



Building Routing Applications with ArcGIS Online or ArcGIS Enterprise

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Shubhada Kshirsagar

ESRI USER CONFERENCE

Slides from this demo theater

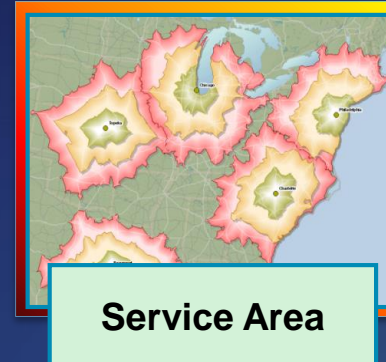
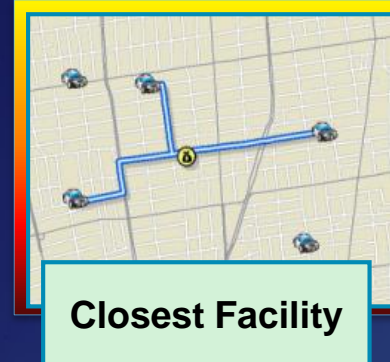
<http://esriurl.com/uc18brago>

Agenda

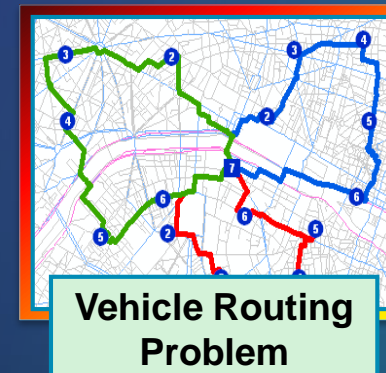
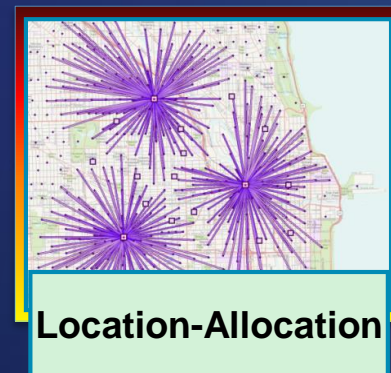
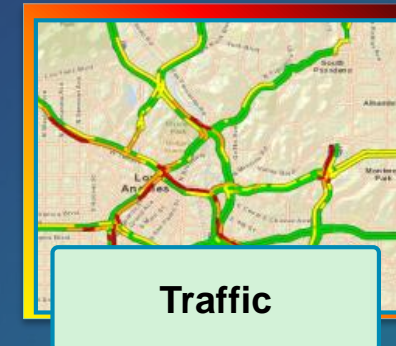
- Directions and routing services
- Creating web apps with ArcGIS
 - Configurable application templates
 - Web AppBuilder for ArcGIS

Directions and Routing services

The background features a dark blue grid pattern. In the bottom corners, there are abstract, colorful geometric shapes in shades of red, orange, yellow, and blue, resembling stylized buildings or data structures. The overall aesthetic is modern and technological.

