

Geo-enable your .NET apps with ArcGIS Online and Runtime

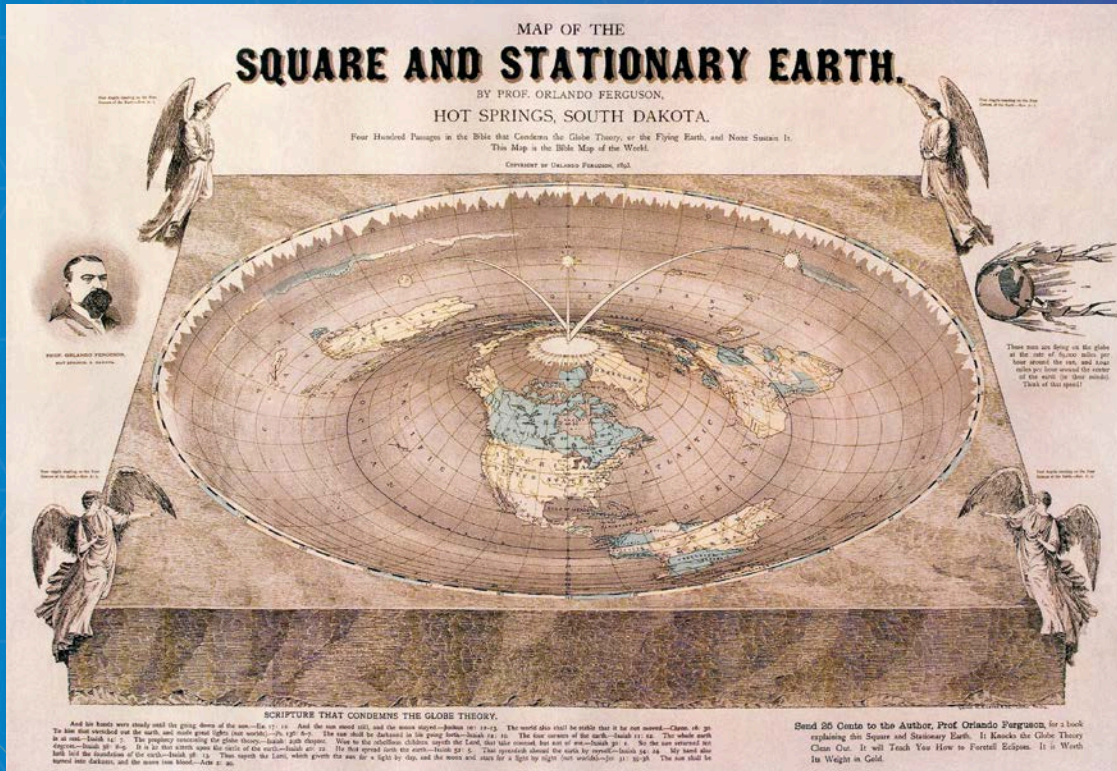
Antti Kajanus

Thad Tilton

Topics

- ArcGIS Online overview
- Creating an ArcGIS Online developer's account
- Licensing and credits
- Uploading data and hosting feature services
- Creating a web map
- Securing your online data
- Accessing your data from a .NET client

- Questions and answers



Demo: Non-spatial app
Yes, they do exist ...

Why geo-enable?

- Discover new relationships within your data
- Better visualization of patterns
- Ability to filter / subset data by location (divide into regions, e.g.)
- Enable spatial analysis (service areas, drive times, etc.)
- Enable geoenrichment (additional attributes derived from location)

- Apps are always better with a map!
 - (we may be biased)

ArcGIS

Cloud based GIS platform



What can ArcGIS Online do for you?



Content

Choose from a collection of ready-to-use basemaps, demographic maps, and imagery and make interactive maps with your data.



Visualization

Create interactive maps allows you to define a map once and use that definition on multiple applications.



Routing

Generate directions, optimal routes and calculate drive time areas.



Geocoding

Search for places and addresses and display them on your map. Transform your non-spatial data into spatial too.



Data storage

Create custom REST endpoints to store and visualize your content. Upload your existing data or create new.



Security

Use User and Groups to share your content securely or integrate permission management with our organization authentication model.

... just to name few.

