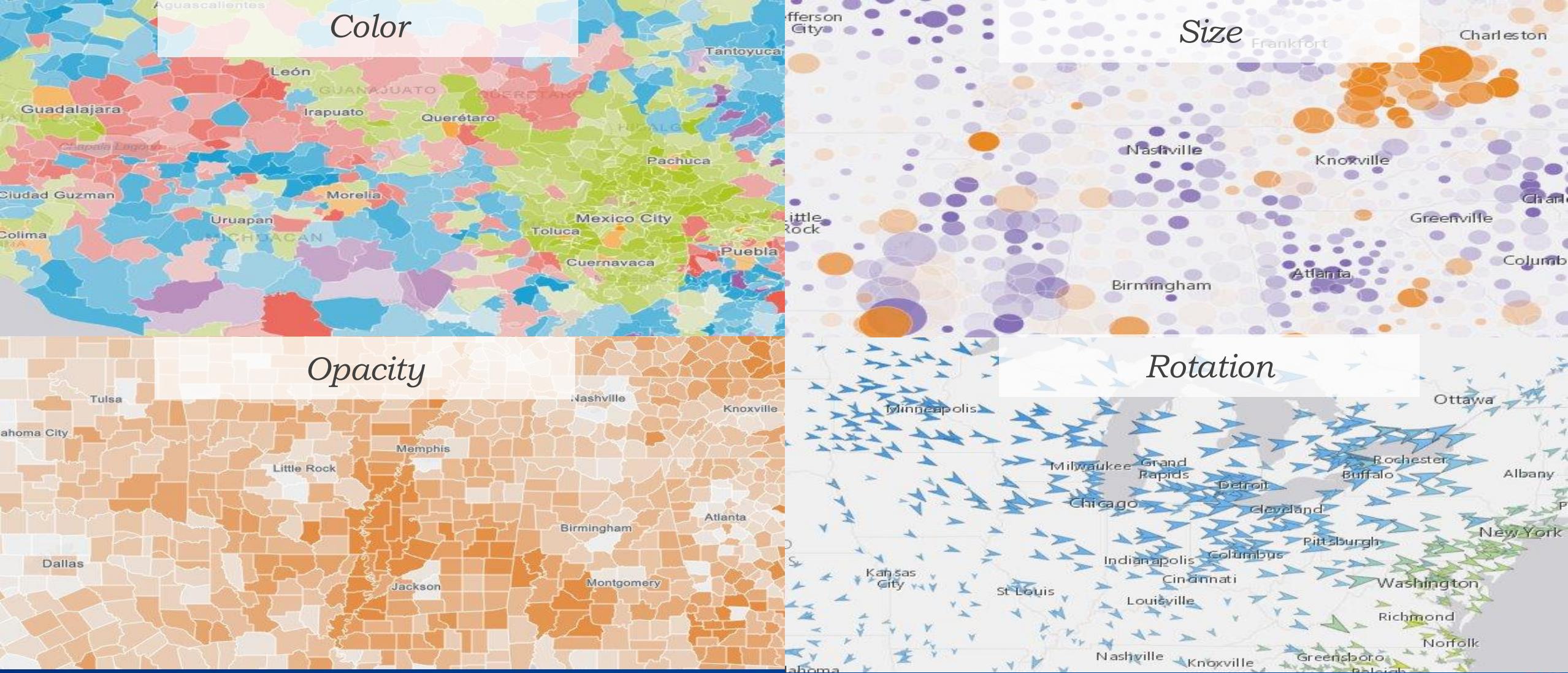
Dot Density



Dictionary

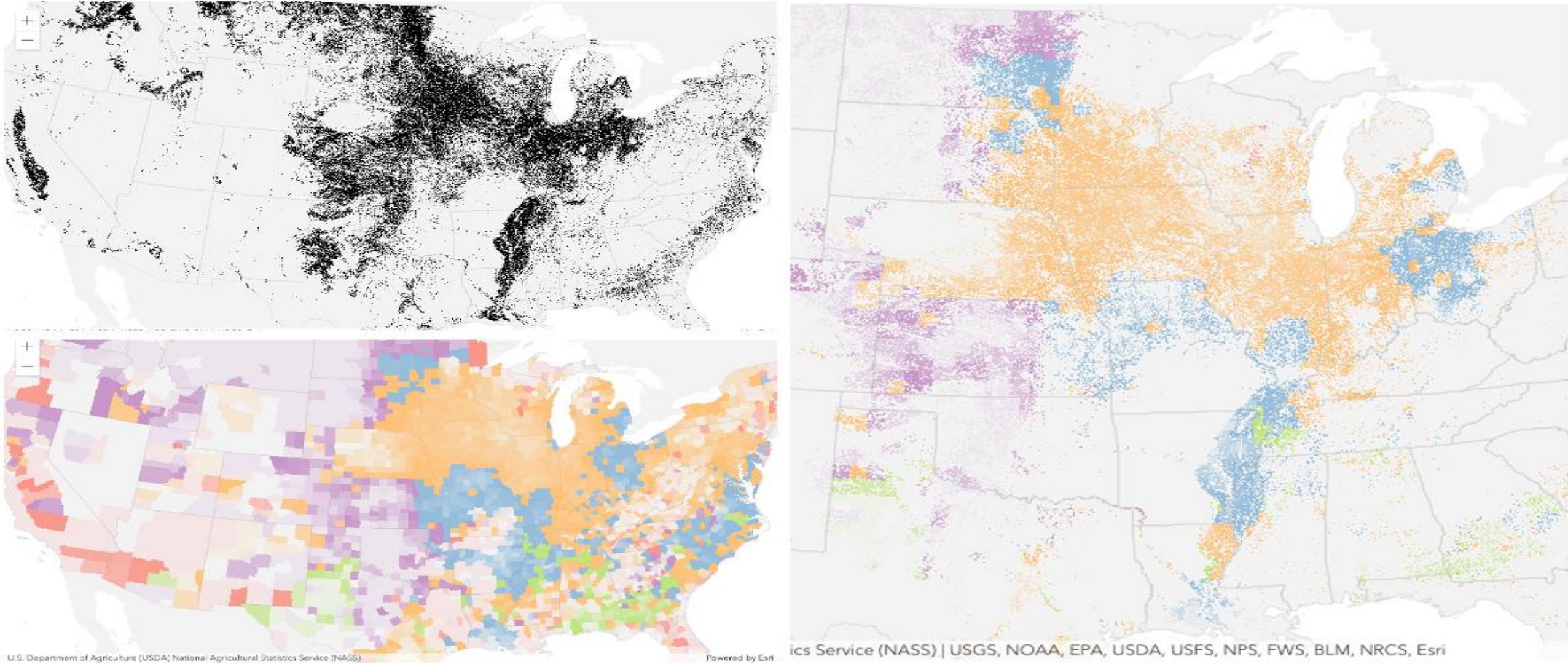


