



ArcGIS Maps for Power BI

An Introduction

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**GIS
INSPIRING
WHAT'S
NEXT**

Agenda

Introduction to ArcGIS Maps for Power BI

- ArcGIS Maps for Power BI overview
- Esri + Microsoft = Better Together
- Visualizing Power BI data on a map
- Using ArcGIS reference layers to add context
- Finding nearby locations using drive time areas
- Licensing overview
- Road ahead
- Q&A



What is ArcGIS Maps for Power BI?



What is Power BI?

Power BI is a suite of business analytics tools that deliver insights throughout your organization. Connect to hundreds of data sources, simplify data prep, and drive ad hoc analysis. Produce beautiful reports, then publish them for your organization to consume on the web and across mobile devices. Everyone can create personalized dashboards with a unique, 360-degree view of their business. And scale across the enterprise, with governance and security built-in.



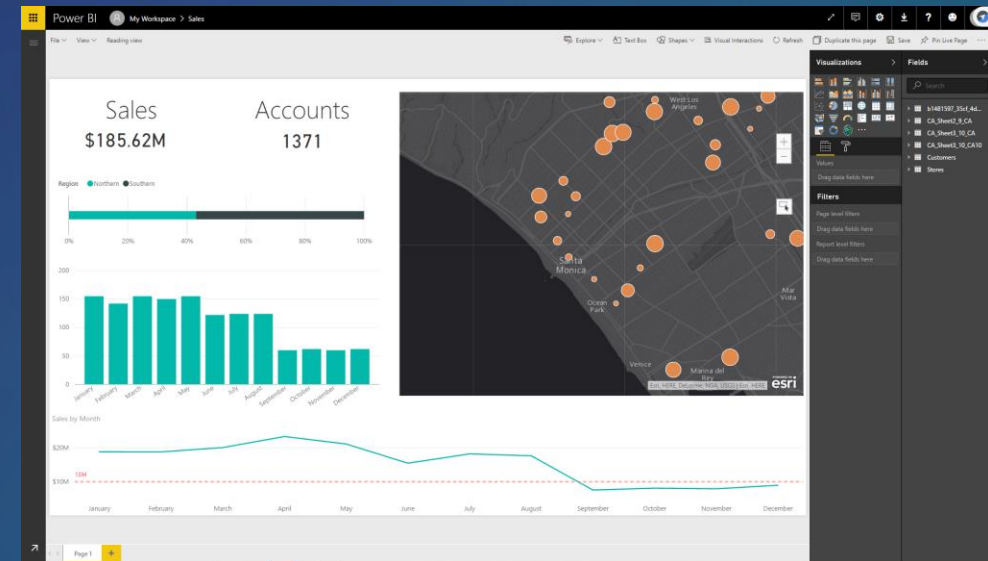


ArcGIS Maps for Power BI

Provide better maps to BI users

Answer location-based questions

Add context with Esri demographics and ArcGIS layers





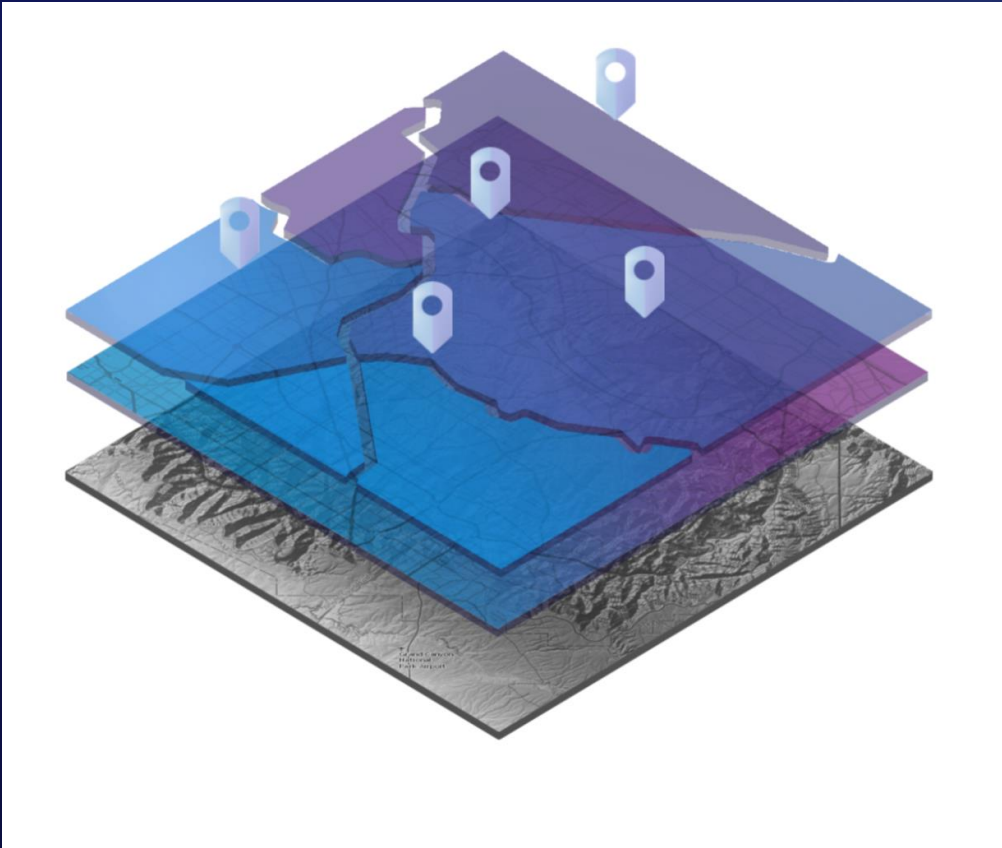
Demo

ArcGIS Maps for Power BI overview



Esri + Microsoft = Better Together

Why is BI + spatial important?