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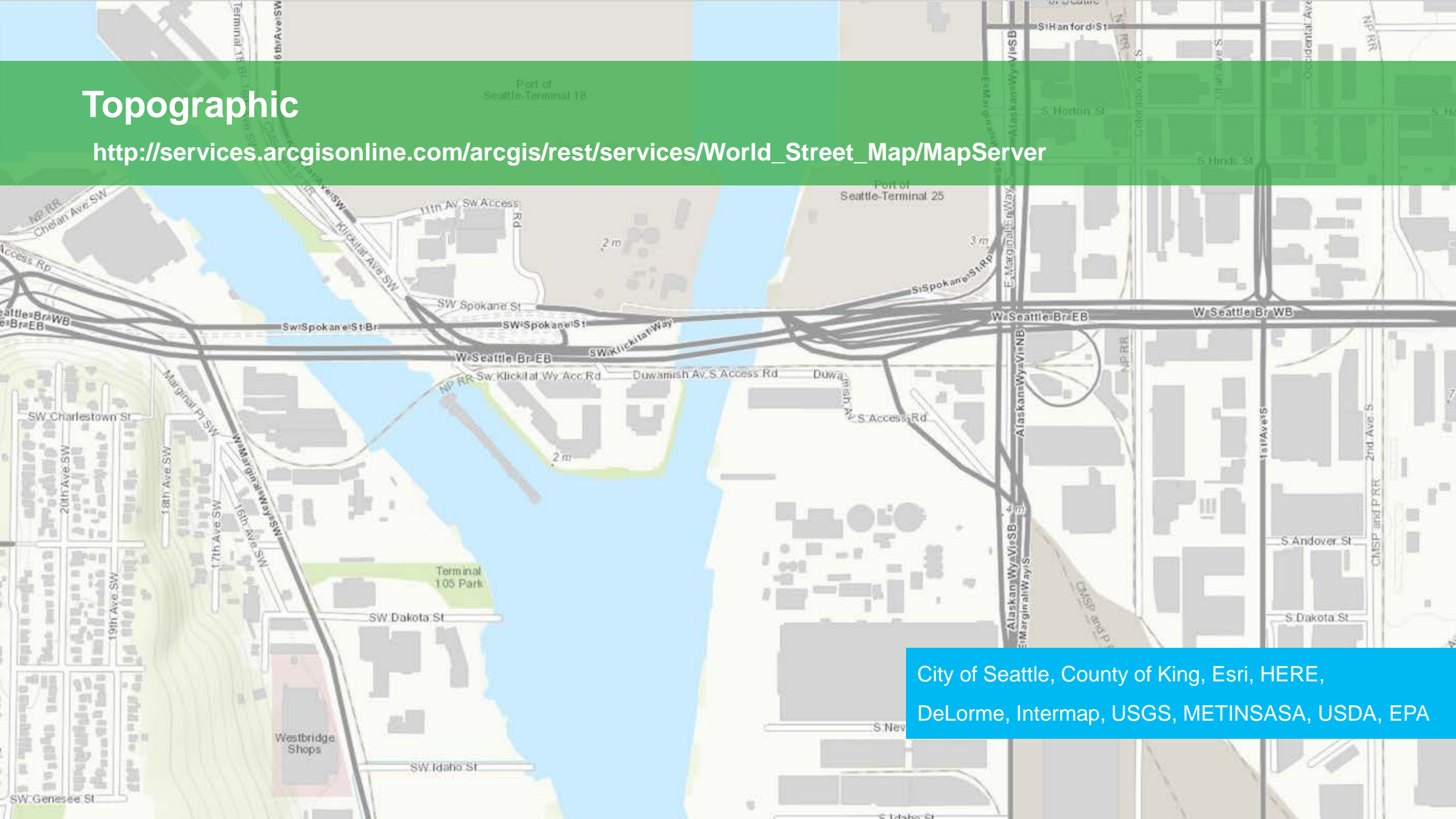
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Topographic

http://services.arcgisonline.com/arcgis/rest/services/World_Street_Map/MapServer



City of Seattle, County of King, Esri, HERE,
DeLorme, Intermap, USGS, METINSASA, USDA, EPA