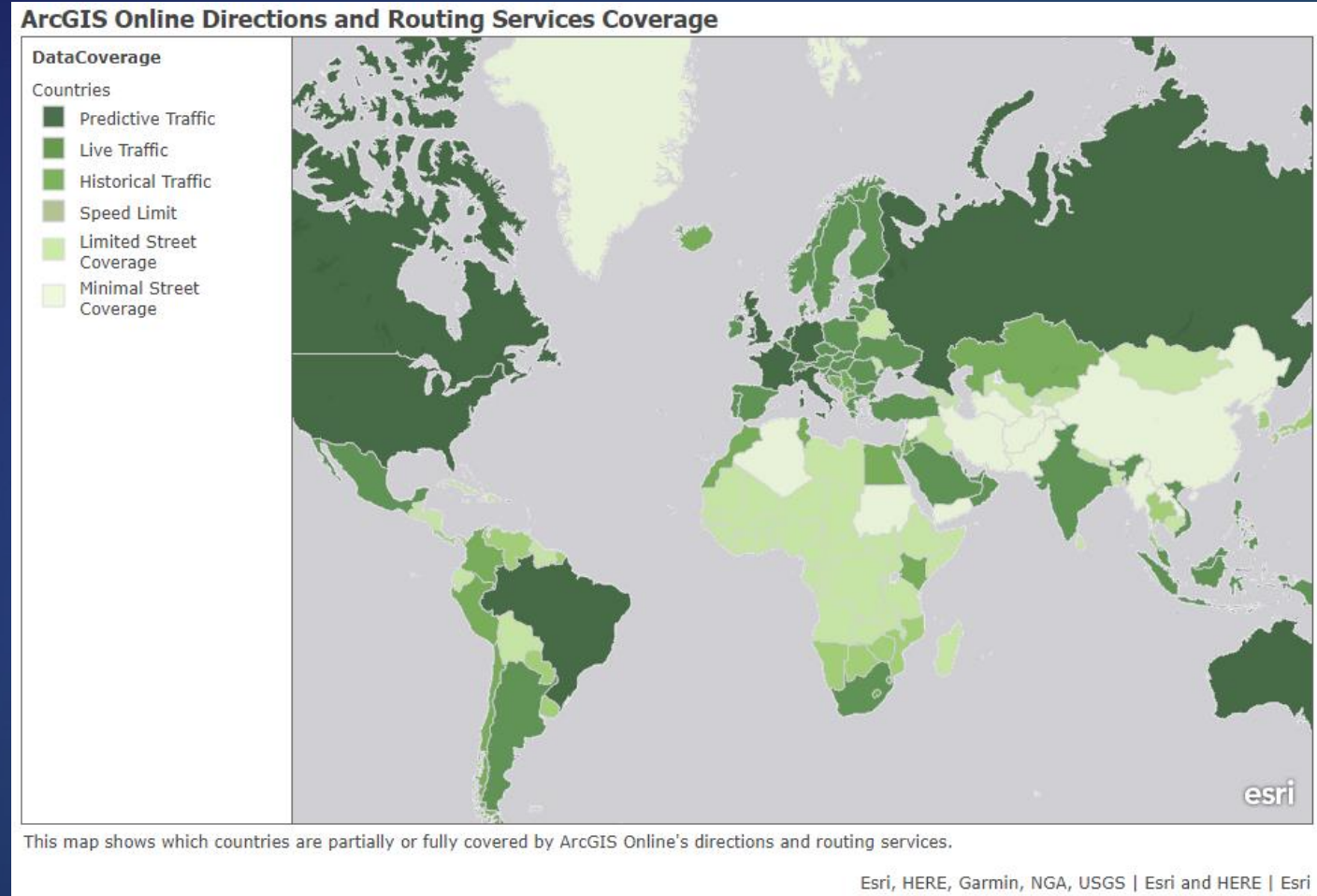


Directions and Routing Services Perform analyses on street networks



Common to all Services

- Work globally
- Use high quality street data
 - Predictive and real time traffic where available
 - Support for vehicle weight, width and height restrictions
 - Can use preferred truck routes or avoid toll roads
- Driving, Walking, Trucking, or your own travel modes



[View larger map](#)

Services are also available with ArcGIS Enterprise

- All the Directions and Routing services are also available with ArcGIS Enterprise
 - Requires ArcGIS Enterprise 10.4 or later
 - Do not work globally but restricted to the extent of your street data
 - No support for live traffic
- Use Publish routing services tool included with ArcGIS Enterprise 10.6 or later to publish all the routing services
- Publish routing services tool is available as a separate download for previous versions of ArcGIS Enterprise

Creating web apps with ArcGIS

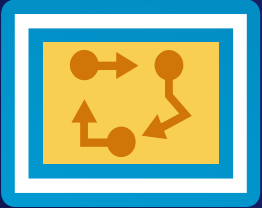


Creating web apps with ArcGIS

Configure, customize, or build apps from scratch



Story maps



Configurable
app templates



Web AppBuilder for ArcGIS®

No programming



Web AppBuilder
custom widgets
and themes



Build apps using
ArcGIS API for JavaScript

Programming effort



What is a web map?