Gartner, 2017:

“Properly analyzing location can provide insights that support and improve decision making in everything from marketing to supply chain logistics and operations.”

“Gaining access to location-based streams of insight on consumers will be critical for organizations striving to become digital businesses.”

“New tools and access to data are now allowing the power of location intelligence to be unleashed across many more business areas and to a much broader base of users.”

Figure 1. Magic Quadrant for Analytics and Business Intelligence Platforms



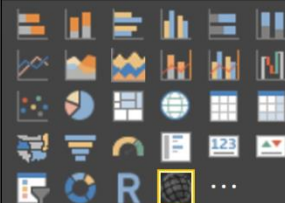
Source: Gartner (February 2018)



Visualize Power BI data on map



Visualizations



Location

Drag data fields here

Latitude

Drag data fields here

Longitude

Drag data fields here

Size

Drag data fields here

Color

Drag data fields here

Time

Drag data fields here

Tooltips

Drag data fields here

Filters

Visual level filters

Drag data fields here

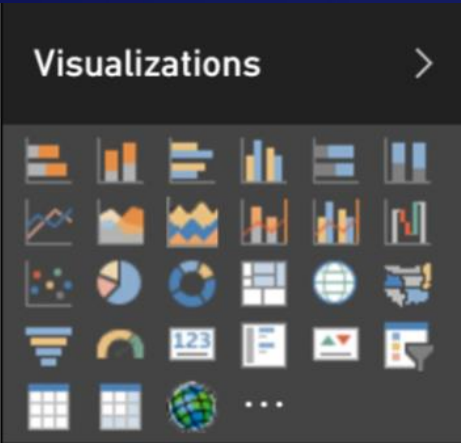
Page level filters

Drag data fields here

Fields

Search

Field wells



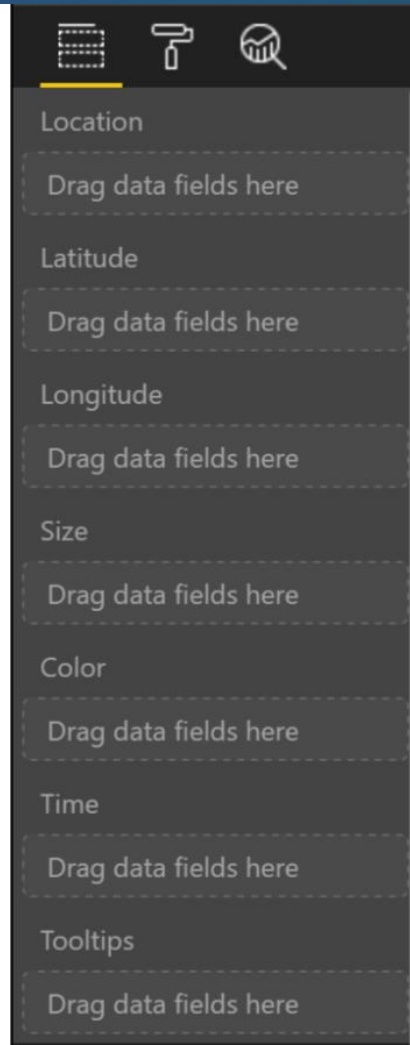
Interact with ArcGIS Maps using field wells