Imagery

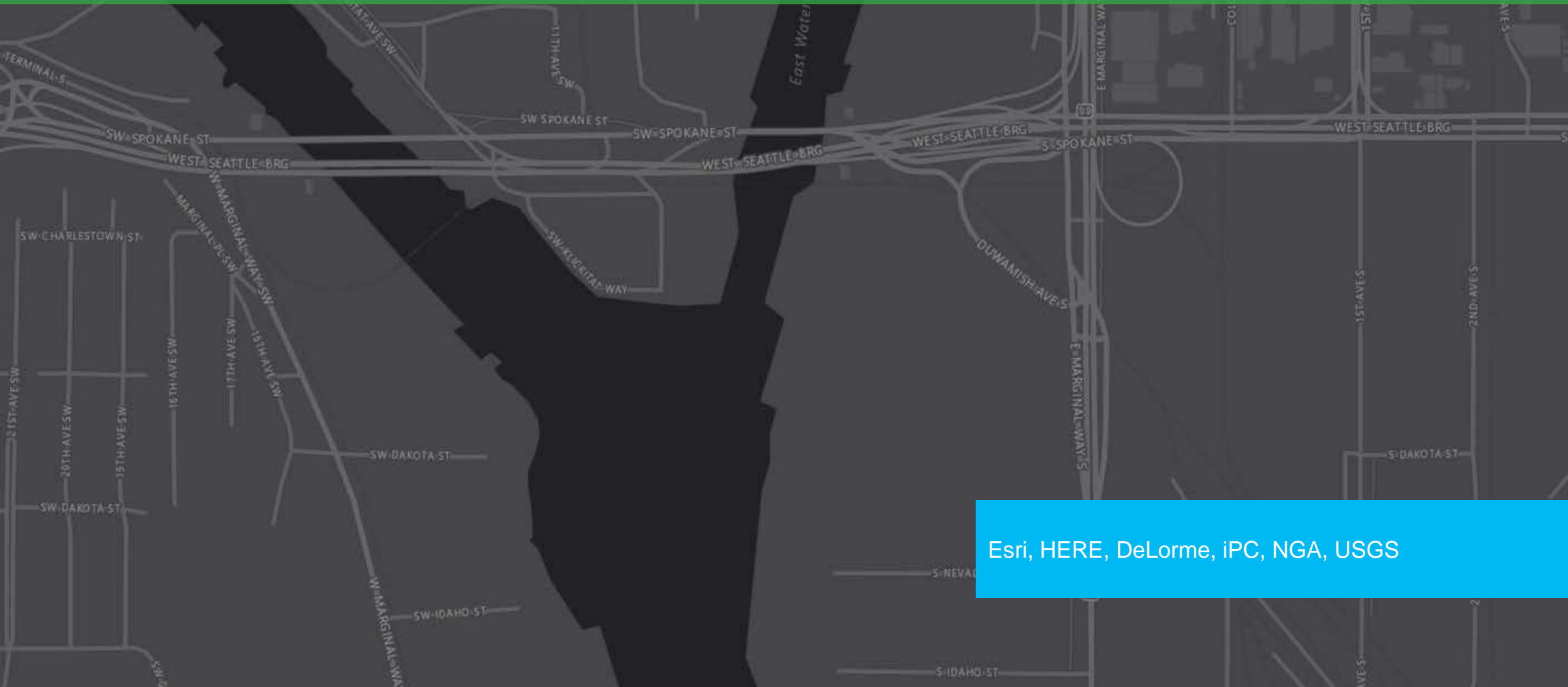
http://services.arcgisonline.com/ArcGIS/rest/services/World_Imagery/MapServer



DigitalGlobe, GeoEye, Microsoft, CNES/Airbus DS

Dark Gray Canvas

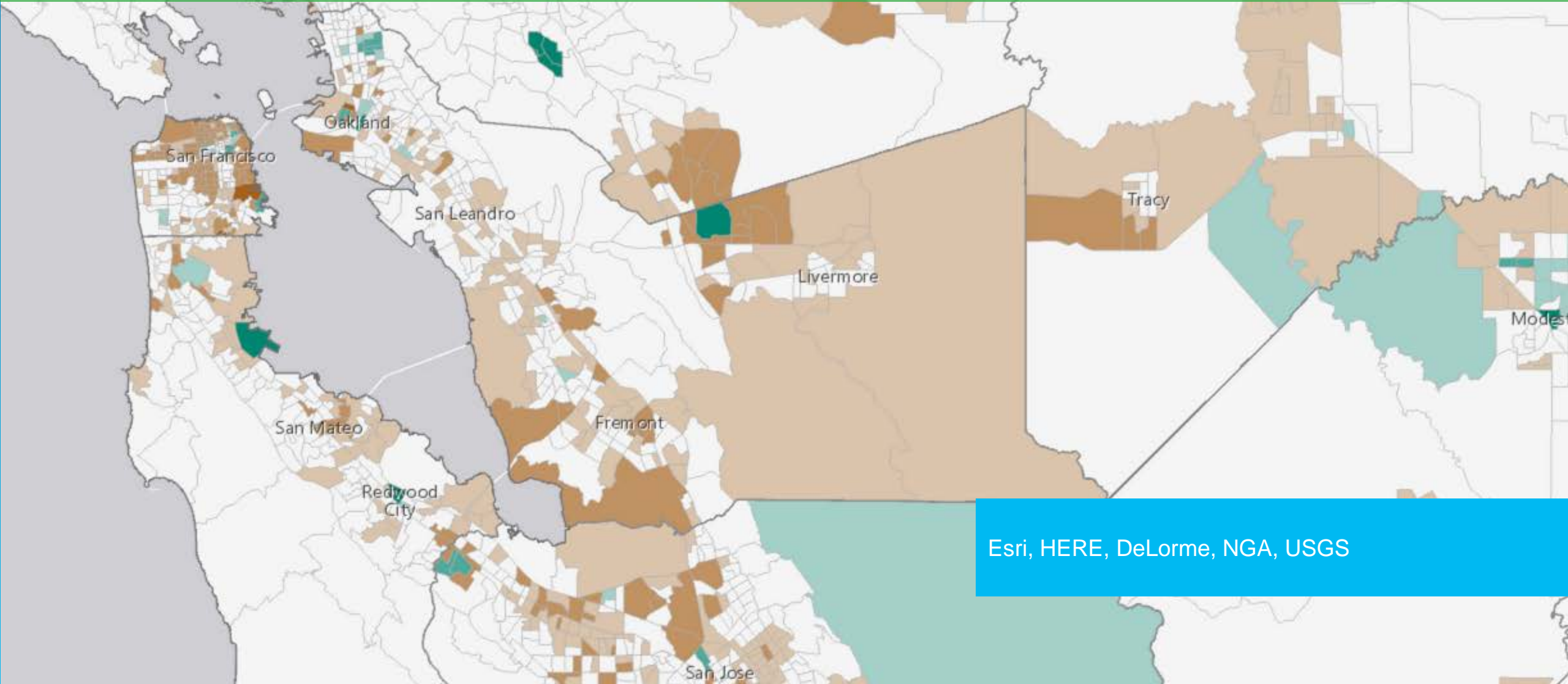
http://services.arcgisonline.com/arcgis/rest/services/Canvas/World_Dark_Gray_Base/MapServer