Renderers



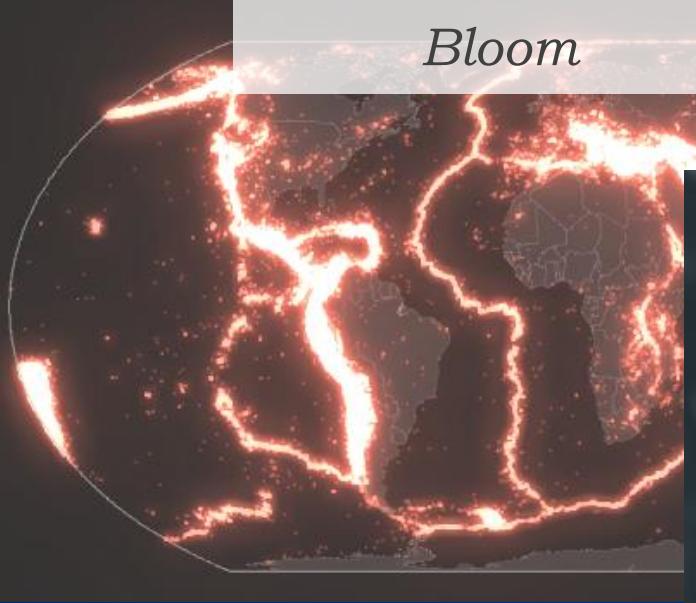
VISUAL VARIABLES