Add locations to the map using Location or Latitude / Longitude field wells

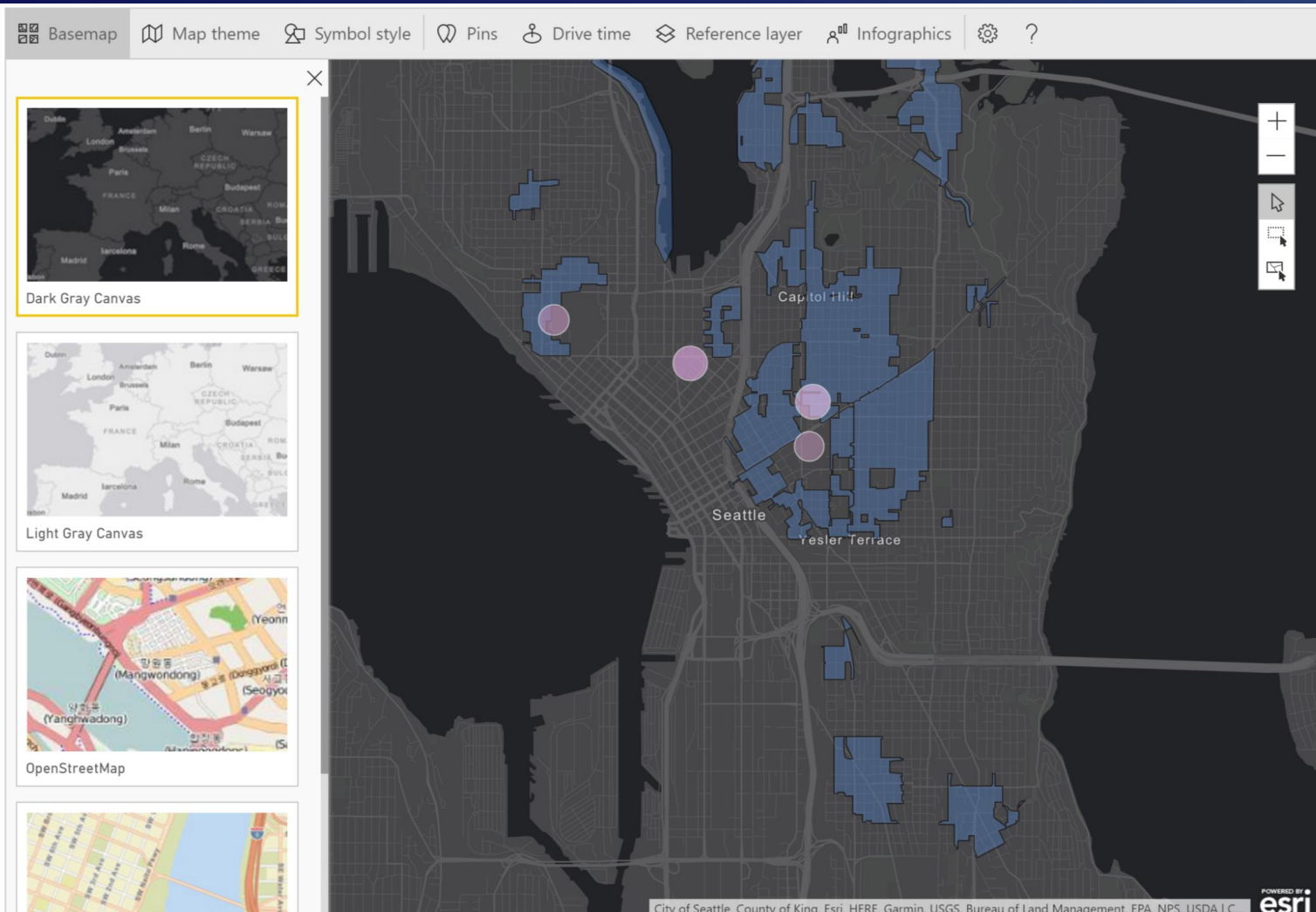
Use Size + Color field wells to add information for visualization

Use Time field well to create time animations

Add information to hover tips using the Tooltips field well



Base maps



Make complex data look great

Includes four base maps:

Dark Grey Canvas

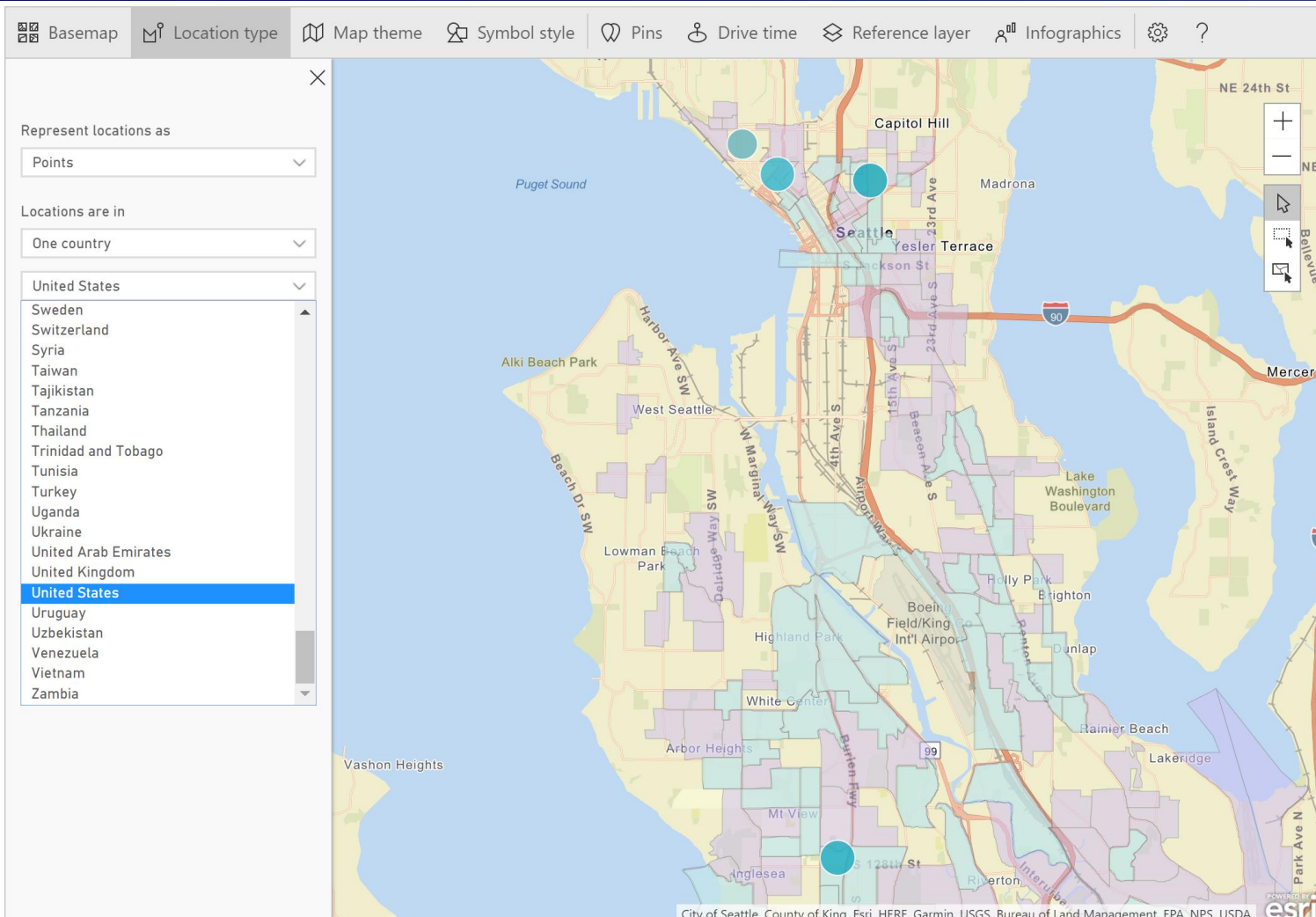
Light Gray Canvas

OpenStreetMap

Streets, the ArcGIS standard

More with paid subscriptions

Location types



Addresses

Automatically geo-code street addresses

High precision global geo-coder

Supports address hints

Capped at 1,500 addresses

Locations

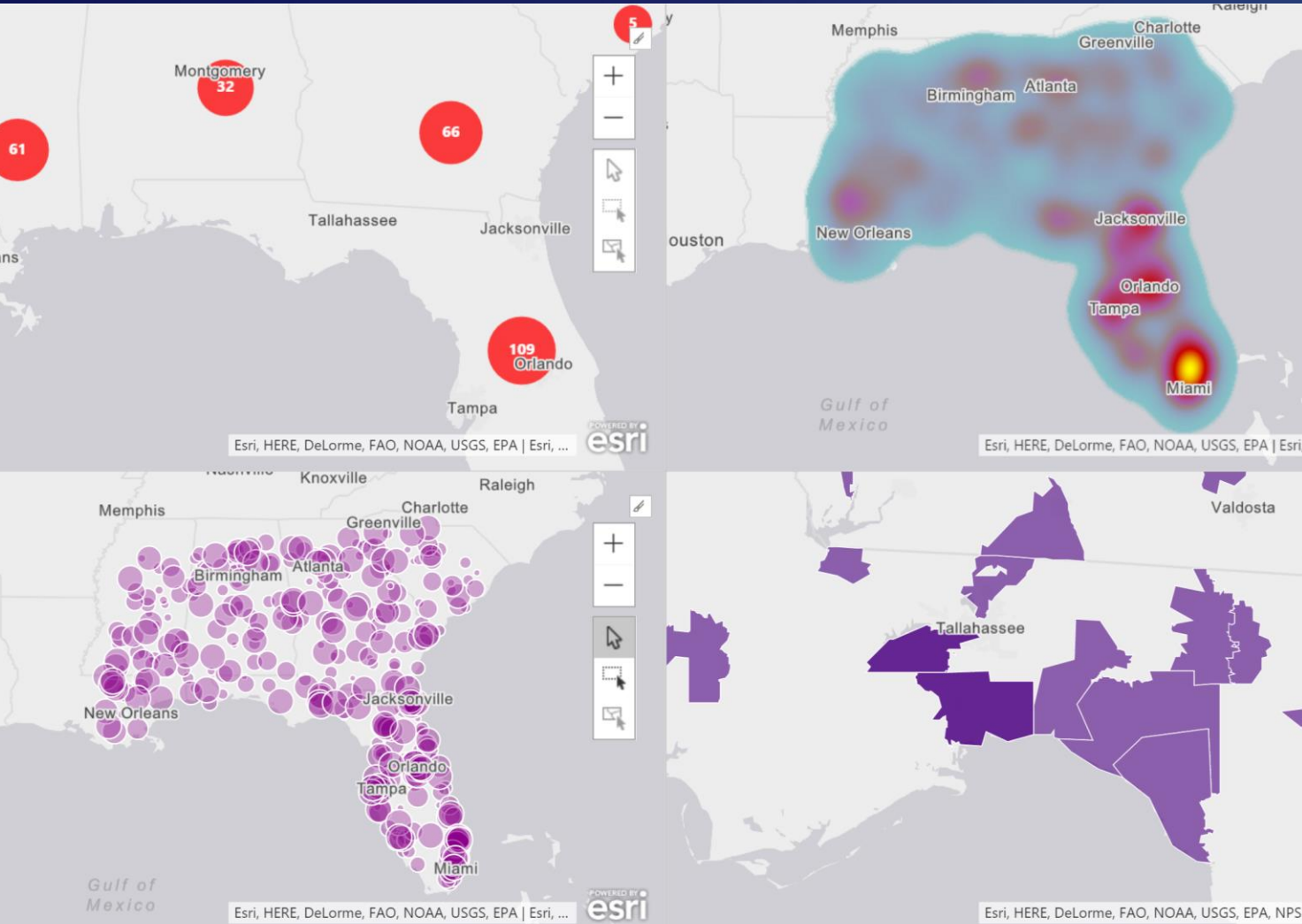
Countries, Provinces, Cities, Place names,
Postal/Zip codes, etc.