Esri, HERE, DeLorme, iPC, NGA, USGS

Demographics and Lifestyle

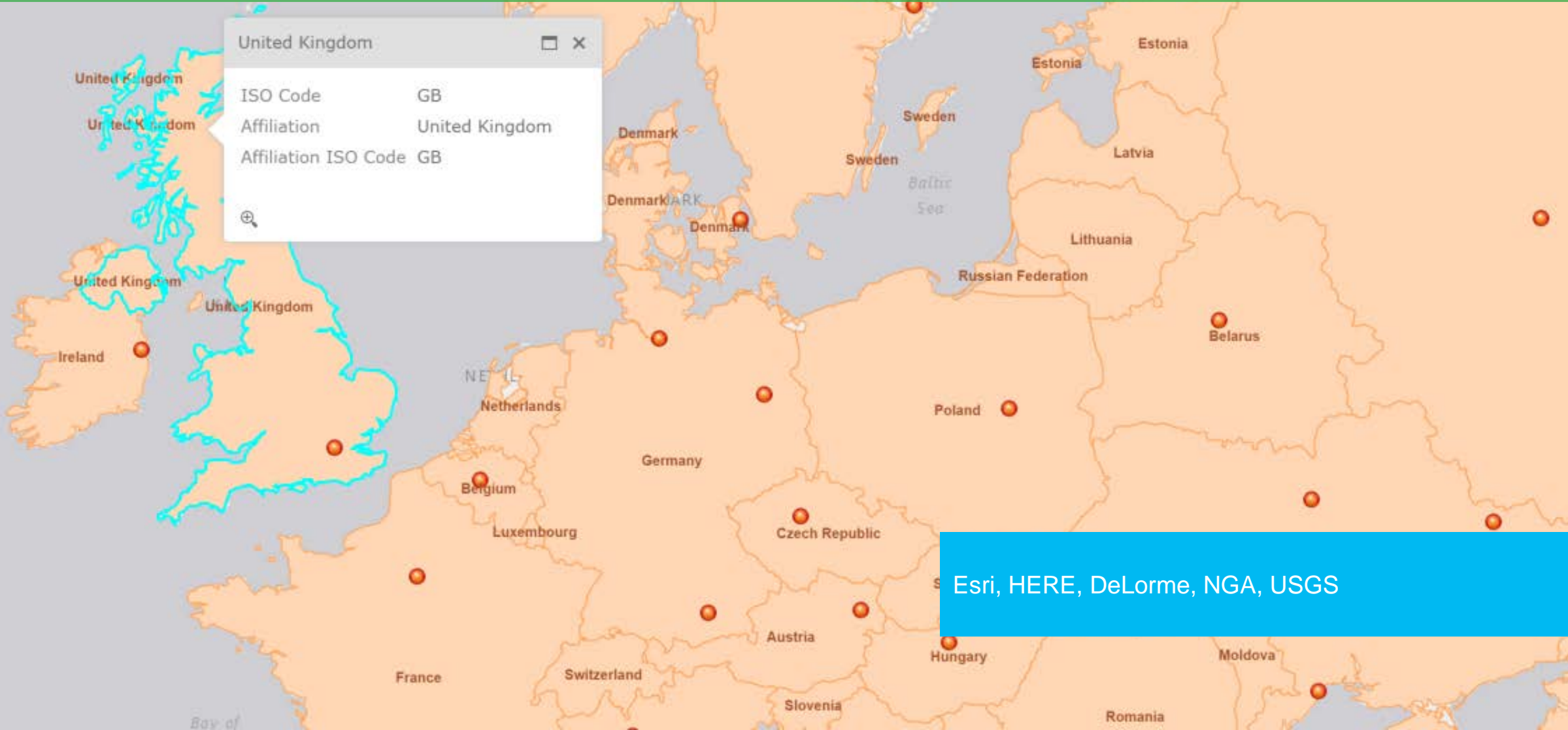
2014 Long Commute to Work in the United States