- COLOR
- SIZE
- OPACITY
- ROTATION



LAYER BLENDING

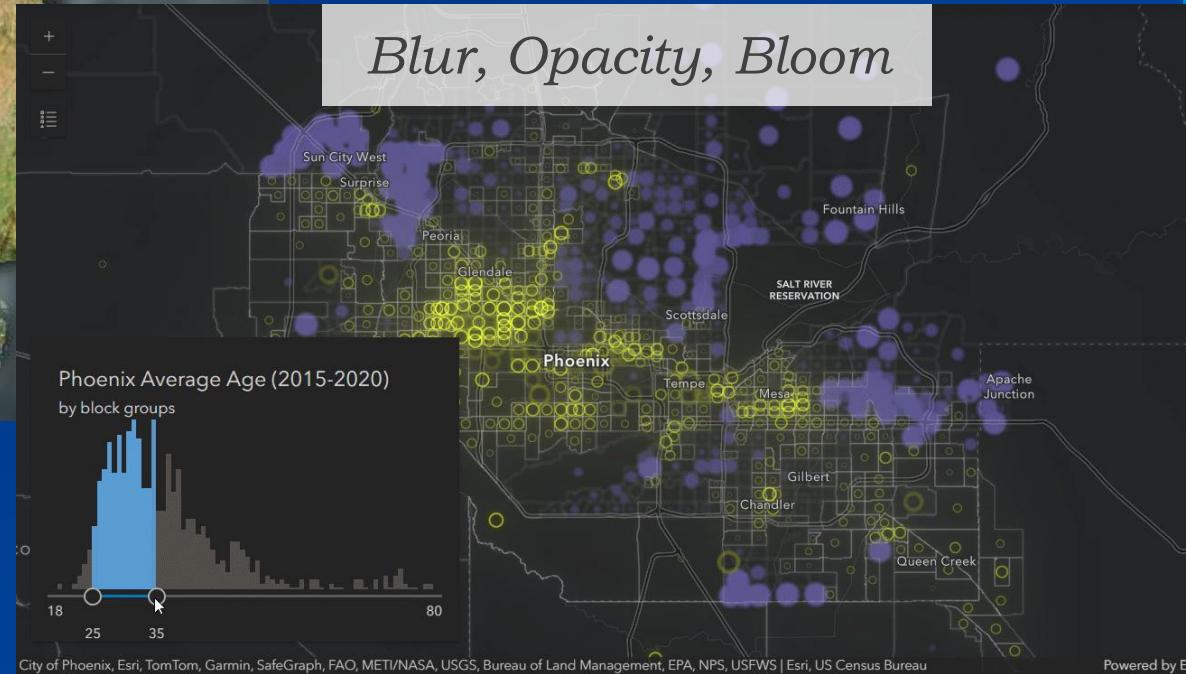
