




# Build Great Information Products with ArcGIS Online

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2019 ESRI DEVELOPER SUMMIT  
Palm Springs, CA

# Agenda

- App overview
  - Configurable app templates
    - StoryMaps
  - Web AppBuilder for ArcGIS
  - Operations Dashboard for ArcGIS
  - Summary
- 

# What are ready to configure apps?

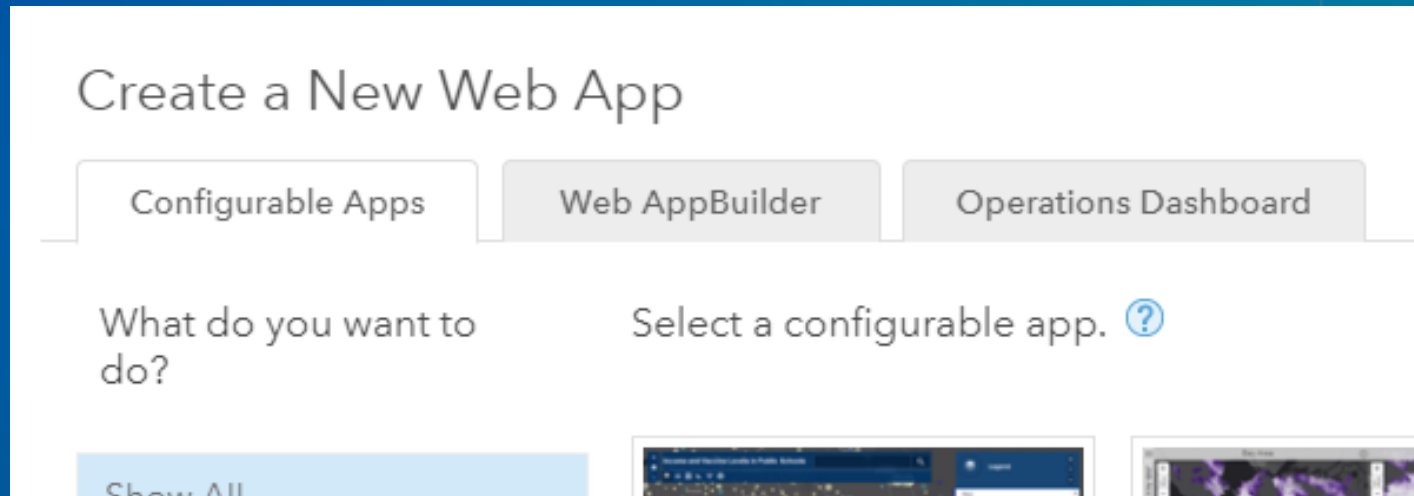
- Hosted apps maintained by Esri in the cloud
- Fastest and easiest way to go from a map to a shareable app
- Designed for you to *configure, assemble, build* – no programming required





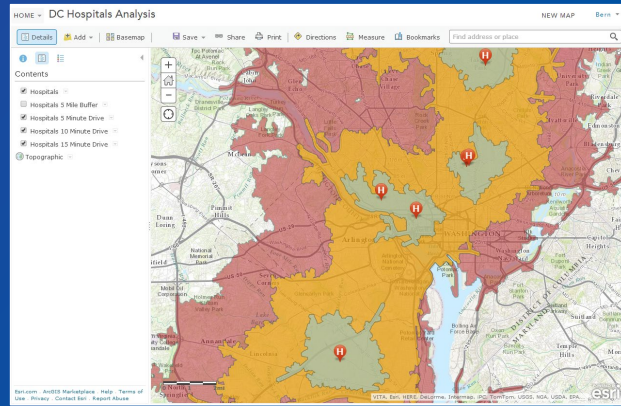
# What are ready to configure apps?

- Hosted apps maintained by Esri in the cloud
- Fastest and easiest way to go from a map to a shareable app
- Designed for you to *configure, assemble, build* – no programming required
- Source code is available (not for Operations Dashboard)

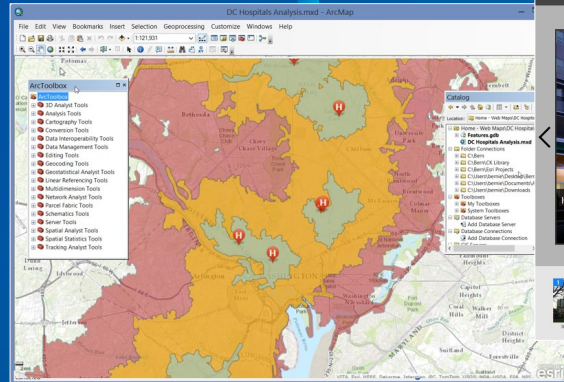




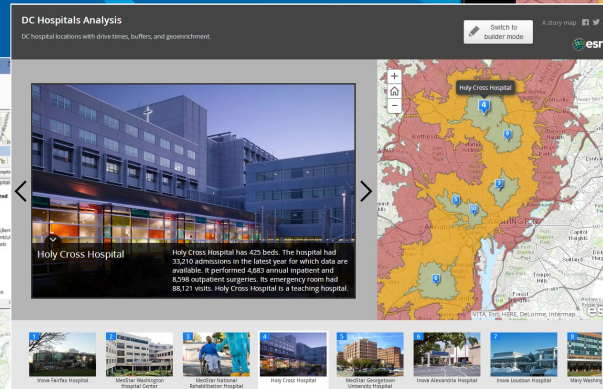
# Web maps are the building blocks of web GIS



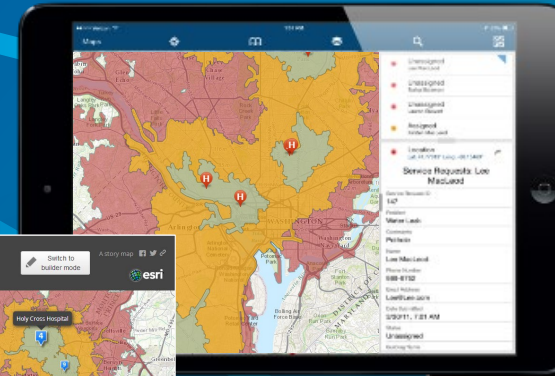
# Map Viewer (for authoring)



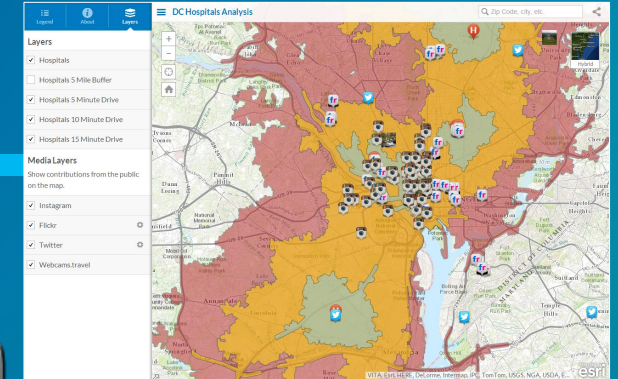
# ArcGIS Desktop



# Story Maps



## Apps for field



## Configurable apps

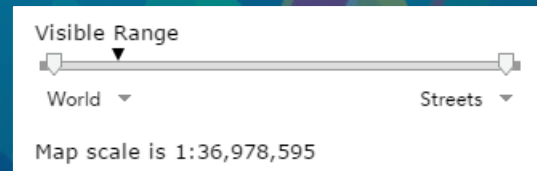
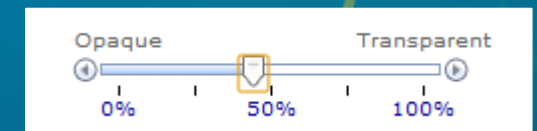
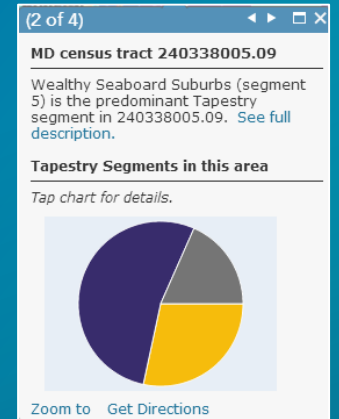
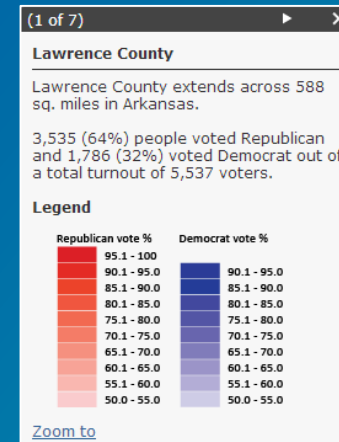
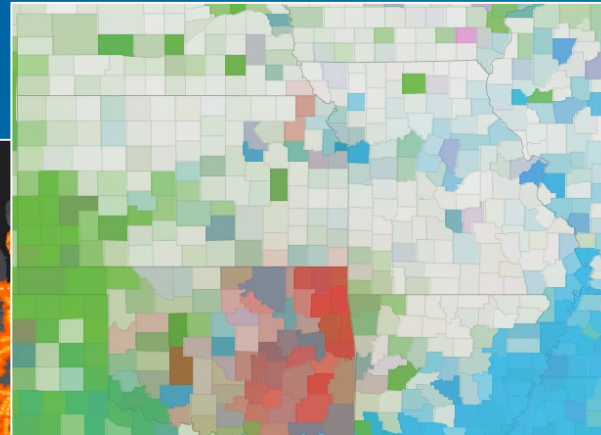
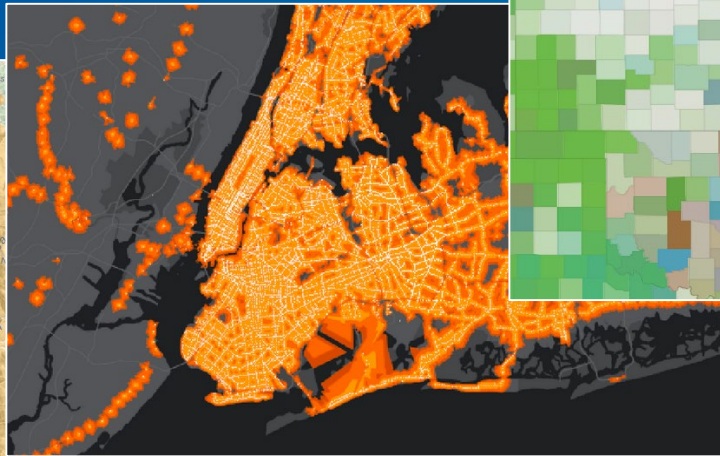
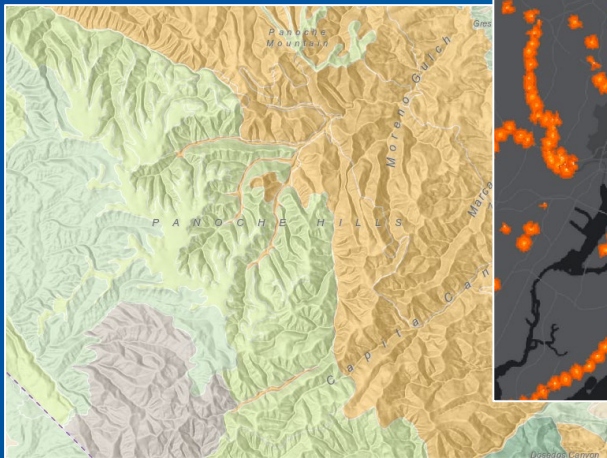