Esri, HERE, DeLorme, NGA, USGS

Boundaries and Places

World Boundaries and Places



Esri, HERE, DeLorme, NGA, USGS

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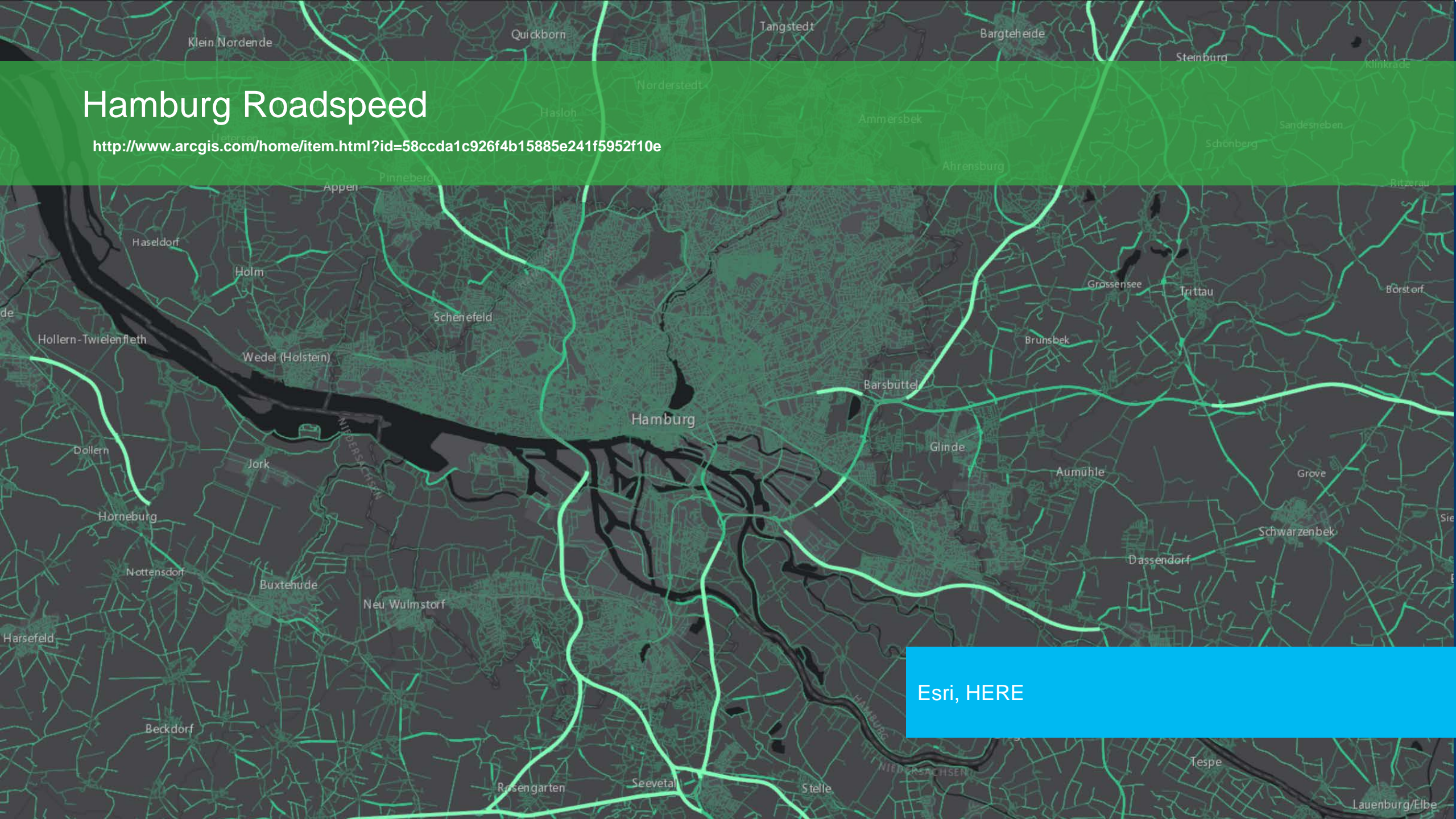
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Hamburg Roadspeed