Bloom



Drop-shadow



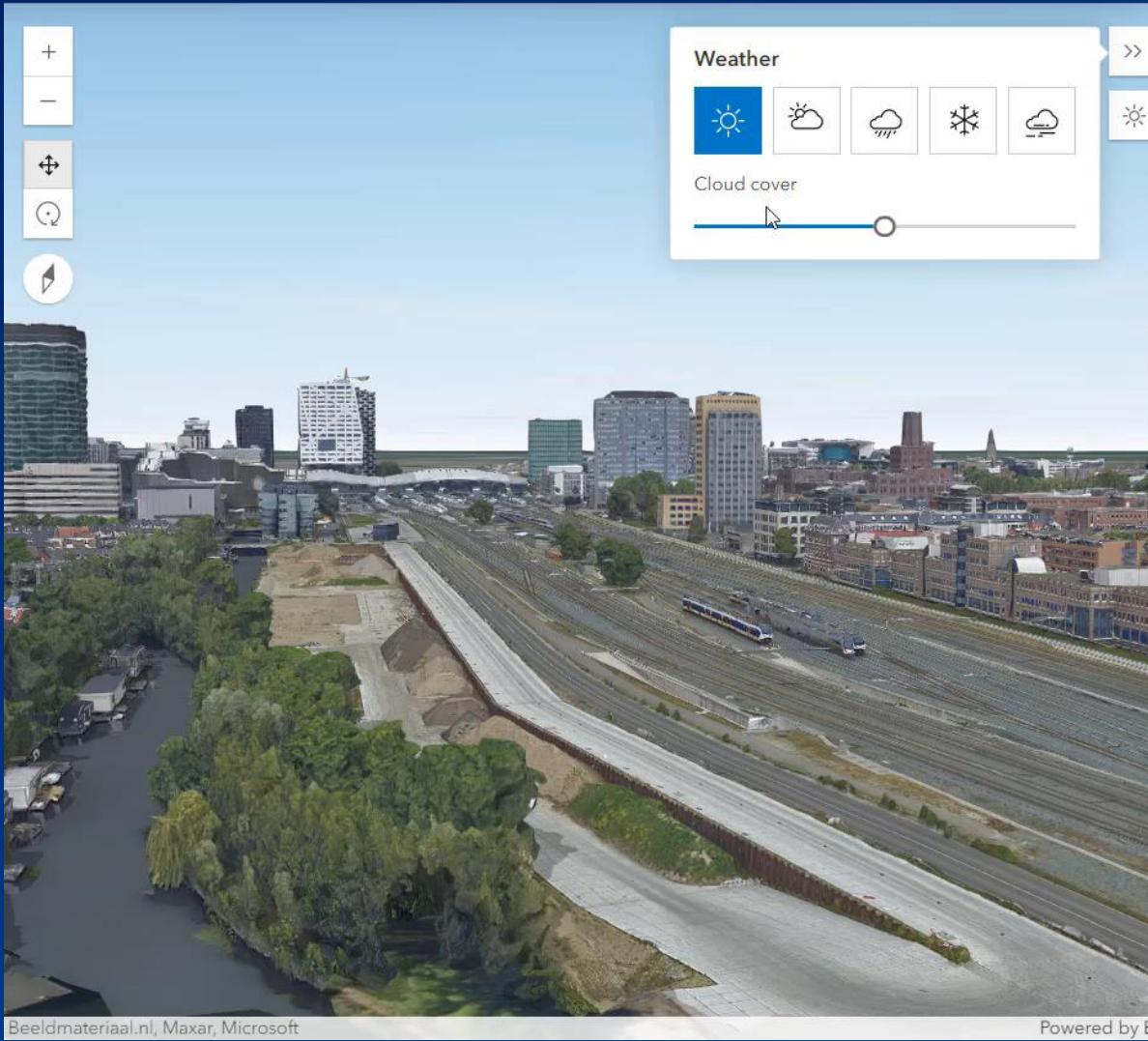
Blur, Opacity, Bloom