## Devices

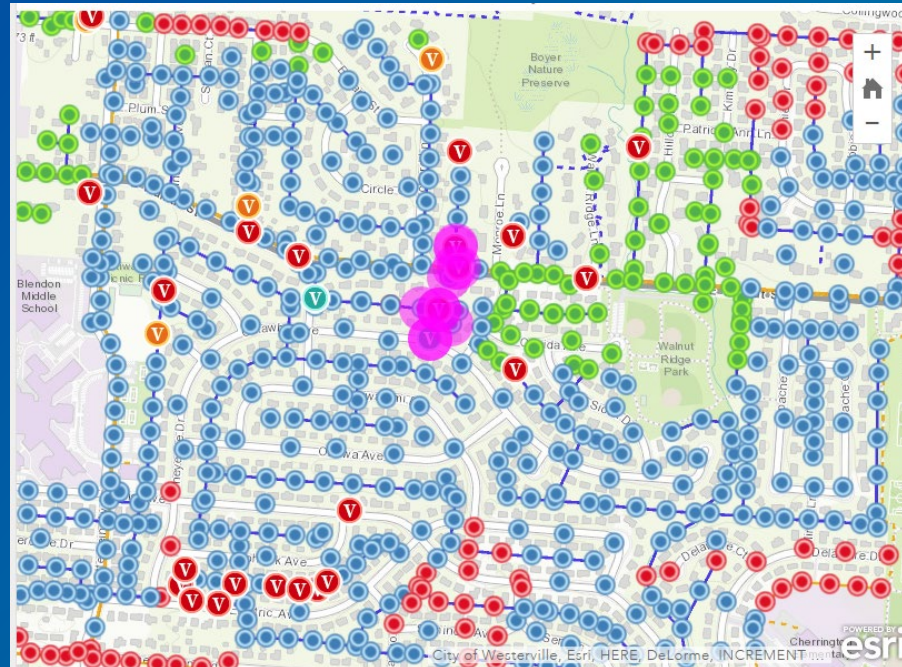


# A great app starts with a great map

- Cartography (smart mapping)
- Transparency, scale ranges, bookmarks
- Pop-ups
- Performance

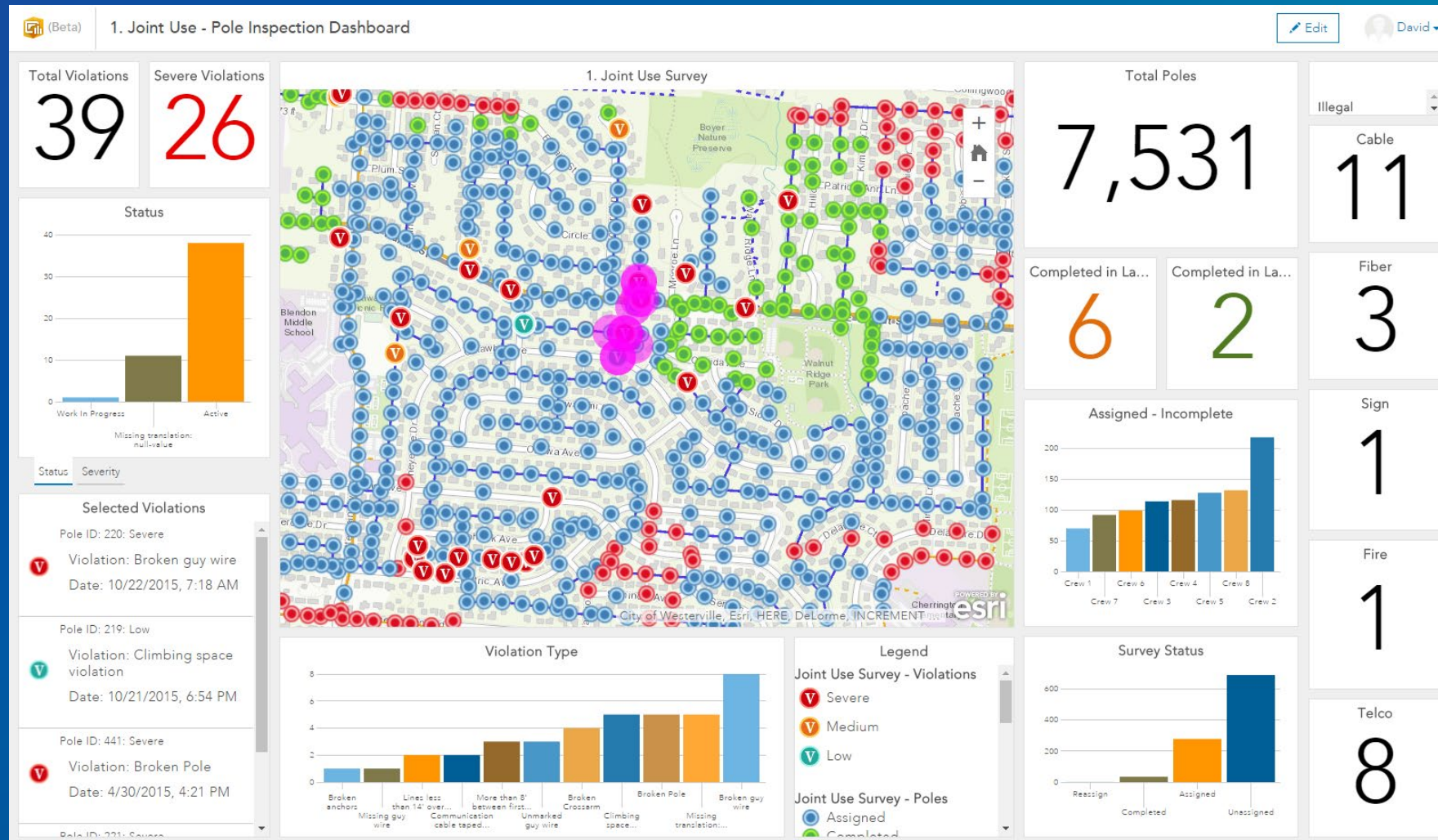


# Apps complete the user experience



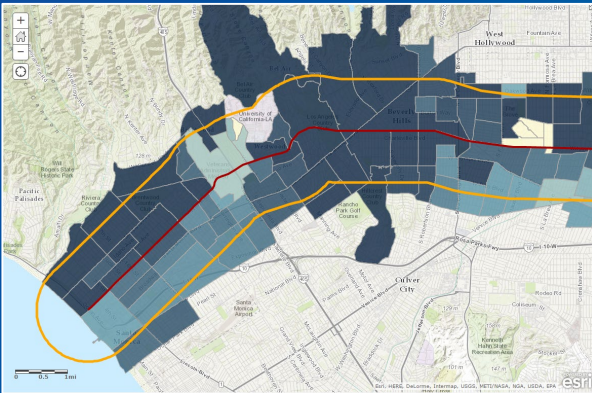


# Apps complete the user experience

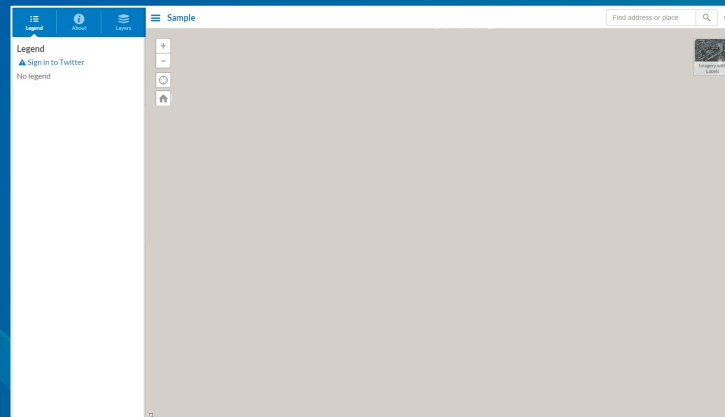


# Apps complete the user experience

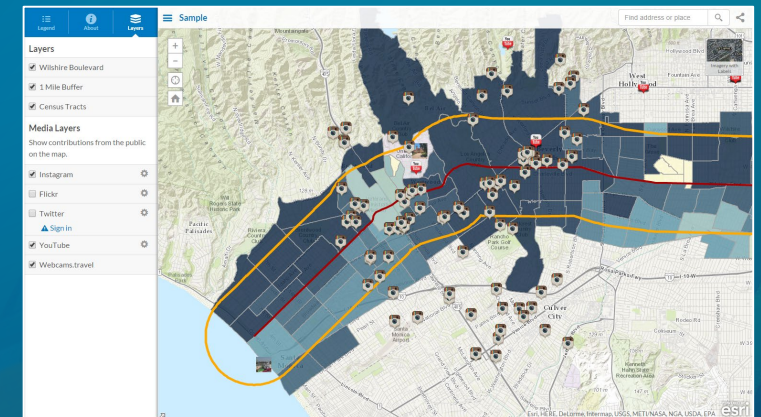
- Present map information and tools in meaningful ways
- Configured to reach target audience
- Support workflows and workforce tasks



Map



App template

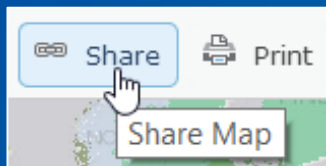


Configured application



# Where to find apps

- Create a New Web App gallery
  - Built in to sharing workflow



CREATE A WEB APP

## Create a New Web App

Configurable Apps

Web AppBuilder

Operations Dashboard

What do you want to do?

Select a configurable app. ?