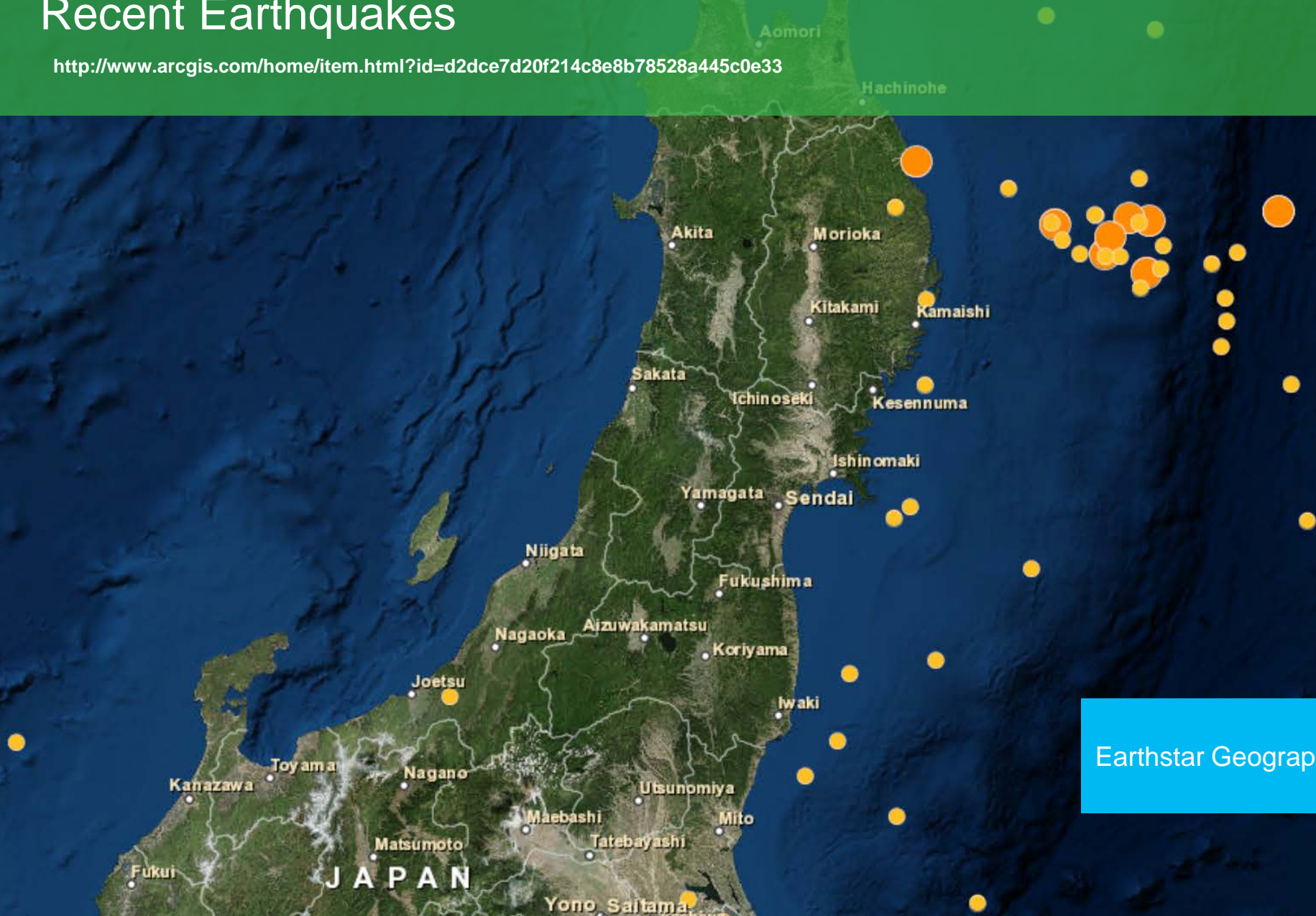
<http://www.arcgis.com/home/item.html?id=58ccda1c926f4b15885e241f5952f10e>