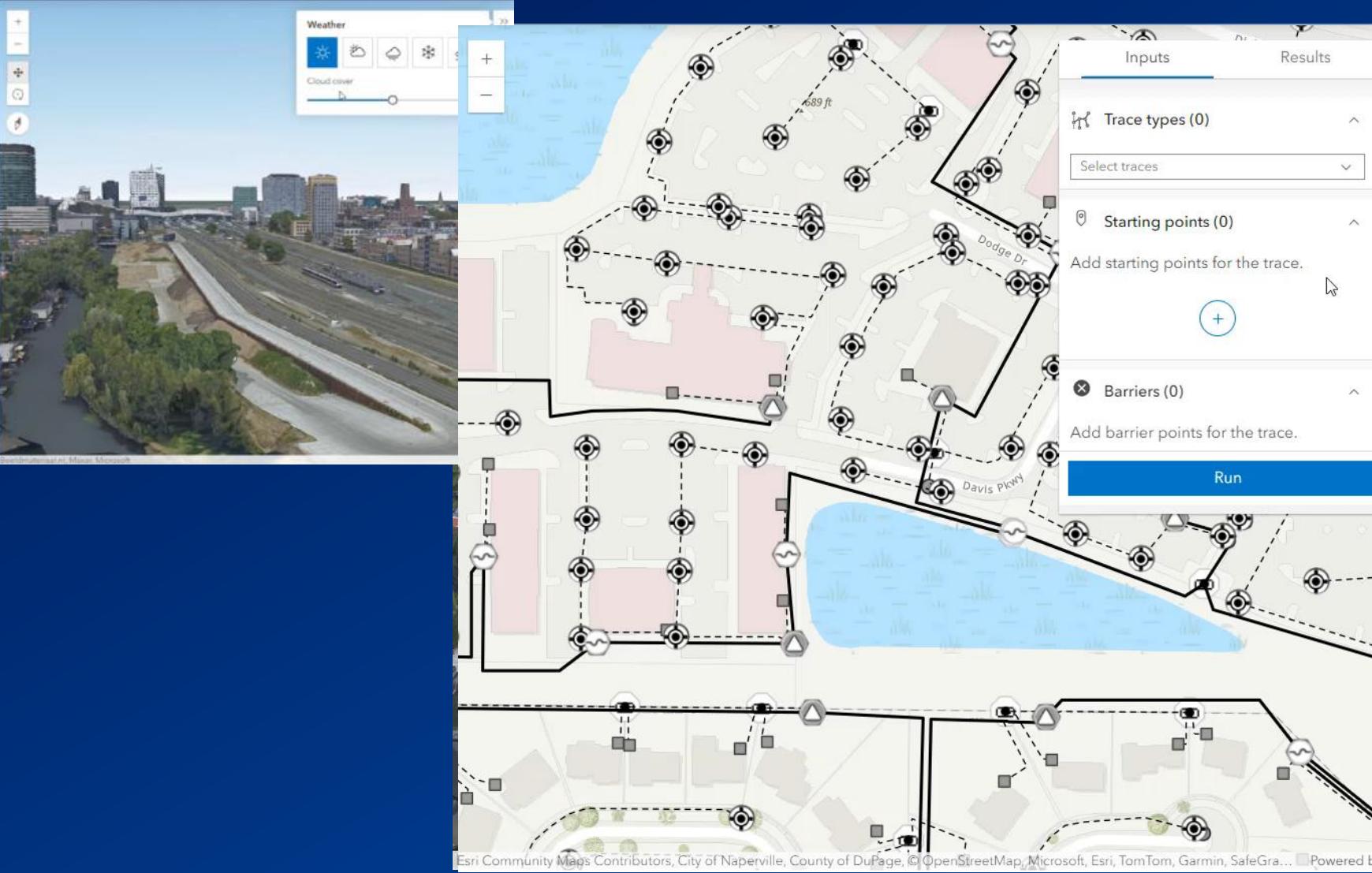
EFFECTS

UI components (widgets & map components)