Boundaries as shapes

Common administrative boundaries

Shown as field shapes on the map

Map themes and symbol style



Map themes aid in understanding

Distribution based themes

Heatmaps or clusters showing number of data points within a given area

Location based themes

Plot data on map with size or color

Supports points or boundaries

Customize

Adjust size, color, transparency, binning algorithm, and more



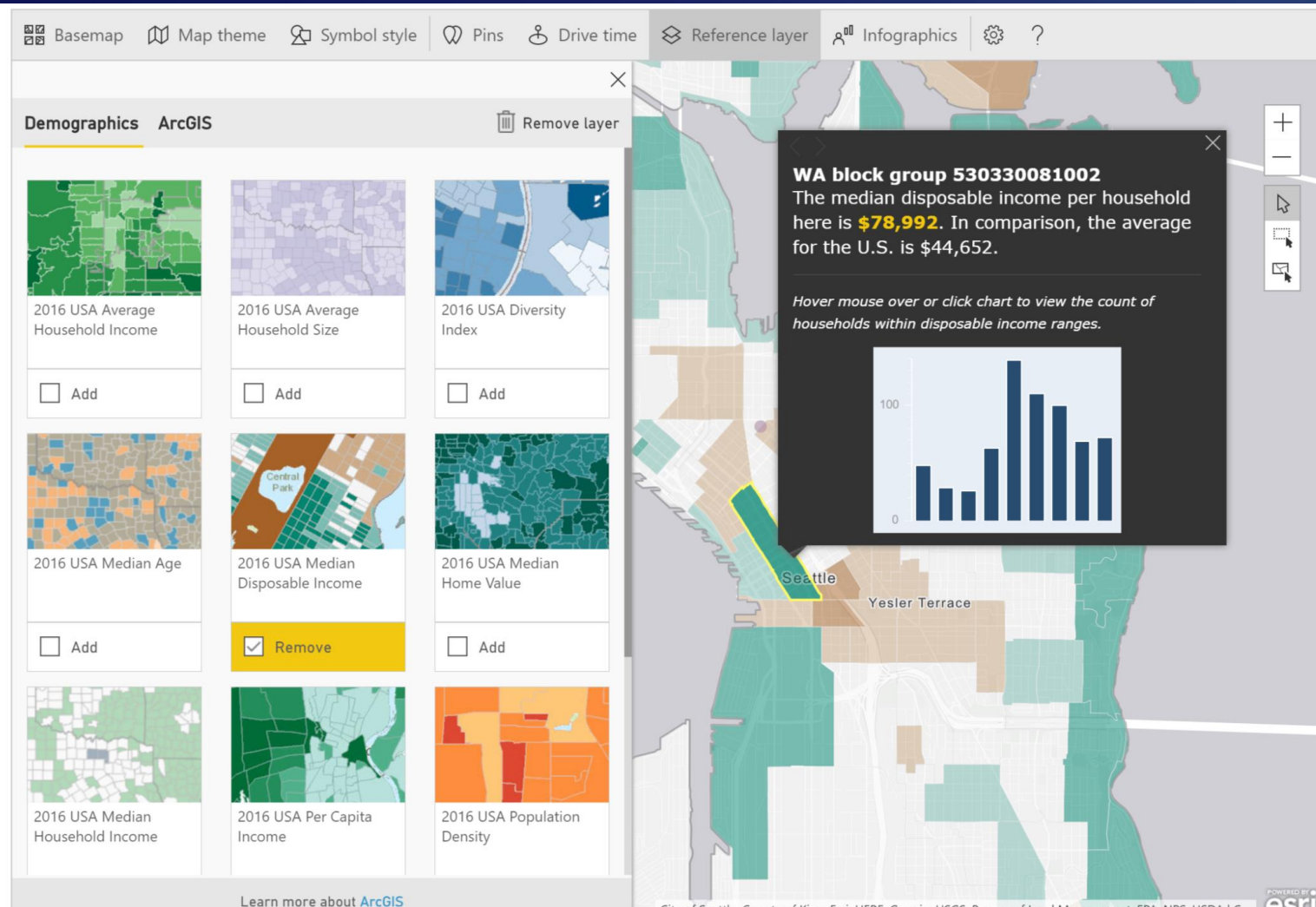
Demo

Visualize your locations



Use ArcGIS reference layers
to add context

Demographic layers



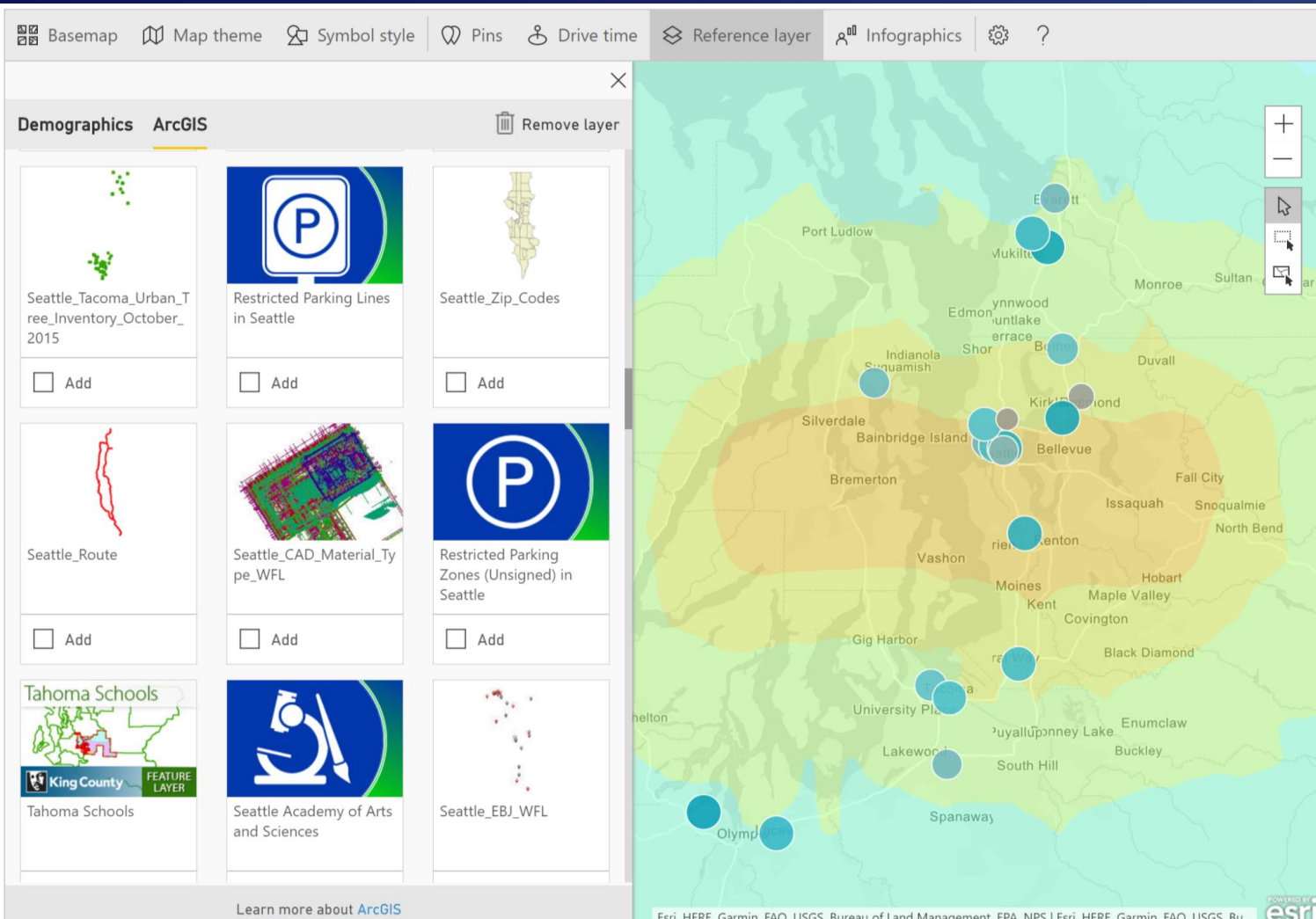
Demographic layers give context to data

USA focused data

10 demographic layers included

Tooltip includes breakdown of demographic information

ArcGIS reference layers



Free and Plus users can add and view public ArcGIS feature layers on the map

ArcGIS named users can add and view private ArcGIS feature layers on the map

Selection tool enables selecting data points based on reference layer boundaries



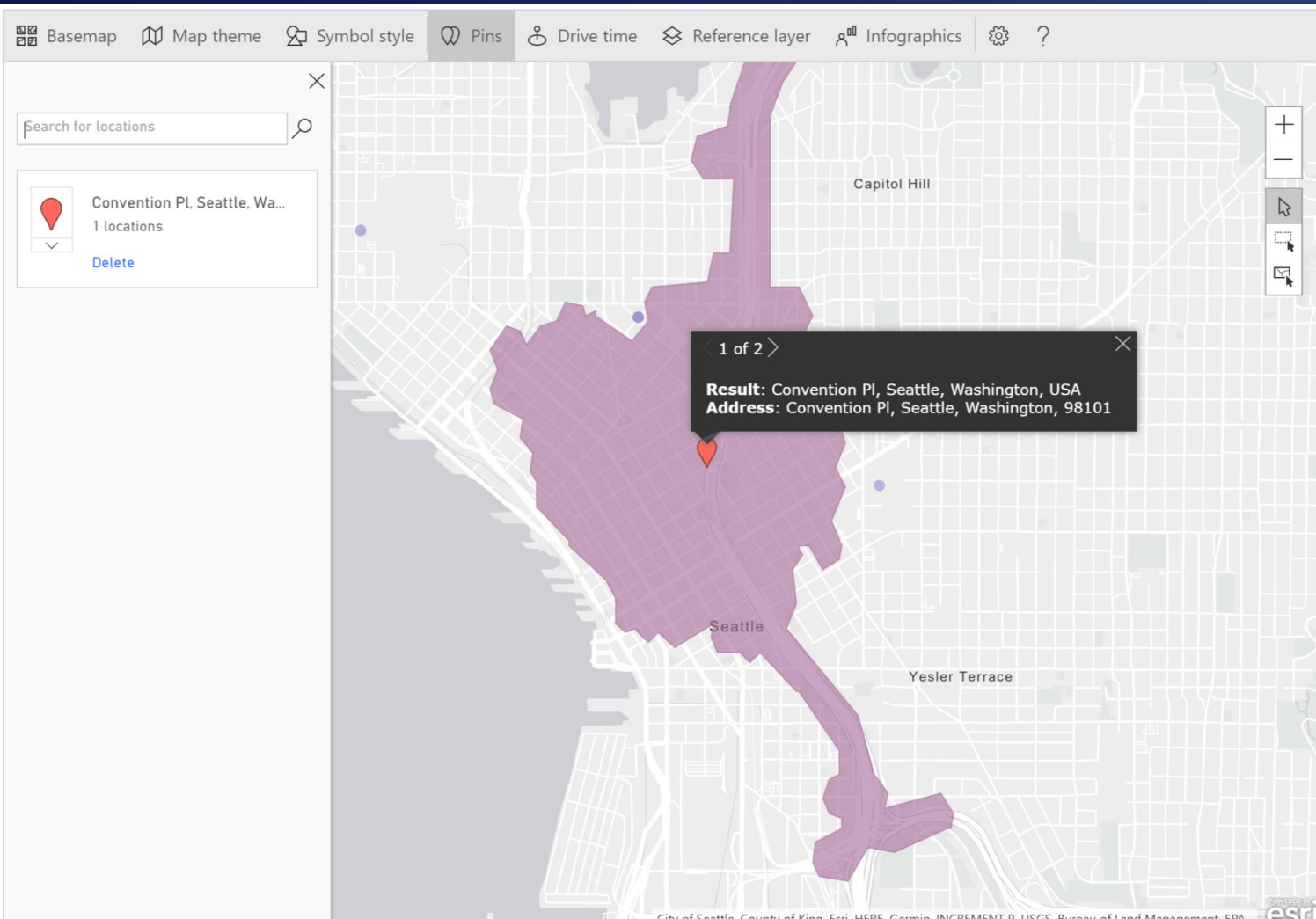
Demo

Using ArcGIS reference layers in
Power BI



Find nearby locations using
drive time areas

Pins and Drive times



Add important locations via pins

Search for specific addresses, points of interest (space needle), or general categories (coffee)