Esri, HERE

Recent Earthquakes

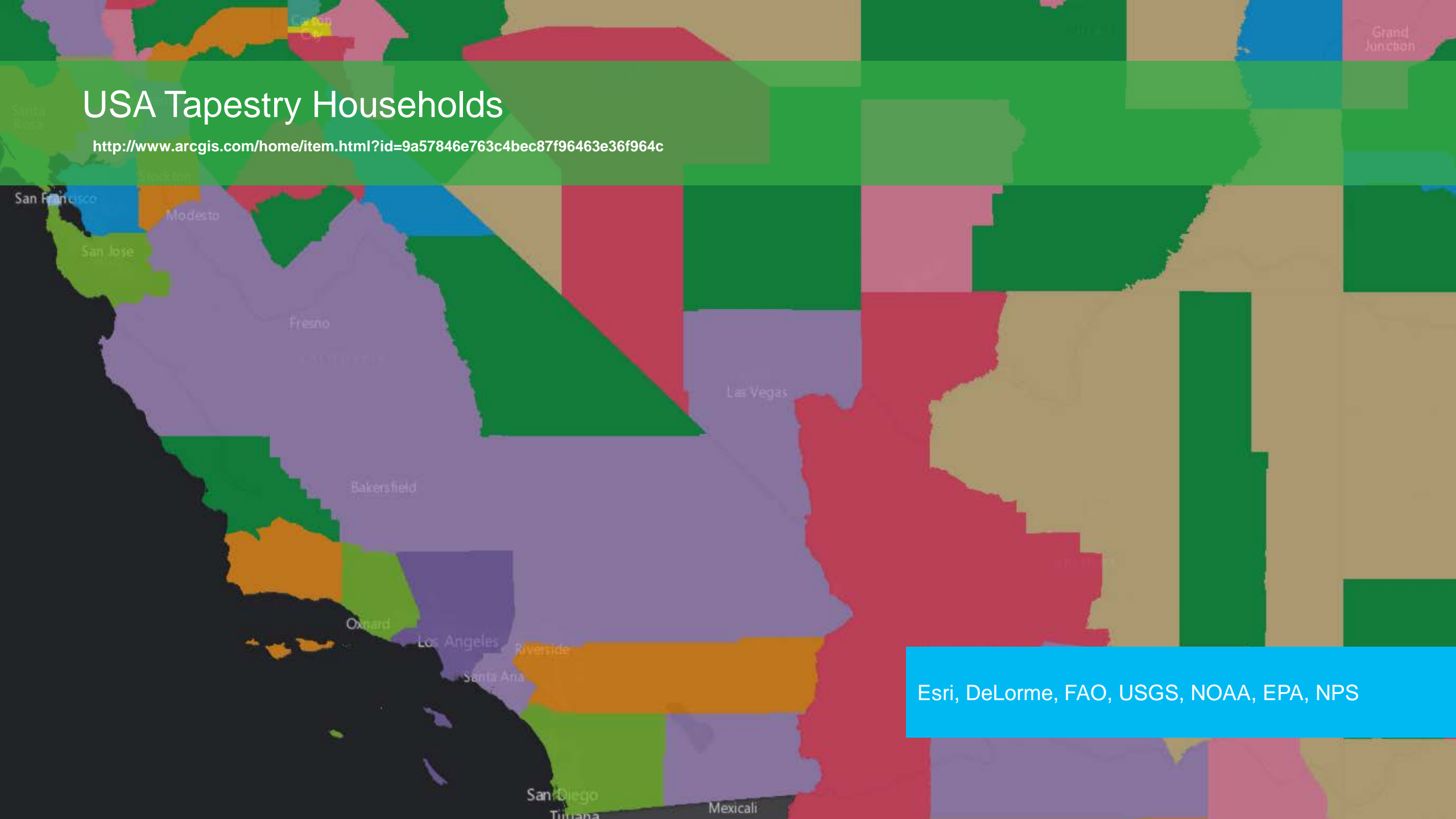
<http://www.arcgis.com/home/item.html?id=d2dce7d20f214c8e8b78528a445c0e33>



Earthstar Geographics | USGS | Esri, DeLorme

USA Tapestry Households

<http://www.arcgis.com/home/item.html?id=9a57846e763c4bec87f96463e36f964c>



Esri, DeLorme, FAO, USGS, NOAA, EPA, NPS

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ArcGIS Online licensing

- **Subscriptions based on named users**
 - Sliding scale based on the number of users
 - Includes a number of *Service Credits*
 - Additional credits and/or users can be purchased
- **Free 60 day trial**
 - Five named users
 - 200 credits



Please see <http://www.esri.com/software/arcgis/arcgisonline/purchase> for details

What are *Service Credits*?

- Credits are exchanged for certain ArcGIS Online services
 - Data storage
 - Analytics (geocoding, routing, etc.)
 - Demographic and lifestyle maps
- Many things do not require credits
 - Basemaps
 - Accessing your hosted data
 - Exporting data from ArcGIS Online



How do credits work?