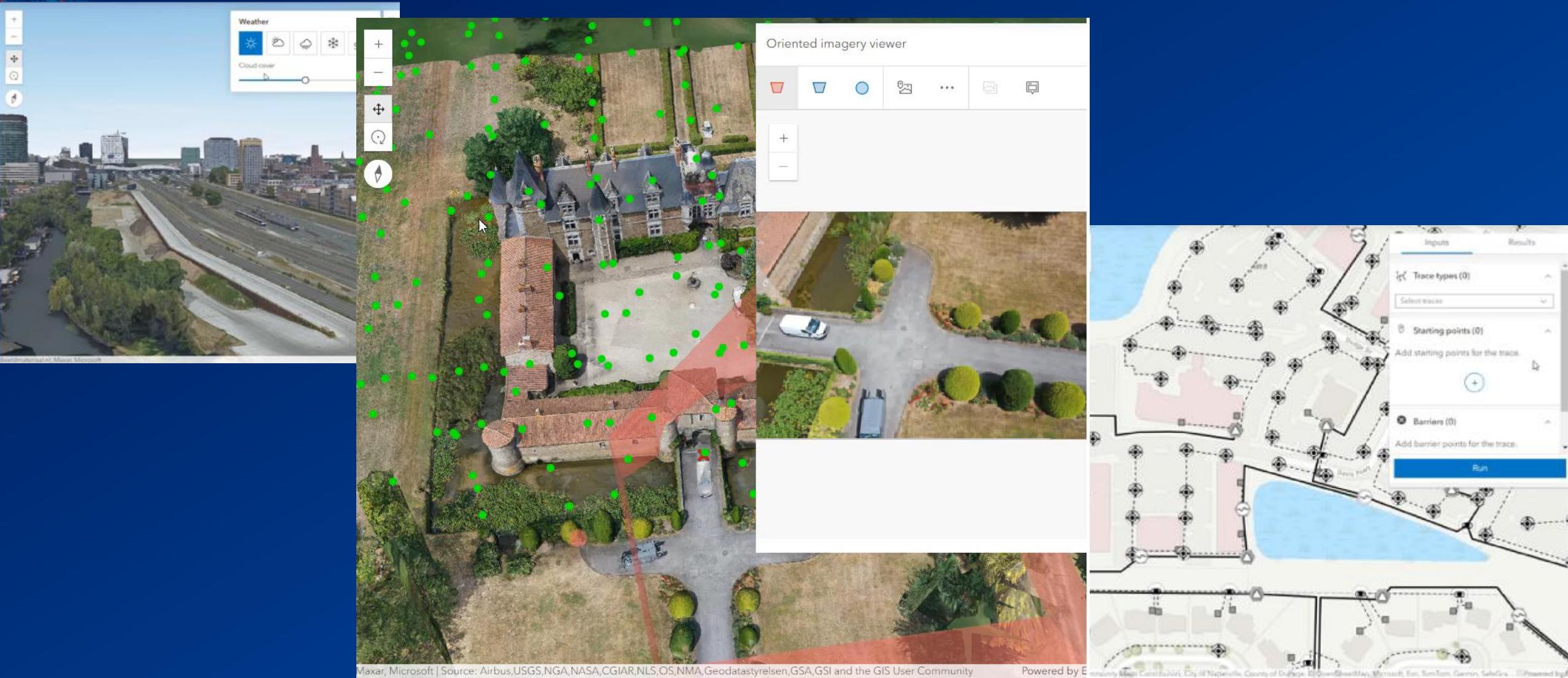




WIDGETS / MAP COMPONENTS



WIDGETS / MAP COMPONENTS



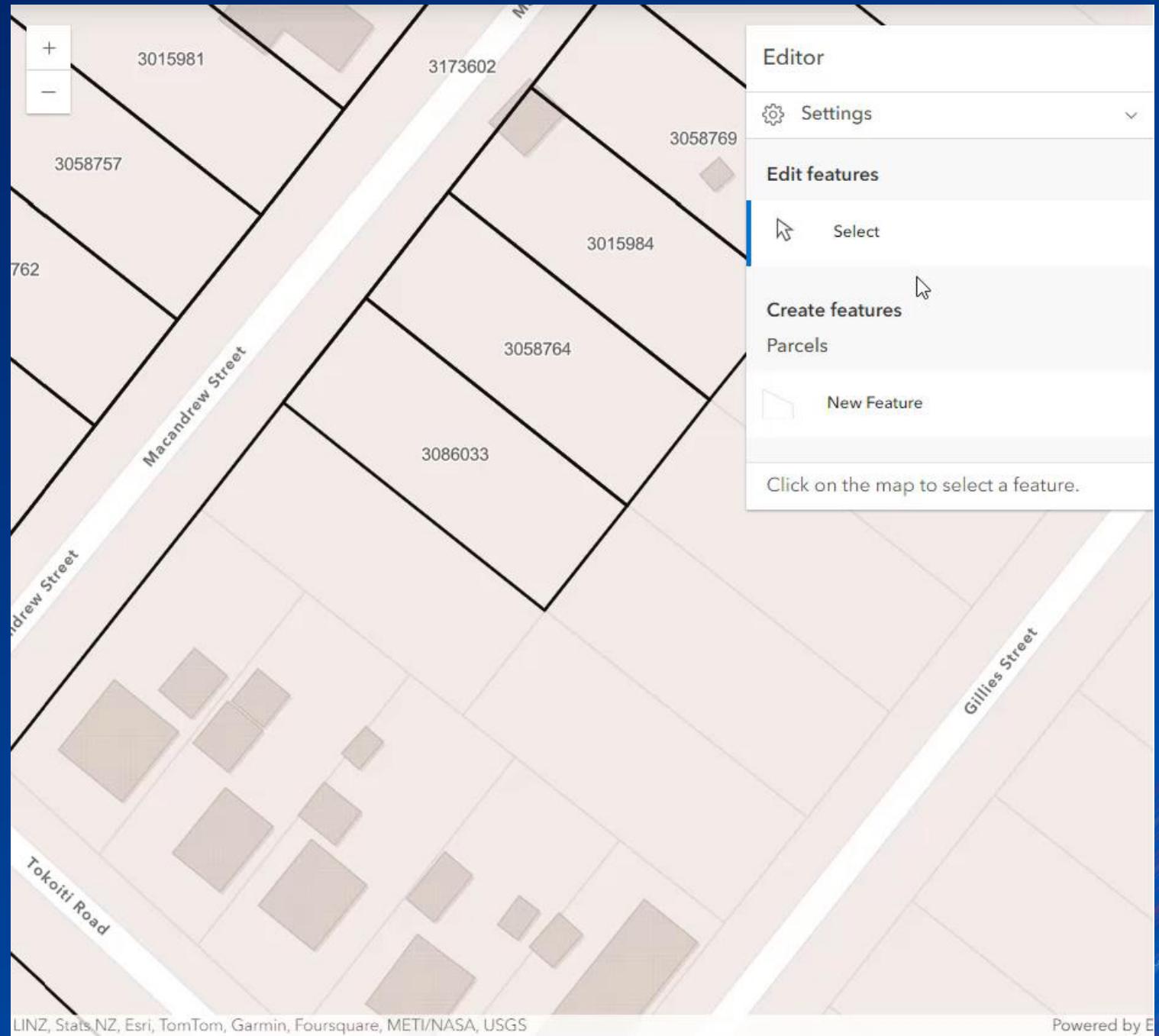
WIDGETS / MAP COMPONENTS

Editing



Editing

- Editor
- FeatureTable
- Attribute, Geometry, Attachments
- Related Records
- Snapping
- 2D / 3D
- Editing constraints
- Branch-versioned data support



Client-side analysis



The screenshot shows a 3D city model with buildings colored in blue, red, and orange. A query geometry tool is visible on the left, and a network traffic analysis tool is on the right.

Query by geometry

Draw a geometry to query by:

Set a geometry buffer size:
0m

Clear

Network

Preserve log

Disable cache No throttling

sceneserver

Invert

Hide data URLs Hide extension URLs

All Fetch/XHR Doc CSS JS Font Img M

Blocked response cookies Blocked requests

3rd-party requests

5000 ms 10000 ms

Name	Status	Size	Time
31-0-0-0-0-3-3	200	1.4 kB	84 ...
22-0-0-0-1-2	200	1.4 kB	71 ...
31-0-0-0-0-2-0	200	1.5 kB	84 ...
11-0-0-0-0-1	200	1.4 kB	84 ...
30-0-0-1-1	200	1.2 kB	83 ...
16-0-0-0-1	200	1.4 kB	86 ...
22-0-0-1-0-1	200	1.5 kB	83 ...
31-0-0-0-0-2-3	200	1.4 kB	83 ...
18-0-0-0-0	200	1.4 kB	85 ...
22-0-0-1-1-0-2	200	1.4 kB	84 ...
31-0-0-0-0-0-0	200	1.4 kB	82 ...