Q S

Show All

Build a Story Map

Collect/Edit Data

Compare Maps/Layers

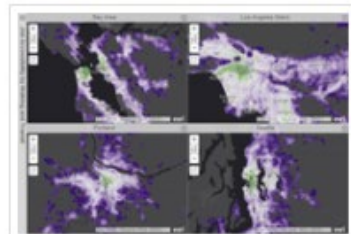
Explore/Summarize Data

Map Social Media

Provide Local Information



Basic Viewer

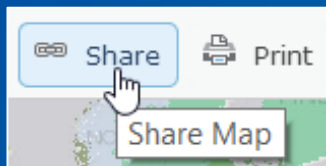


Compare Analysis

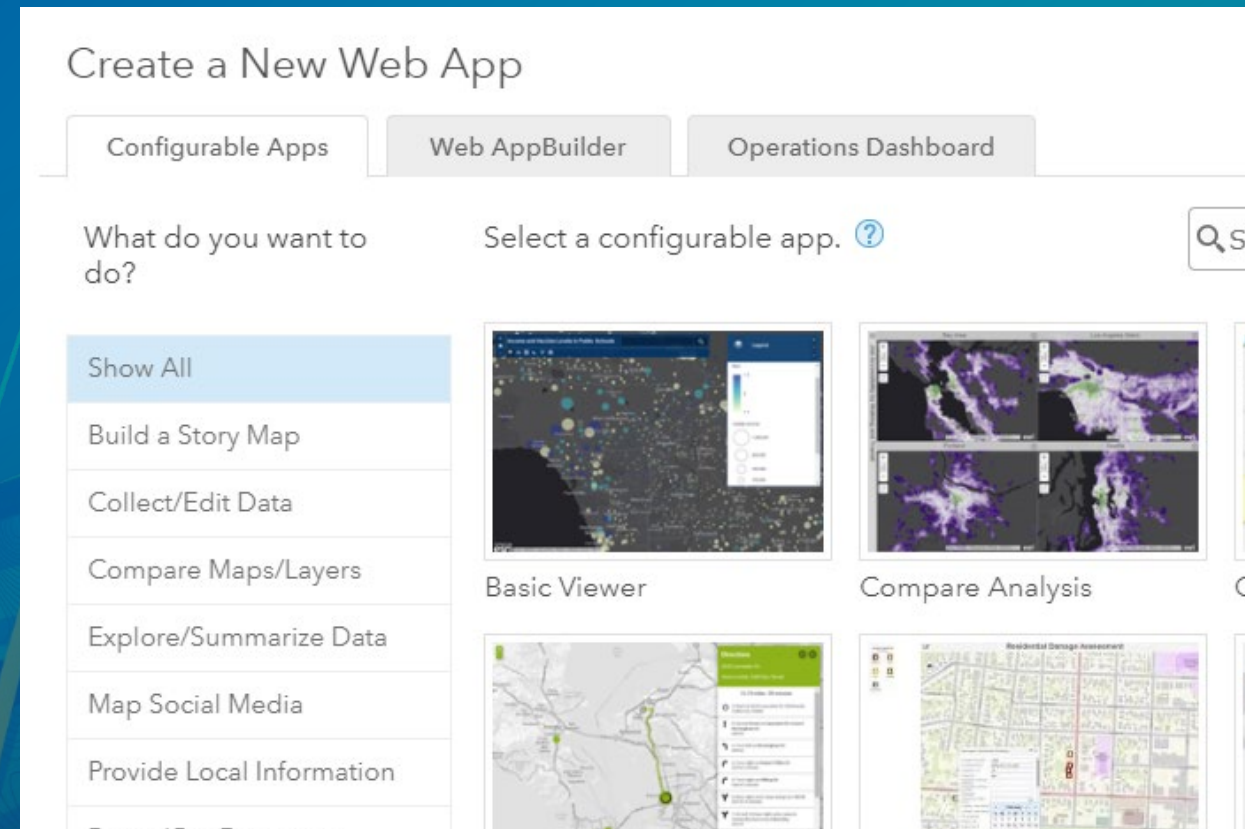


# Where to find configurable apps

- Create a New Web App gallery
  - Built in to sharing workflow
- Story Maps website
  - <https://storymaps.arcgis.com>
- Solutions
  - <https://solutions.arcgis.com>

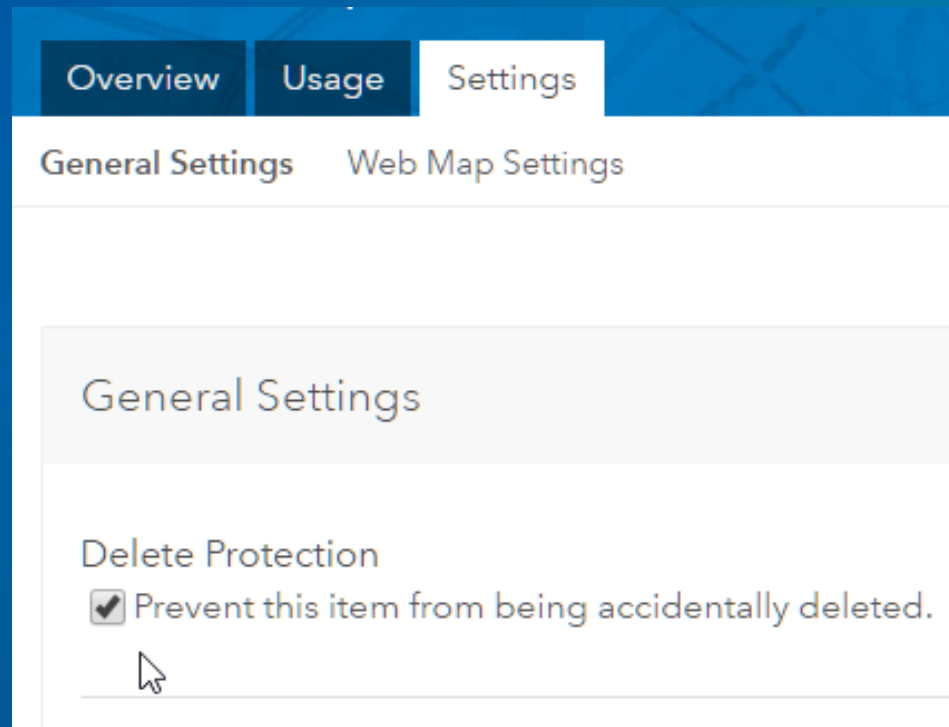


CREATE A WEB APP



# Delete protection

- Ensures maps, apps and related items don't vanish
- Item Setting tab





Configurable apps in more detail



# What do you want to do?

What do you want to do?