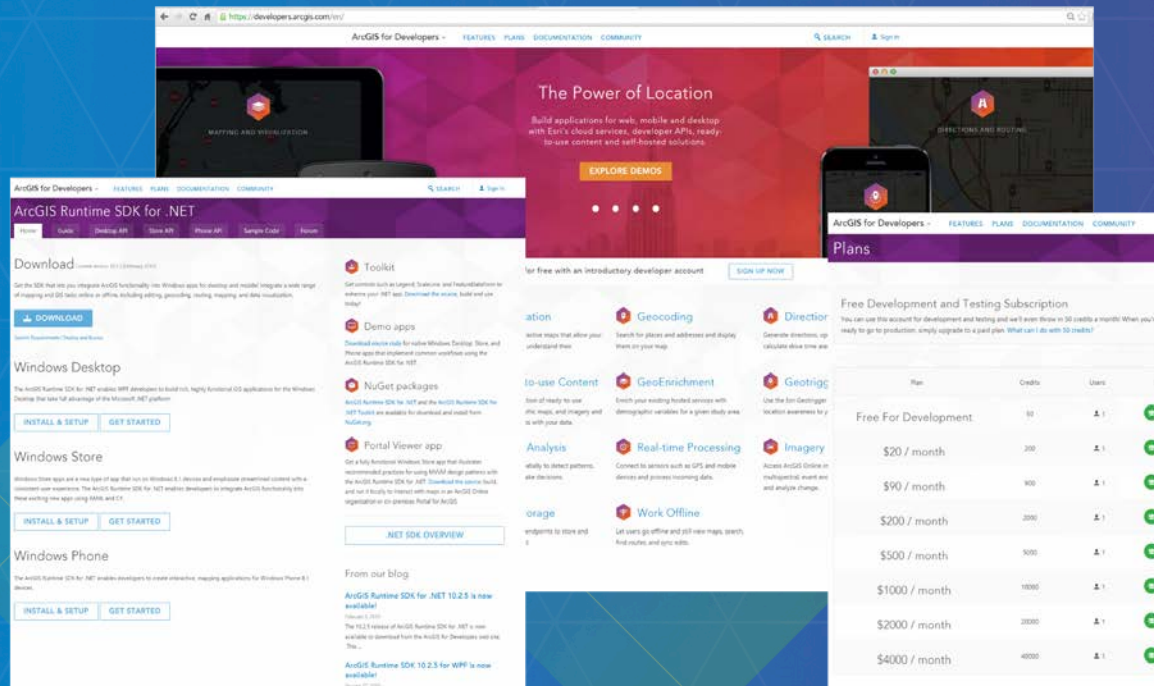
- Pricing by number of requests or amount of data
 - Varies by type of operation
- See <http://www.esri.com/software/arcgis/arcgisonline/credits>
- Some examples:
 - Feature services storage: 2.4 credits per 10 megs (per month)
 - Tile and data storage: 1.2 credits per 1 gig (per month)
 - Geocoding: 40 credits per 1,000 geocodes
 - Simple routes: 0.004 credits per simple route
 - Other routes: 0.5 credits per optimized route, drive time, or closest facility
 - Data enrichment: 10 credits per 1,000 variables
 - Tile generation: 1 credit per 1,000 tiles

Credit Estimator -

<http://www.esri.com/software/arcgis/arcgisonline/credits/estimator>

ArcGIS Developers site

- Download native ArcGIS Runtime SDKs
- Documentation and samples
- Data hosting
- 50 credits per month for dev and testing



Sign In

Username
MrRoyHutchins

Password
.....

Keep me signed in

SIGN IN

[Forgot username or password?](#)

[Sign in with your enterprise login](#)

Sign Up

First Name
Ted

Last Name
Bell

Email Address
ImTedBell@gmail.com

We will send you details on how to finalize your account.

SIGN UP FOR FREE

Already have an ArcGIS subscription? [Sign In](#)

Free Developer Account

developers.arcgis.com



Demo: Create a developer account

Did I mention it's free?



Demo: Upload data

- Host feature services
- Create a web map
- Geoenrich customers layer
- Secure assets



Demo: Consume a web map and services in a .NET app

- Load a web map using its ID
- Use authentication to access secured resources
- Use feature data in the updated app

ArcGIS Runtime SDK sessions Thursday

| Session Name | Time | Location |
|---|----------------|---------------|
| ArcGIS Runtime SDKs: Building Offline Apps, Part I | 9:00 – 10:00am | Primrose A |
| ArcGIS Runtime SDK: Building Offline Apps, Part II | 10:30– 11:30am | Primrose A |
| ArcGIS Runtime SDK for .NET: Integrating Devices, Sensors, Services, and More | 1:00 – 2:00pm | Primrose B |
| Preview of ArcGIS Runtime and Xamarin | 2:30-3:30pm | Mesquite GH |
| ArcGIS Runtime SDKs: Offline Routing and Geocoding | 4:00-5:00pm | Smoketree A-E |
| ArcGIS Runtime SDK for .NET: How We Built the Plenary Apps | 4:00-5:00pm | Primrose C/D |
| ArcGIS Runtime SDKs: Implementing 3D Capabilities | 5:30 – 6:30pm | Primrose C/D |
| Collector for ArcGIS: How we did it | 5:30 – 6:30pm | San Jacinto |

ArcGIS Runtime SDK sessions Friday

| Session Name | Time | Location |
|--|-----------------|-----------------|
| The Road Ahead: ArcGIS Runtime | 8:30 – 9:30am | Primrose A |
| Everything (or Anything) You Wanted to Know about the ArcGIS Runtime SDKs but Were Afraid to Ask | 10:00 – 11:00am | Primrose A |
| The Road Ahead: Web 3D and Native Mobile Apps | 10:00 – 11:00am | Primrose C/D |
| ArcGIS Runtime SDK for .NET: Tips and Tricks | 1:00pm – 2:00pm | Smoketree A - E |

Questions?



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