Create interactive drive-time areas

Create drive-time areas around pins or points from your data

Visualize up to 30 minute drive distances

Use drive-time areas to make selections



Demo

Creating and using drive times



ArcGIS Maps for Power BI licensing

ArcGIS Maps for Power BI

Three ways to get ArcGIS Maps for Power BI



Included

Turn on the power of maps. No cost, included with Power BI.

- ✓ Access US demographics
- ✓ Access public maps
- ✓ Map and view locations
- ✓ Perform spatial analyses such as heat maps, drive times and more
- ✓ Create easy map visualizations with four simple basemaps



Plus Subscription

Access global data. Individual or enterprise deployments available for an additional cost.

- ✓ Access global demographics
- ✓ Access verified ready-to-use data curated from authoritative sources
- ✓ Map and view more locations, up to one million per month
- ✓ Conduct the same spatial analyses as Included
- ✓ Access basemaps to create compelling visualizations that give perspective and impact decisions



ArcGIS Online

Access private ArcGIS content from ArcGIS Online with your ArcGIS named user subscription

- ✓ All of the advanced perks of the Plus subscription
- ✓ Access and use private content within your ArcGIS Online organization, including custom basemaps



Road ahead

ArcGIS Maps for Power BI

Road ahead

Completed since last UC

- **Plus licensing for individuals and enterprise**
 - More basemaps
 - Geocode more points
 - Access to Living Atlas
 - Demographic data from all over the world and not just the US
- **Bring data into your PBI report from your AGOL org**
 - Basemaps, including different spatial references
 - Reference layers you've created
 - When you sign in with AGOL, you automatically get access to all Plus content
- **Boundaries now more effectively change generalization levels as you pan/zoom, giving you high fidelity polygons**
- **Decreased the memory footprint of the visual, making it easier to use on underpowered machines and mobile devices**
- **Improved boundary look ups**

Upcoming

- **Vastly improved map performance**
- **Support for embedded scenarios**
- **Find Similar tool**

An abstract graphic on the left side of the slide. It features a dark blue background with various colorful geometric shapes (rectangles, triangles, lines) in shades of blue, green, orange, and red. These shapes are layered and tilted, creating a sense of depth and movement. In the center of this graphic, there is a small, semi-transparent map fragment showing a street grid and some green areas, with several small white dots scattered across it.