## Create a New Web App

Configurable Apps | Web AppBuilder | Operations Dashboard

What do you want to do? | Select a configurable app. ? | Search

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

Basic Viewer

Compare Analysis

Crowdsour

Directions

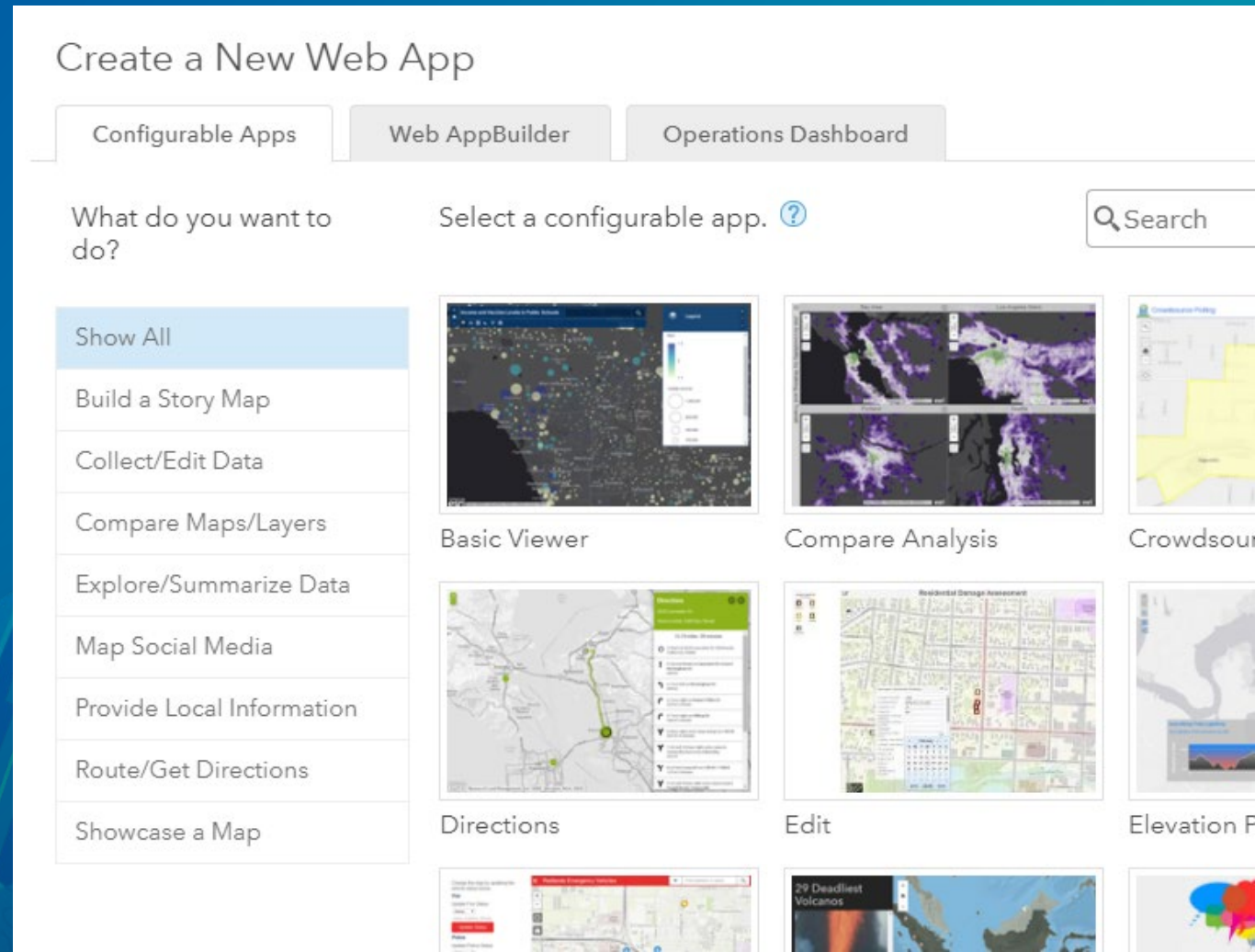
Edit

Elevation P

29 Deadliest Volcanos

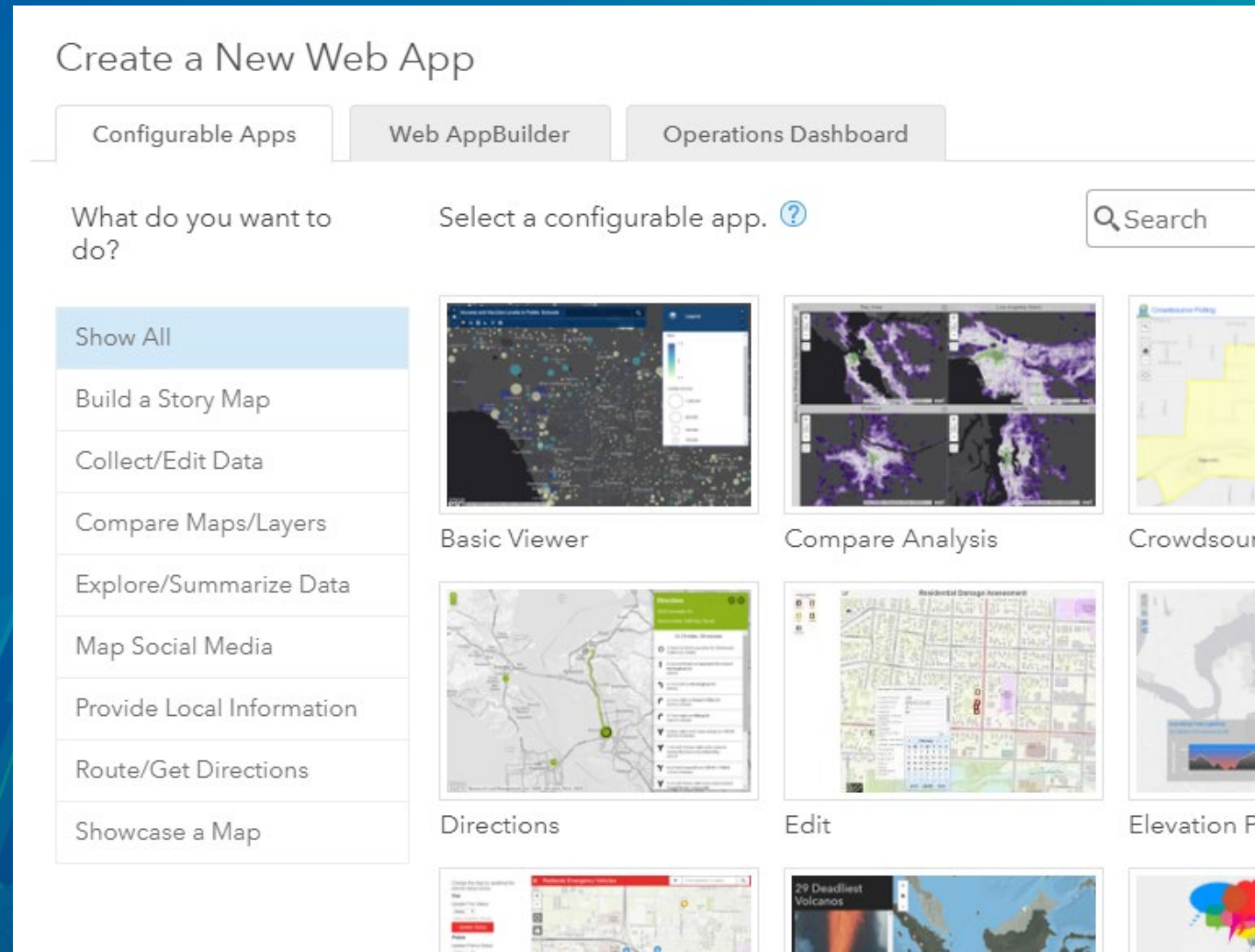
# What do you want to do?

- 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



# Some apps and tools have map requirements

- Bookmarks
- Filter
- Editable feature layer
- Attributes
- Others...





# Story Maps



# Story Maps website

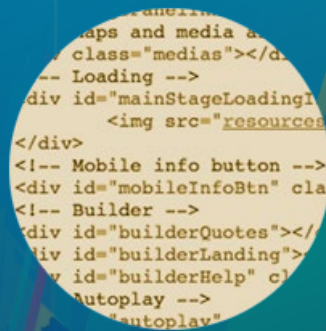




# Story Maps website

- Showcase and gallery
- Create a New Story
- Story Map Tutorials, training
- My Stories
- Documentation, training links, FAQs
- Blog, Planet Story Maps
- Developer info

✓ *Everything you need to succeed*






# My Stories

Tools to validate maps and media, manage, update, and share your stories

No issues found 

We found some  
issues 


Premium content

Your story contains  
premium content that will  
consume **credits** when  
publicly available.  
Confirm to make these  
layers public or remove  
the layers from your  
story.

CONFIRM

Subscription content

## Bern's stories

 33 stories

Storytelling is the most powerful way to put  
ideas into the world today.

-- Robert McKee

 CREATE STORY

 CHECK STORIES

Search your stories...

Sort: Title ▾

Filter ▾

33 results ✕



### A Brief Tour of America's Five Largest Cities

Map Journal | Public | Modified January 5, 2017

1,004 views



### Anchialine Caves and Cave Fauna of the World

Map Journal | Public | Modified October 30, 2016

371 views



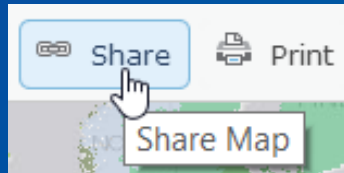
### ArcGIS Online Arctic Maps Swipe (UC 2015)

Swipe/Spyglass | Public | Modified July 31, 2015

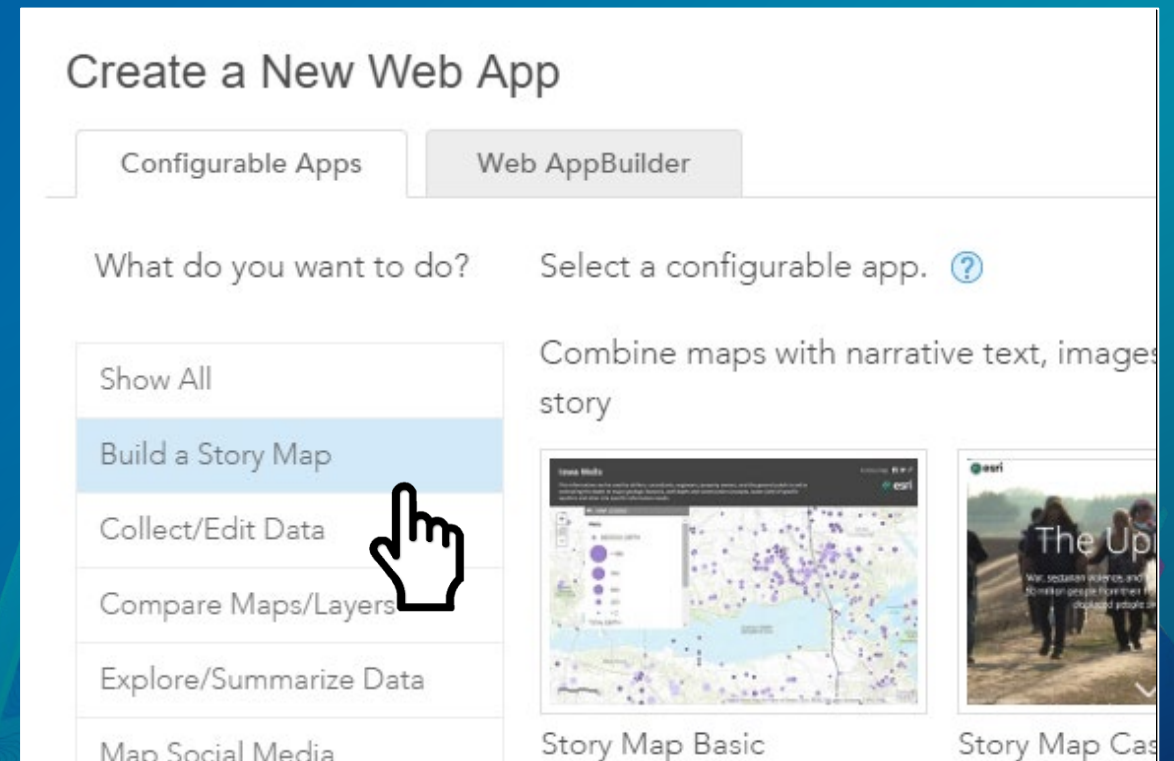
123 views

# Two workflows

1. Start with a web map
2. Start at the Story Maps website



CREATE A WEB APP



# Two workflows

1. Start with a web map
2. Start at the Story Maps website

Get started right away!

CREATE STORY



## Story Map Tour<sup>SM</sup>

This app presents a sequential, place-based narrative in the form of a series of geotagged photos and captions linked to an interactive map. It's ideal for walking tours or for a series of locations you'd like users to follow in sequence.

Features:    

LEARN MORE

BUILD A MAP TOUR



*Recommended workflow*



# Story Maps use builders (and have help)

WELCOME TO **Map Journal** Builder

Which layout do you want to use? ?



**Side Panel**  
A layout for a text intensive story that excels at combining your photos, videos, and maps in a clear focused message.


[VIEW A LIVE EXAMPLE](#)









**Floating Panel**  
A layout that puts your cartography in focus while allowing a transparent short form text panel to help tell the story.

[VIEW A LIVE EXAMPLE](#)

[START](#)


 **Help**


ADD SETTINGS ORGANIZE EDITS SHARE TIPS

By default the maps location are synchronized. Disabling synchronization allows each map to display a different location.

**Synchronization ON**



**Synchronization OFF**



To disable synchronization, go to Settings > Map Options and uncheck "Synchronize map locations".