Foundation for all your apps

- Enables “intelligent maps” → Web Map stores references to web services and data, display and behavior settings
- Supports: smart mapping, pop-ups, editing, analysis, time, etc.
- Create in Map Viewer available with ArcGIS Online and ArcGIS Enterprise
- **Can be leveraged by all other Esri Apps**

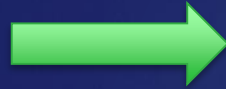


Configurable app templates

Quickly transform your web map into a focused app



Web Map



Create a New Web App

Configurable Apps

Web AppBuilder

What do you want to do?

Select a configurable app.

Show All

Build a Story Map

Collect/Edit Data

Compare Maps/Layers

Explore/Summarize Data


Map Social Media

Provide Local Information


Route/Get Directions

Showcase a Map

Provide routing directions to features within your map



Directions



Local Perspective

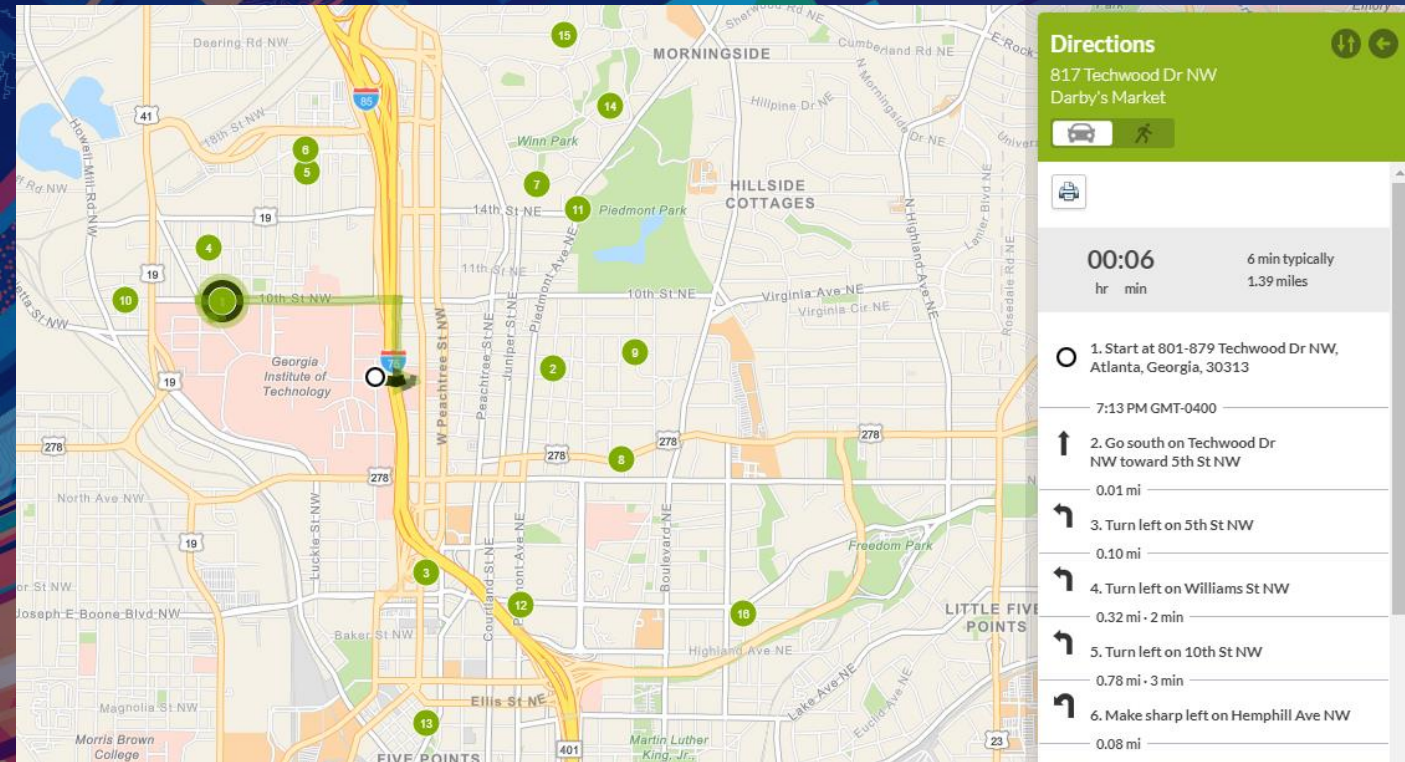
BACK

CANCEL

Demo: Store Locator

Create a store locator app using
configurable app template

Shubhada Kshirsagar



Demo: Store Locator -- Takeaways

- Directions app template can be used to provide travel directions from user specified location to the features in your map
- Use a web map with your destination features to get started
- Configure popups and symbology in your web map
- Share the app publicly using Subscriber Content settings

Web AppBuilder

Build powerful GIS apps that run on any device



Web Map



Create a New Web App

Configurable Apps Web AppBuilder

To create a new app with Web AppBuilder, enter a title, tags and summary.

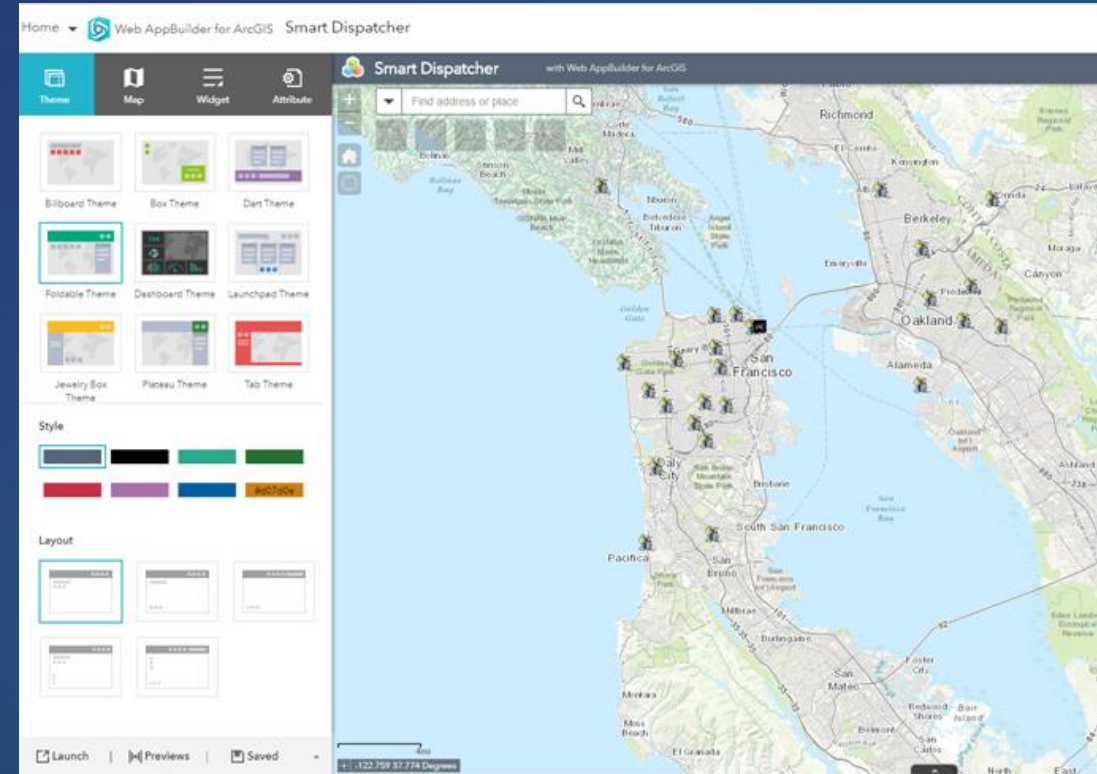
Title: Smart Dispatcher

Tags: route x
Add tag(s)