Demo

Map performance improvements

App island

Use the product! Meet the team!



ArcGIS Maps for Power BI

Resources and helpful info

GeoNet community

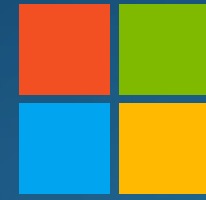
<https://geonet.esri.com/groups/powerbi>

Documentation

<https://doc.arcgis.com/en/maps-for-powerbi/>

Intro training seminar

<https://www.youtube.com/watch?v=CynnJ04xy8k>



Microsoft

Q / A

sball@esri.com



esri

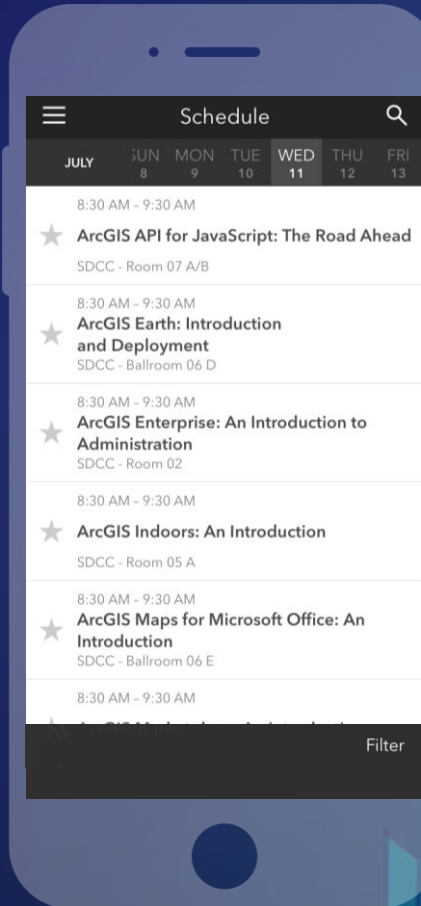
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WHERE

Please Take Our Survey on the App

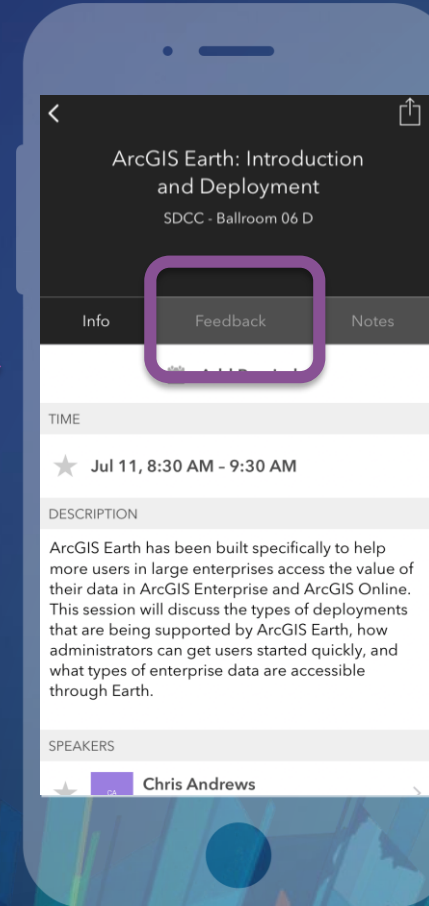
Download the Esri Events app and find your event



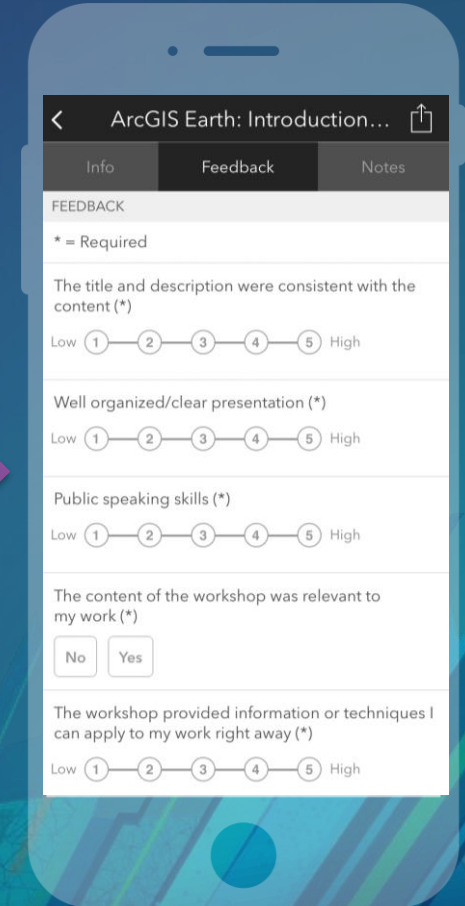
Select the session you attended



Scroll down to find the feedback section



Complete answers and select "Submit"





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