[Want more? Visit the Esri Story Maps website.](#)

[CLOSE](#)

# Story Maps have multiple layouts

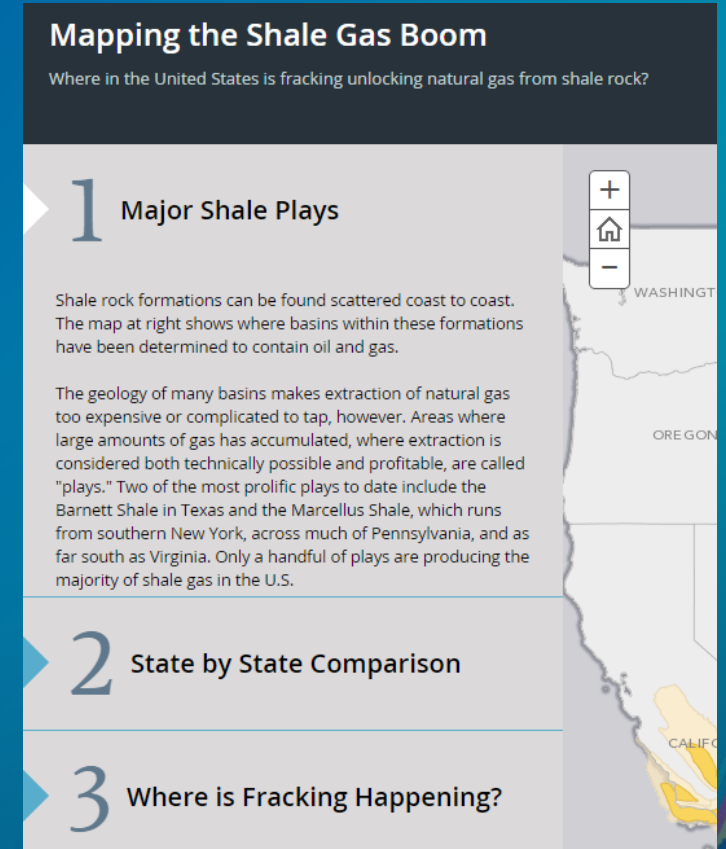
## Story Map Series



### Bulleted



### Tabbed



### Side Accordion



Demonstration

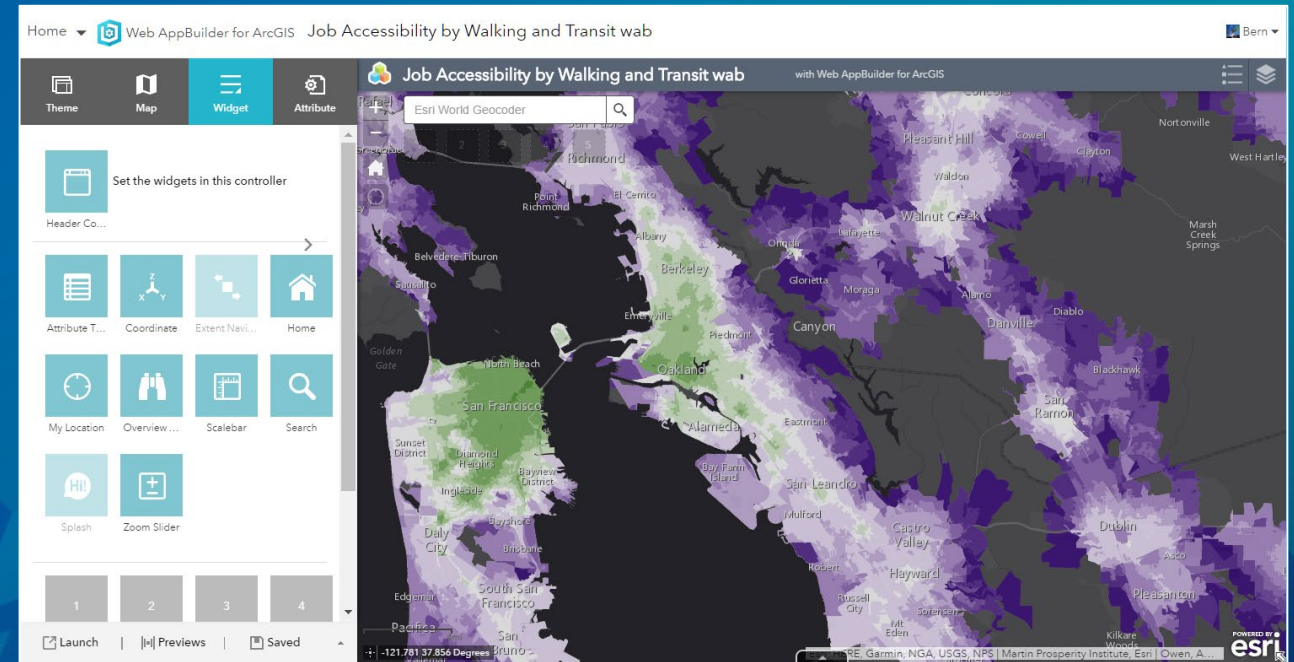




# Web AppBuilder for ArcGIS

# Web AppBuilder for ArcGIS

- Assemble an application using a theme, layout, and configurable widgets





Demonstration





# Operations Dashboard for ArcGIS

# Operations Dashboard for ArcGIS

For at-a-glance decision making

- Monitor assets, events, or activities
  - Provides key insights on a single screen
  - Support for real-time data
- Web browser-based app
  - Works on desktops and tablets
- Integrated with ArcGIS Online
  - Available in ArcGIS Enterprise 10.6
- Built on the ArcGIS API for JavaScript





Demonstration





# Doing More & Developer Options

# Embedding a web map

- Choose map options
- HTML is automatically generated
- Based on Minimalist

## Embed in Website

Choose the size of your map. [i](#)

W  X H  ☒ Allow responsive sizing

Copy and paste HTML to embed in website.

```
<style>.embed-container {position: relative; padding-bottom: 80%; height: 0; max-width: 100%;}
```

[COPY](#)

Map Options

Add Symbol


Choose options to display on your map.

<input checked="" type="checkbox"/> Zoom Control	<input checked="" type="checkbox"/> Scale Bar
<input type="checkbox"/> Home Button	<input type="checkbox"/> Location Search
<input type="checkbox"/> Basemap Selector	<input type="checkbox"/> Map Details
<input type="checkbox"/> View larger map	<input type="checkbox"/> Legend
<input checked="" type="checkbox"/> Disable scroll zoom	

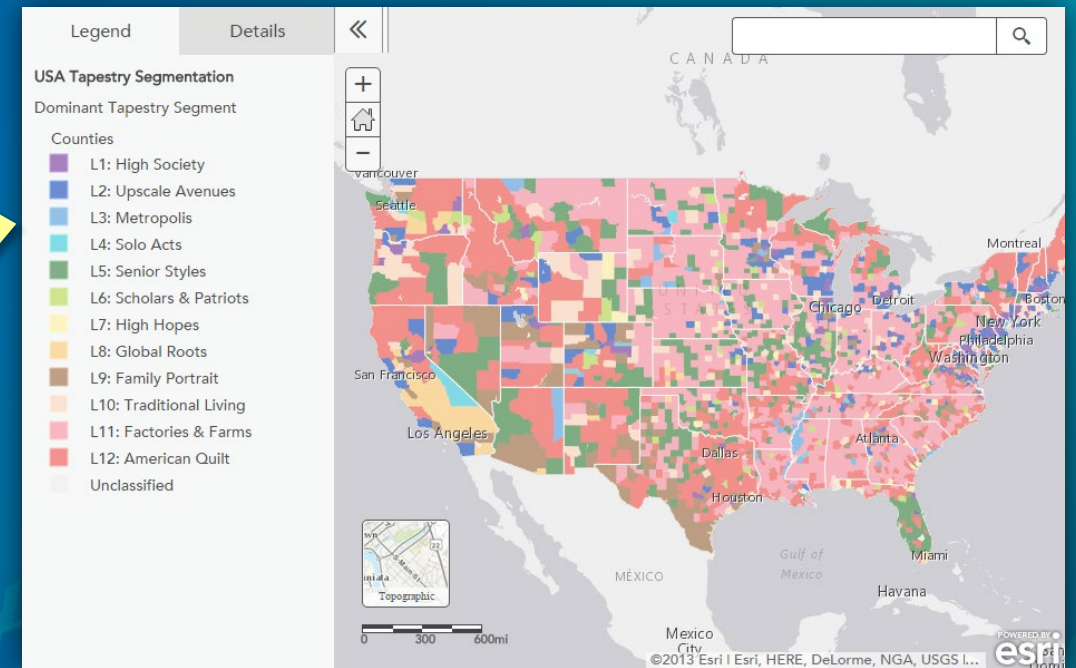
Choose your theme.

☒ Light ☐ Dark

Map Preview



BACK DONE



# Apps can be embedded in websites

SPECIAL REPORT Sponsored By

## Industry Impact

WHERE THE JOBS ARE (AND AREN'T) IN AMERICA

Job growth has been uneven across the US since 2009. The same can also be said of jobs by industry. Explore the maps to see which states and industries are thriving since the Great Recession and see where the jobs have dried up.

### Best and Worst States

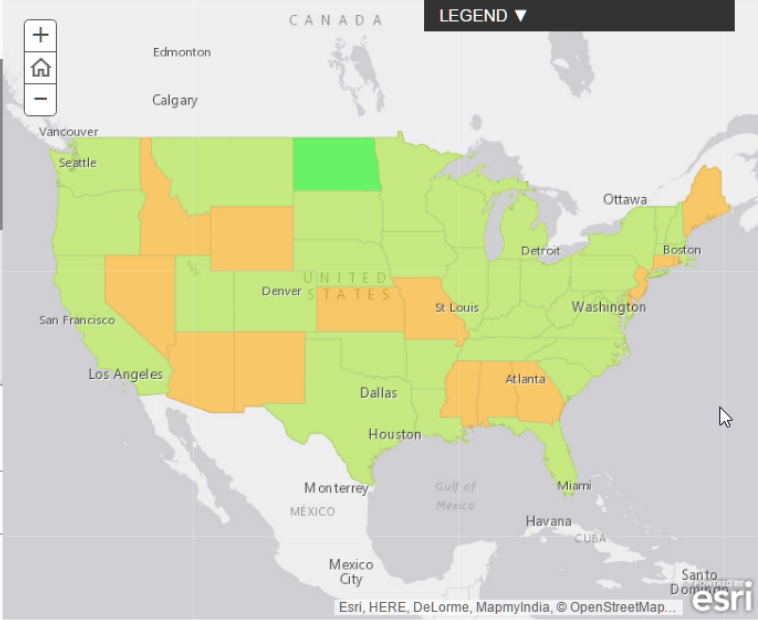
North Dakota saw the most dramatic rise in employment between 2009 and 2013, with employment up 19% due in large part to the state's booming energy rush. Texas, Utah, Alaska, and the District of Columbia followed with overall employment increases closer to 5%.

Other states struggled to build their workforces post-recession. Nevada employment declined 2.4%, New Mexico 2.1%, and Wyoming 1.1%.

### Best Job Outlook: Healthcare

### Mixed Results: Construction

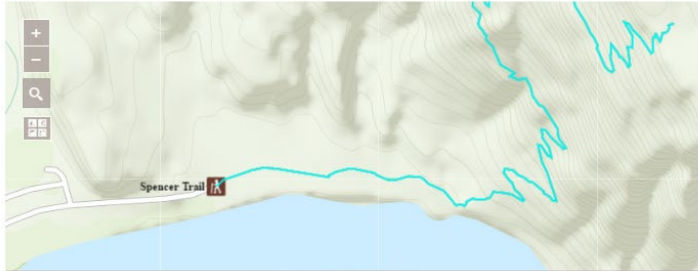
### Worst Job Outlook: Life Sciences



GRAND CANYON TRUST About / Blog / Hikes / Resources ACT VOLUNTEER DONATE

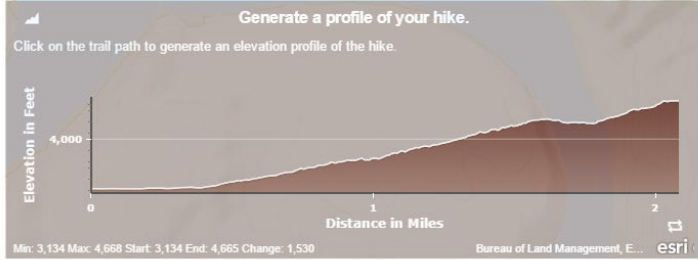
OUR WORK GET INVOLVED NEWSROOM

## Spencer Trail



Generate a profile of your hike.