Summary: (Optional) Plan your routes intelligently

Save in folder: WebApps

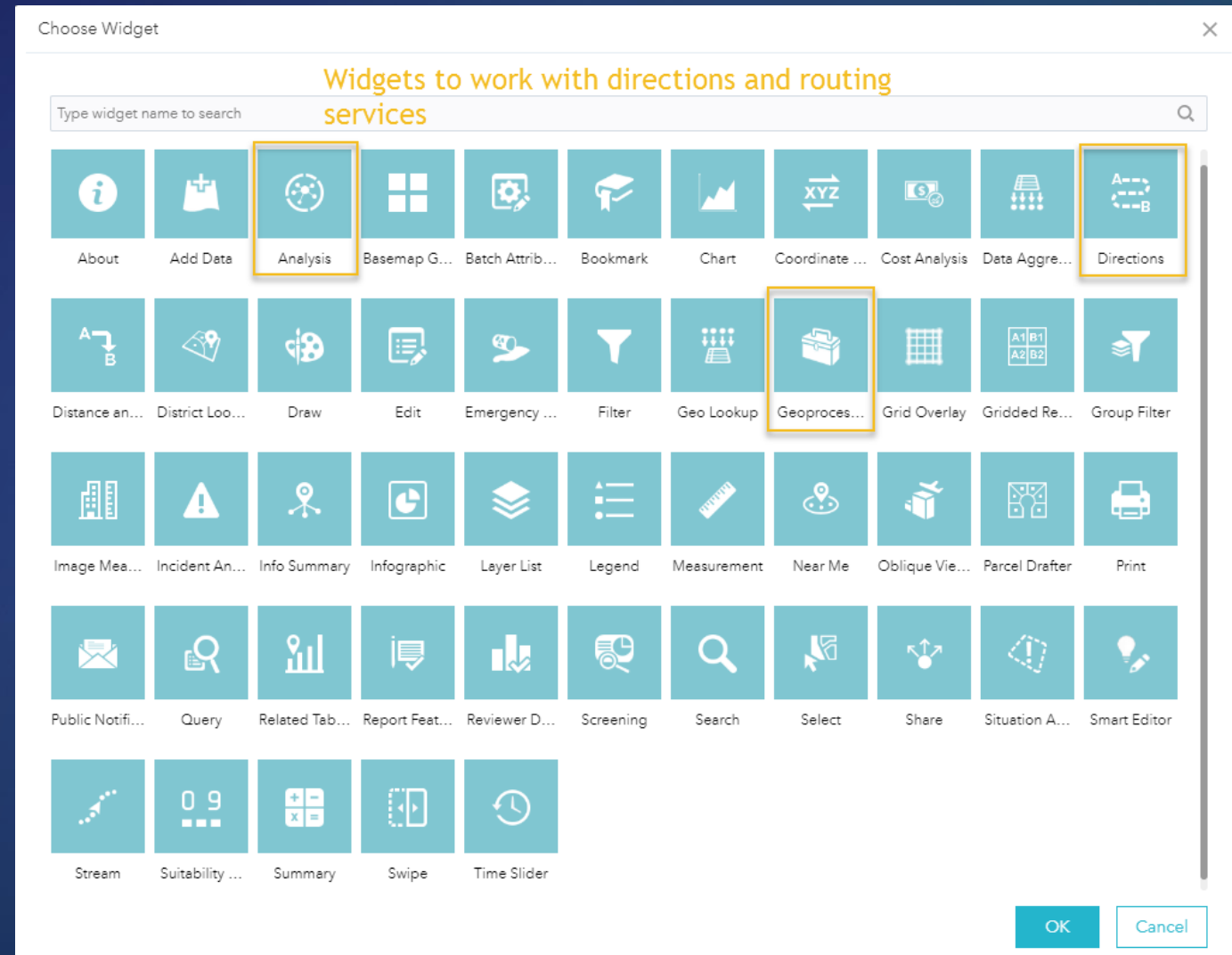
BACK GET STARTED CANCEL



Web AppBuilder widgets

Choose the widgets you need in your app

- Pick the widgets for your workflow
- Directions and routing services are available with the following widgets
 - Analysis
 - Directions
 - Geoprocessing