345 / 929 requests | 498 kB / 11.5 MB transferred

Client-side analysis

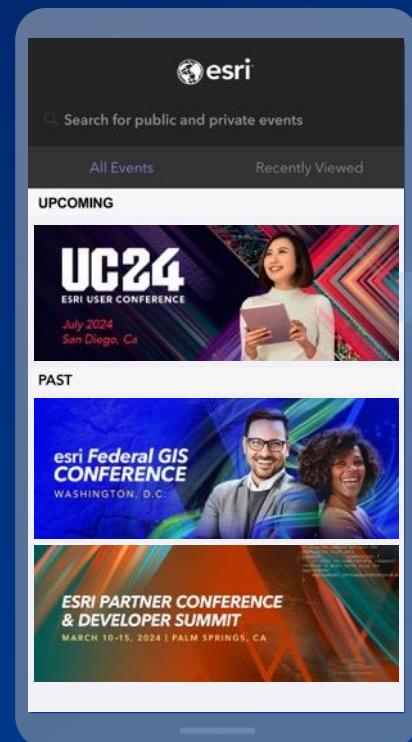
- LAYERVIEW
- GEOMETRYENGINE

Resources

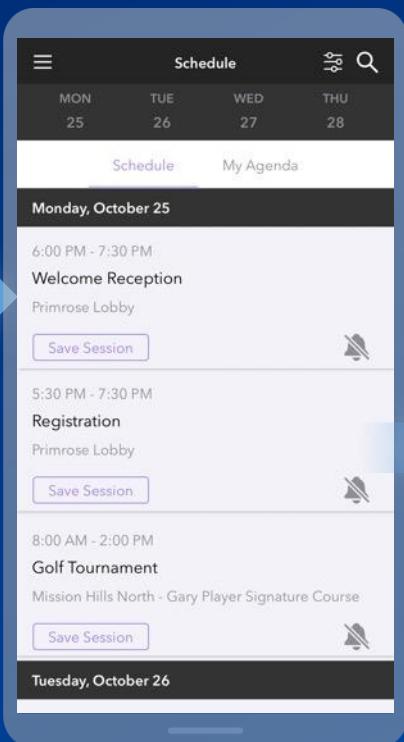
- GitHub shortened link!

Please Share Your Feedback in the App

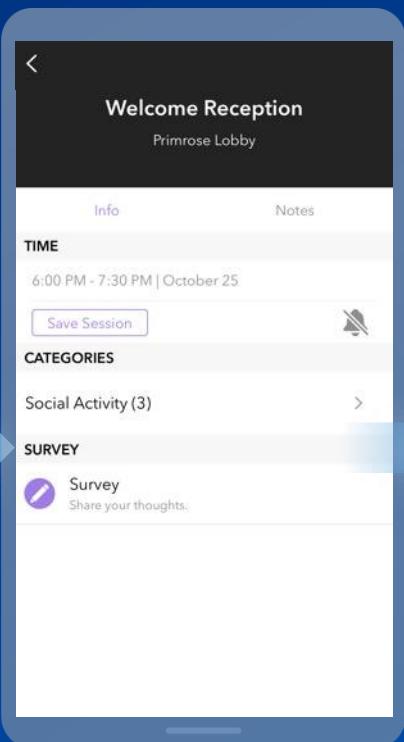
Download the Esri Events app and find your event



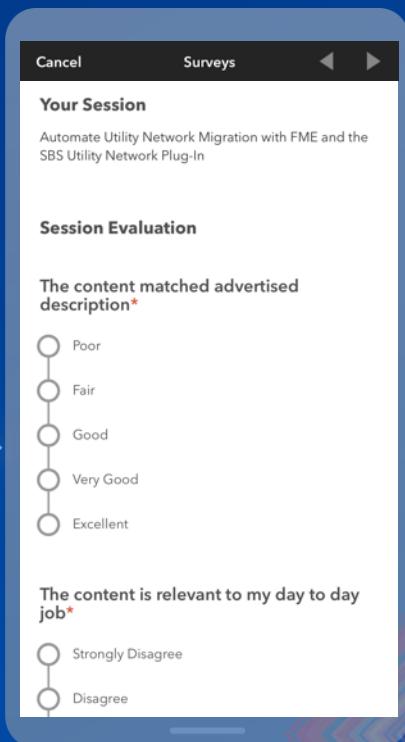
Select the session you attended



Scroll down to "Survey"



Log in to access the survey





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