Click on the trail path to generate an elevation profile of the hike.




Min: 3,134 Max: 4,668 Start: 3,134 End: 4,665 Change: 1,530 Bureau of Land Management, E... esri

View Full Screen Map

A steep hike up the the Echo Cliffs to a broad, open bench with stunning views of Navajo Mountain to the east and the Kaibab Plateau to the west.

### Colorado Plateau EXPLORER



**General Location**  
About 7 miles southwest of Page AZ (roughly 45 miles by highway)

**Distance**  
4.1 miles (7.1 km)

**Difficulty**  
Strenuous

**Trailhead Elevation**  
3,100 ft (945 m)

**Highest/Lowest Elevation**  
3,100/4,650 ft (945/1,417 m)

**Maps**  
USGS Quad: Lee's Ferry, Arizona

**Managed By**  
Glen Canyon National Recreation Area, NPS

**Fees, Permits, and Restrictions**  
Fee required - Check the



# Embedding apps in websites

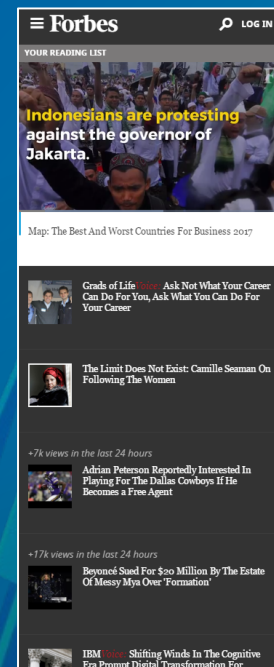
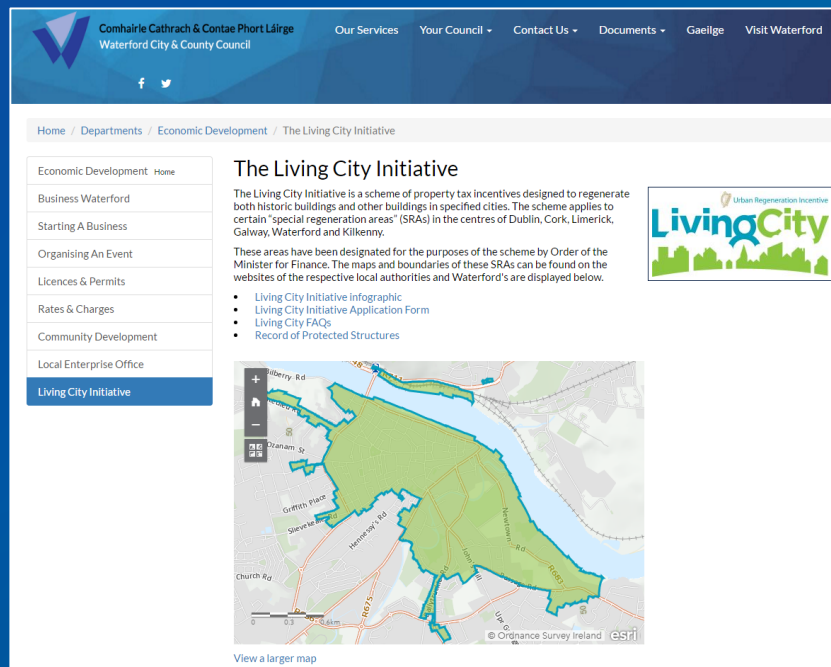
- Use iframe
- Protocol relative URL (src="//myorg..." vs. src="http://myorg..." )
- Minimize app UI for embedding

```
<iframe width=100% height="600" frameborder="1" scrolling="no"  
marginheight="0" marginwidth="0"  
src="//myorg.maps.arcgis.com/apps/View/index.html?  
webmap=8a896ce35a3c454f959c102a4f7b72e8"></iframe>
```

App URL

# Embedding apps in websites

- Mimimize the UI in the configuration panel
- Allow room for the app to “breathe”



for Business. Metrics included property rights, innovation, taxes, technology, corruption, freedom (personal, trade and monetary), red tape, investor protection and stock market performance (click [here](#) for complete coverage).

The Asia-Pacific region landed five countries in the top 25 with the U.S. and Canada the other representatives outside of Europe. The U.S. ranked No. 23, which marked the seventh straight year of declines for the world's biggest economy. The U.S. ranked first in 2006.

Seven African nations populate the bottom 10 of the rankings, including Chad, which ranked last for the second straight year. High levels of corruption, bureaucracy and taxes continue to plague most of these nations.

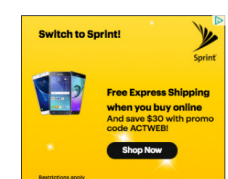


Best and Worst Countries for Business, 2016

Facebook Twitter LinkedIn

Top 25 Bottom 10

- |                |               |
|----------------|---------------|
| 1) Sweden      | 130) Ethiopia |
| 2) New Zealand | 131) Algeria  |

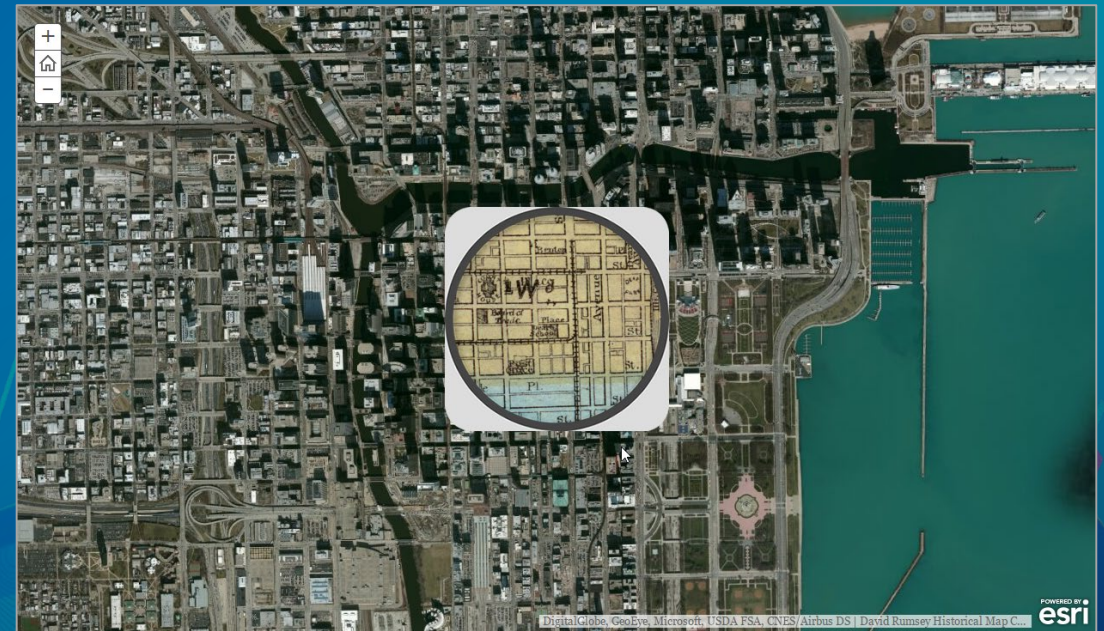
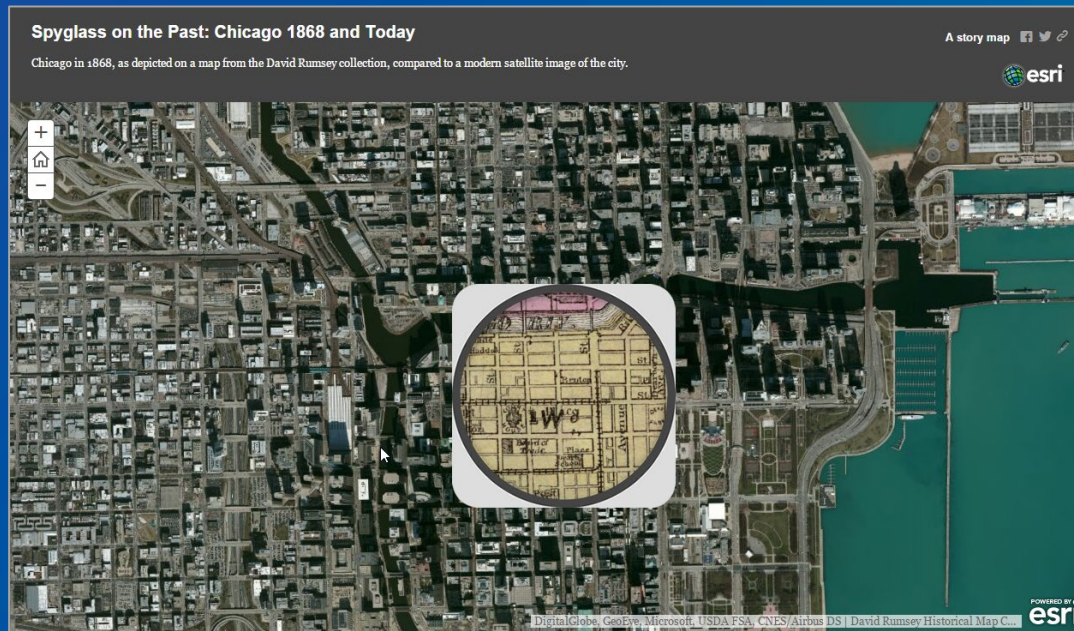