Web AppBuilder custom widgets


Build your own widgets

- Build widgets for your own workflows using Web AppBuilder Developer Edition
- Combine existing widgets to create new widgets
- Requires programming in HTML5 / CSS / JavaScript
- Apps containing custom widgets have to be hosted on your own web server

Create custom widgets and themes for Web AppBuilder.

Get Web AppBuilder for ArcGIS (Developer Edition) to create custom widgets and themes. Boost your productivity by extending the framework. Build powerful GIS apps that run on desktops, tablets, and smartphones.


[Supported Browsers](#) | [License](#) | [Key Features](#) | [Developer's Overview](#)



Installation and set up

Instructions are provided to help you install and start Web AppBuilder for ArcGIS.


[> Get Started](#)



Your first app

Find a location for a given address using geocoding functionality.

[> Build your first app](#)

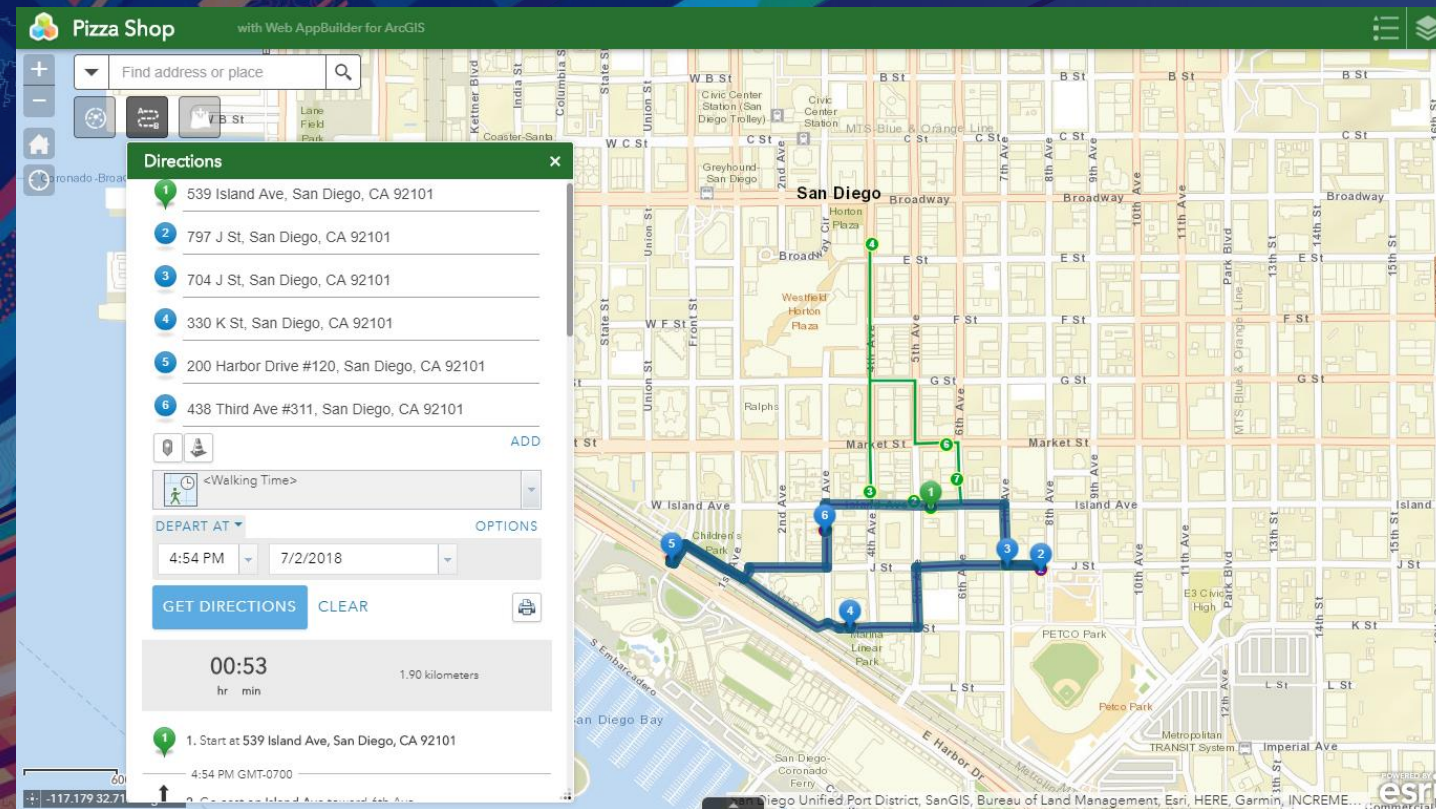


Custom widgets & themes

Build widgets to extend what your apps do and customize themes to tailor the look of your apps.

[> Widgets](#) [> Themes](#)

[Web AppBuilder Developer Edition](#)



Demo: Pizza Delivery

Create a Pizza Delivery app using **Plan Routes** analysis widget and **Directions** widget in Web AppBuilder

Shubhada Kshirsagar

Demo: Pizza Delivery -- Takeaways

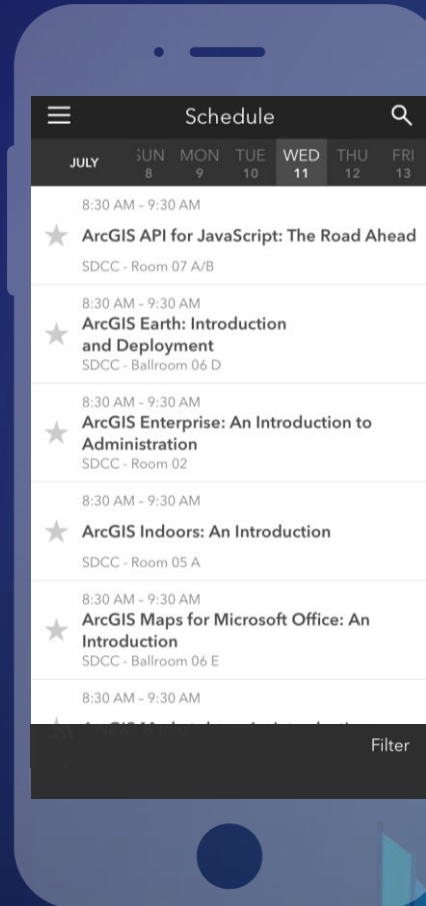
- Web AppBuilder allows building apps with lots of capabilities.
- Analysis widget contains multiple tools
- Add Data widget allows you to add content from local files
- Share routes with your workforce using route layers and Navigator for ArcGIS

Please Take Our Survey on the App

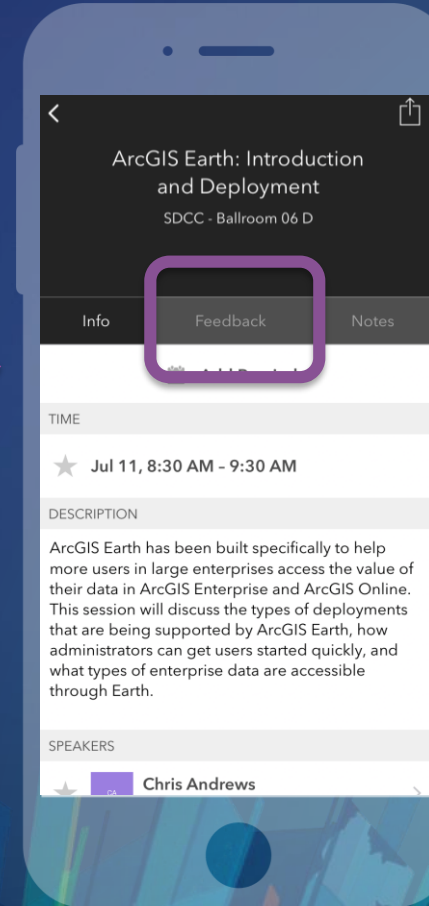
Download the Esri Events app and find your event



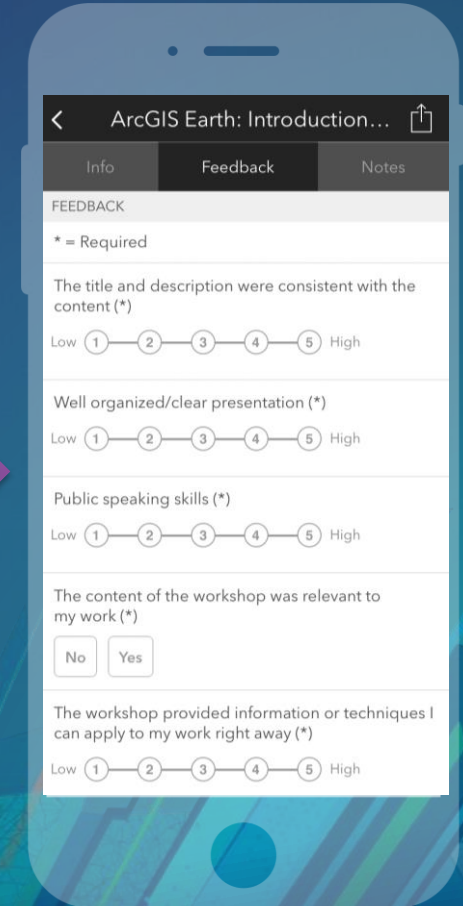
Select the session you attended



Select the Feedback tab



Complete answers and select "Submit"



See Us Here

Tuesday July 10

8A

Network Analyst: Creating Network Datasets - Room 30 C

9A

10A

Network Analyst: An Introduction - Room 30 C

StreetMap Premium: Adding Custom Roads - Room 16 A

11A

12P

1P

GeoAI Deep Dive: Implementing Machine Learning Solutions with ArcGIS - Room 05 B

Navigator for ArcGIS: An Introduction - Room 15 A

2P

ArcGIS API for Python Integrating Machine Learning and Deep Learning - Demo Theater 08

3P

4P

Network Analyst: An Introduction - Room 30 C

5P

Wednesday July 11

8A

Network Analyst: Solving Large Transportation Analysis Problems - Room 29 D

9A

10A

Network Analyst: Optimize Your Fleet of Vehicles with the VRP Solver - Room 33 C

11A

ArcGIS Enterprise: Publish Your Own Network Analysis Services - Demo Theater 05

12P

Navigator for ArcGIS: Connecting to Preplanned Routes - Demo Theater 09

1P

Network Analyst: Automating Workflows with Geoprocessing - Room 30 A

2P

3P

4P

Network Analyst: Creating Network Datasets - Room 33 C

5P

Thursday July 12

8A

Public Transit Data: Spatial and Network Analysis - Room 07 A/B

9A

10A

Building Routing Applications with ArcGIS Online or ArcGIS Enterprise - Demo Theater 10

Navigator for ArcGIS: Connecting to Preplanned Routes - Demo Theater 05

11A

12P

1P

ArcGIS Online: Routing and Network Analysis - Room 07 A/B

2P

Network Analyst: Automating Workflows with Geoprocessing - Room 31 A

3P

4P

Network Analyst: Solving Large Transportation Analysis Problems - Room 30 D

Network Analyst: Optimize Your Fleet of Vehicles with the VRP Solver - Room 33 C

5P

Questions?

Slides from this demo theater

<http://esriurl.com/uc18brago>



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