# Embedding story maps in websites

- Use &embed at the end of the URL

&embed

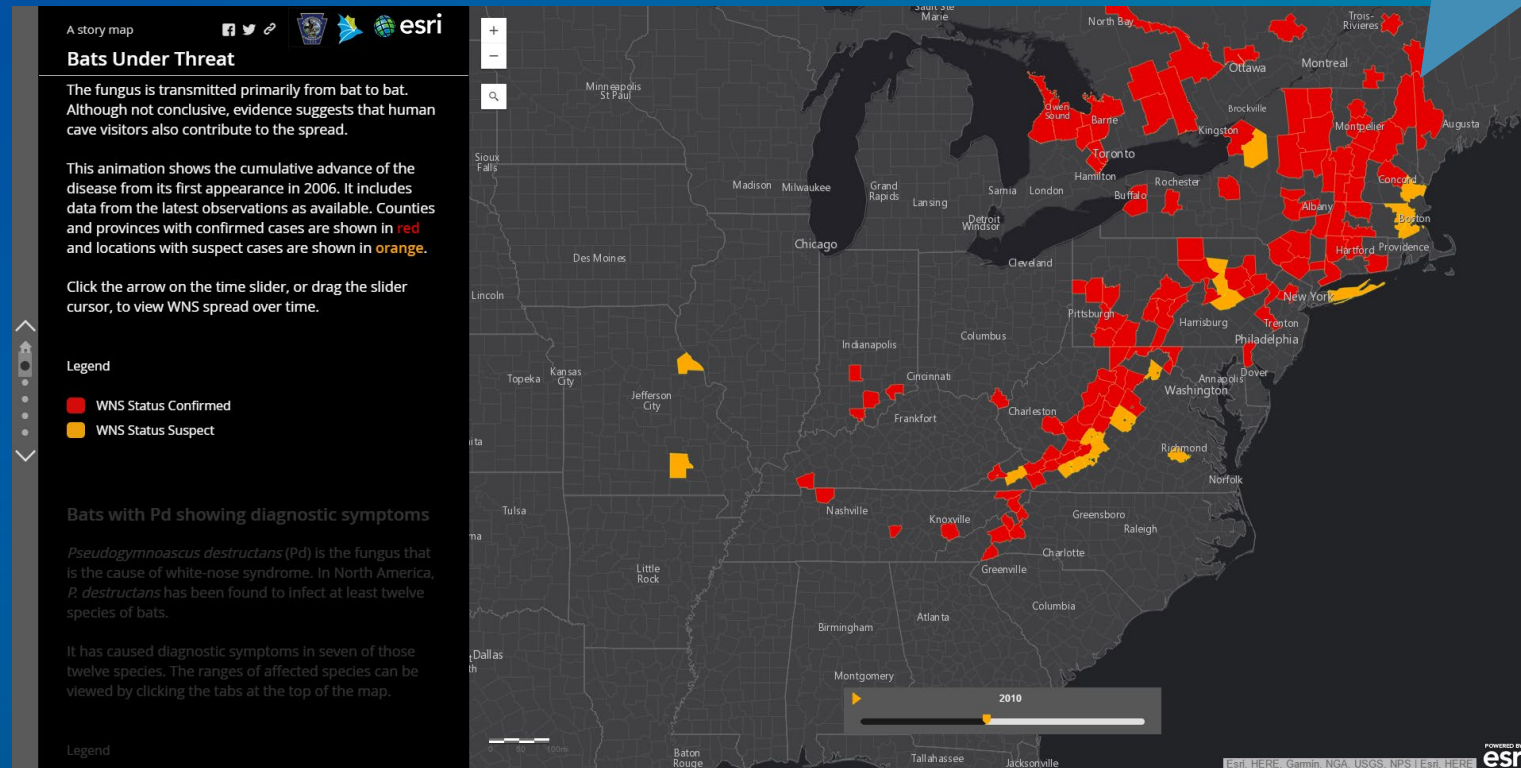




# Embedding apps in story maps

- Use URL (note http vs. https)
- Minimize the UI for embedding

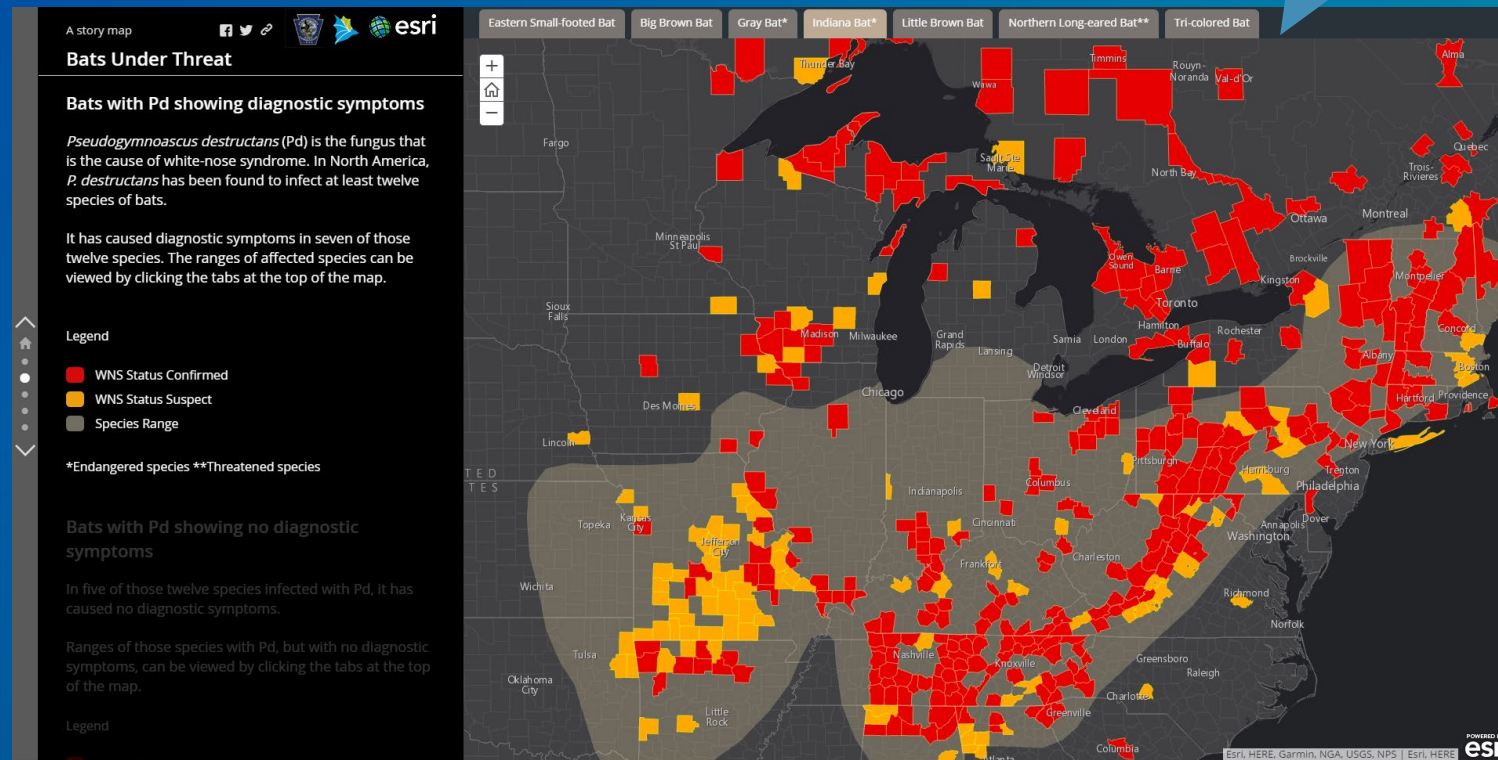
Time Aware app in  
Story Map Journal



# Embedding story maps in story maps

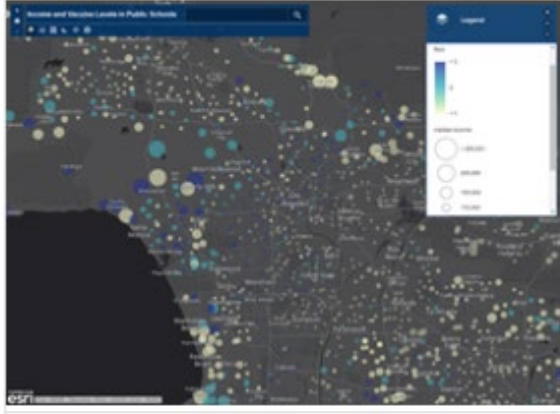
- Minimize the UI (&embed)

Story Map Series  
In Story Map Journal



# Configurable app source code

- Available on GitHub
- Must self-host



**Basic Viewer**

Presents a map in a general purpose app with a collection of essential tools including edit and print.

[CREATE WEB APP](#)

[PREVIEW](#) [DOWNLOAD](#)

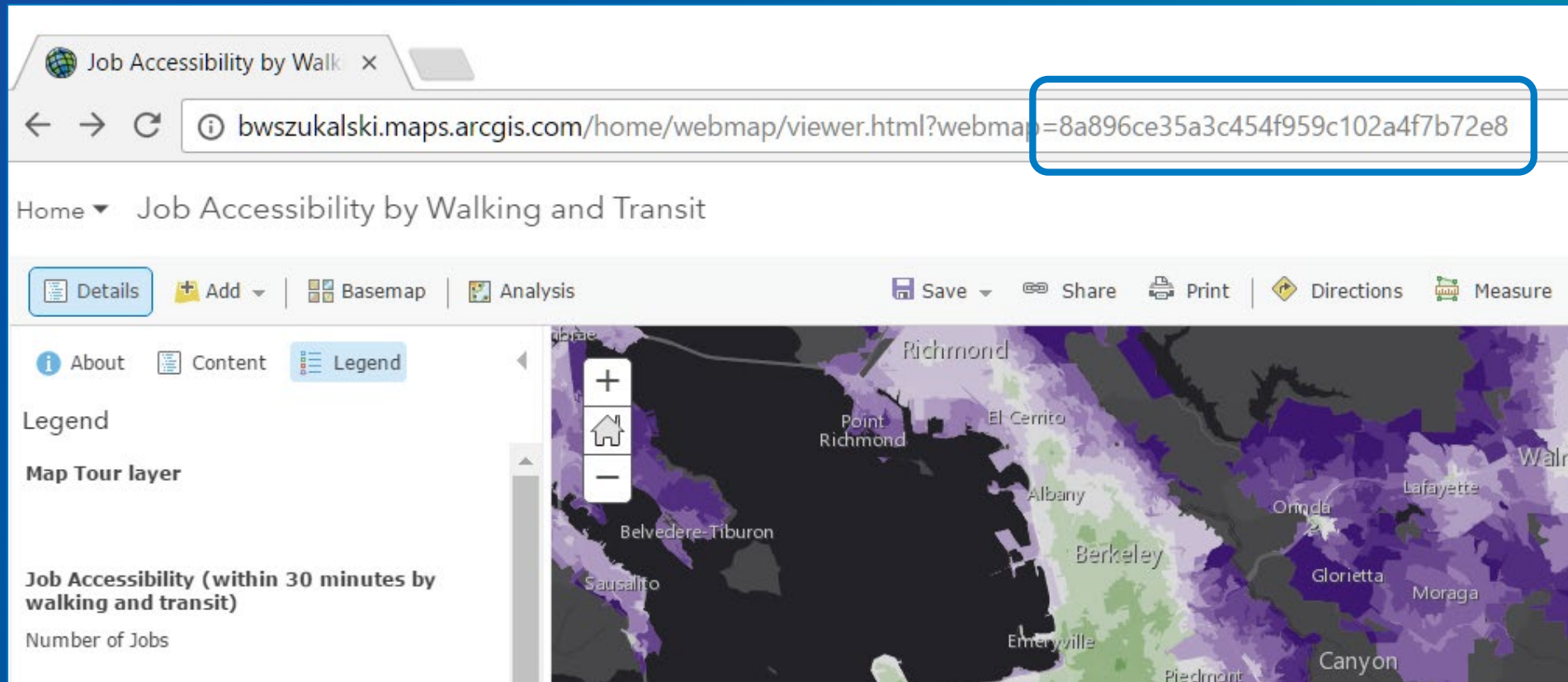
[CLOSE](#)





# Map ID

- Each map has a unique identifier







# Use ID in source code

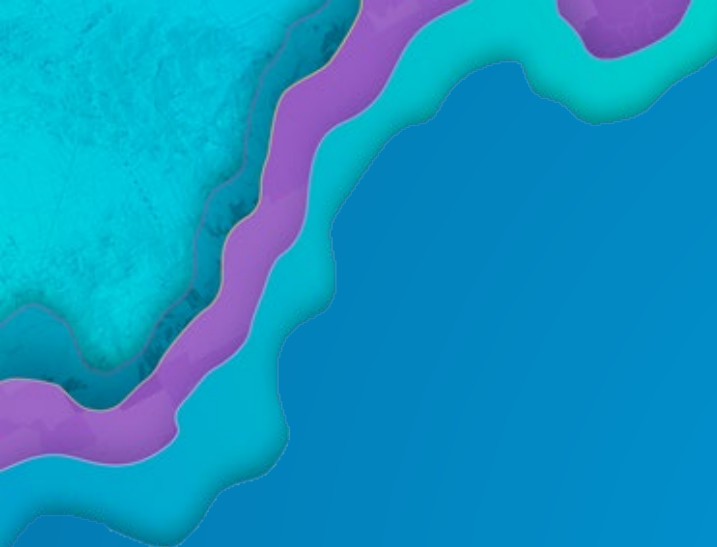
```
12 | Unless required by applicable law or agreed to in writing, software
13 | distributed under the License is distributed on an "AS IS" BASIS,
14 | WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
15 | See the License for the specific language governing permissions and
16 | limitations under the License.
17 */
18 define({
19     //Default configuration settings for the application. This is where
    you'll define things like a bing maps key,
20     //default web map, default app color theme and more. These values can be
    overwritten by template configuration settings and url parameters.
21     "appid": "", //"73909e939be34d2b931f0765ba3bf4a6",
22     "webmap": "f5b13dbed07c46cdb783cf361833aa6b",
23     "oauthappid": null, //"AFTKRmV16wj14N3z",
24     //Group templates must support a group url parameter. This will contain
    the id of the group.
25     //group: "",
26     //Enter the url to the proxy if needed by the application. See the
```

# Story Map source code

- Available on GitHub
- Links found in the Story Map overview on the story maps website

 Download the ready-to-deploy app  
 Get the source code on GitHub  
 Introduction to hosting a Story Map app  
 Story Maps Developers' Corner





# Demonstration & Examples

## Configurable App & Story Map Source

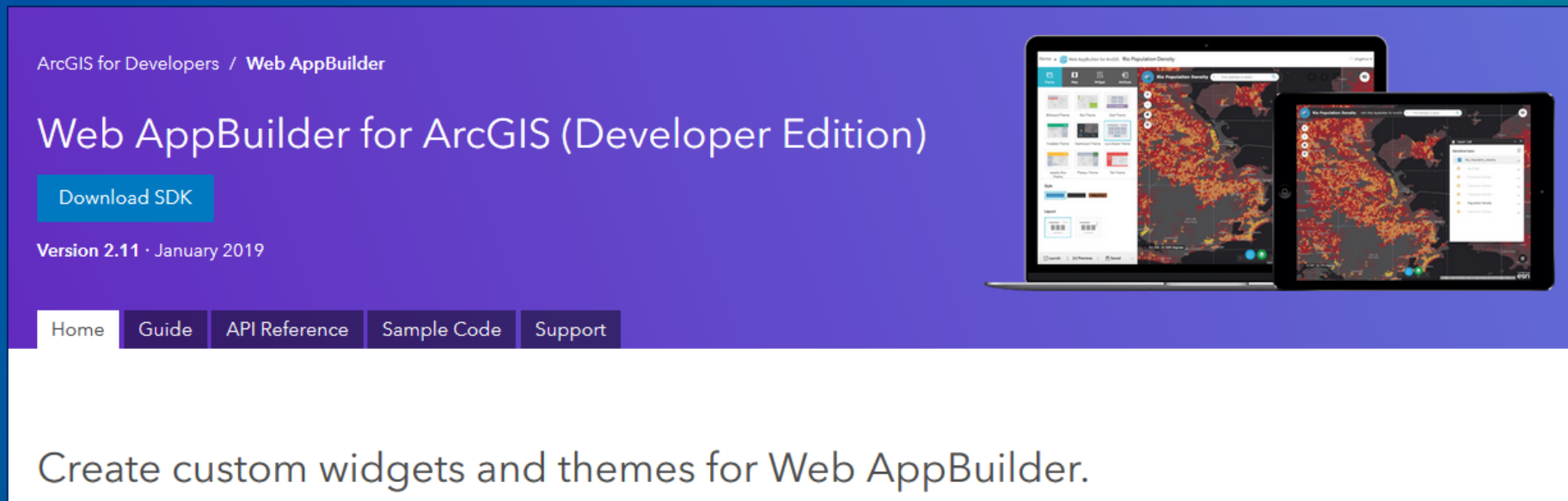


# Web AppBuilder Developer Edition

# Web AppBuilder Developer Edition


[developers.arcgis.com/web-appbuilder](https://developers.arcgis.com/web-appbuilder)

- Download and install locally
  - Same user experience as embedded Web AppBuilder
- Create custom widgets and themes, allowing you to extend your apps
- Leverages ArcGIS API for JavaScript





# Summary

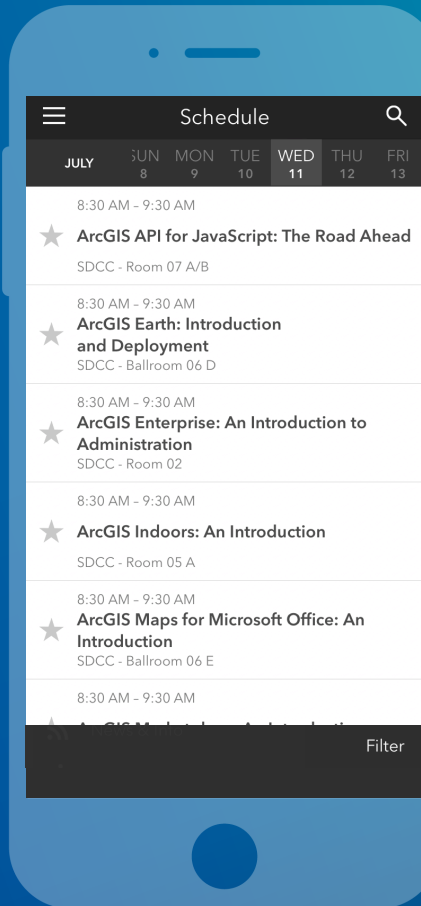
- App overview
  - Configurable app templates
    - StoryMaps
  - Web AppBuilder for ArcGIS
  - Operations Dashboard for ArcGIS
- 

# Please Take Our Survey on the App

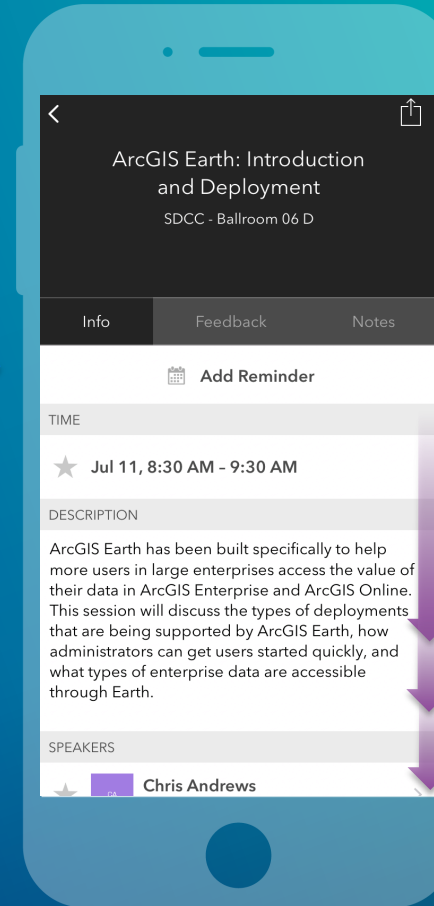
Download the Esri Events app and find your event



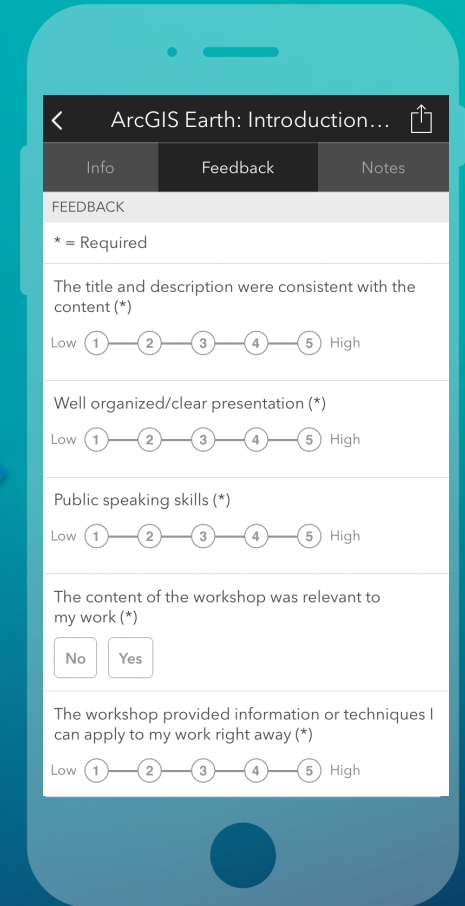
Select the session you attended



Scroll down to find the feedback section



Complete answers and select "Submit"





esri

THE  
SCIENCE  
OF  
WHERE