



# Leveraging ArcGIS Web Mapping Applications

Bern Szukalski, Ian Wittenmyer

Technical Workshop

# Workshop Outline

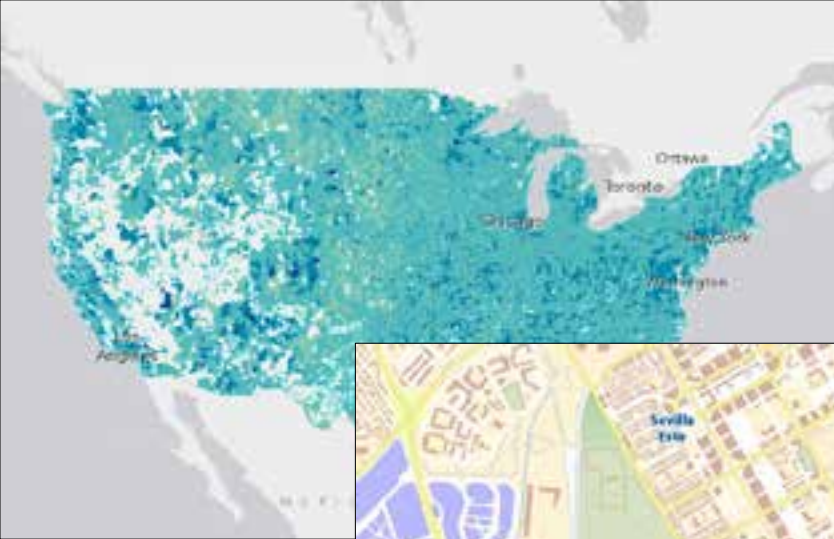
- **Building great information products**
- **What are my options and where do I find them?**
- **How to choose which template to use?**
- **Apps and your organization**
- **Road ahead**



# Building Great Information Products

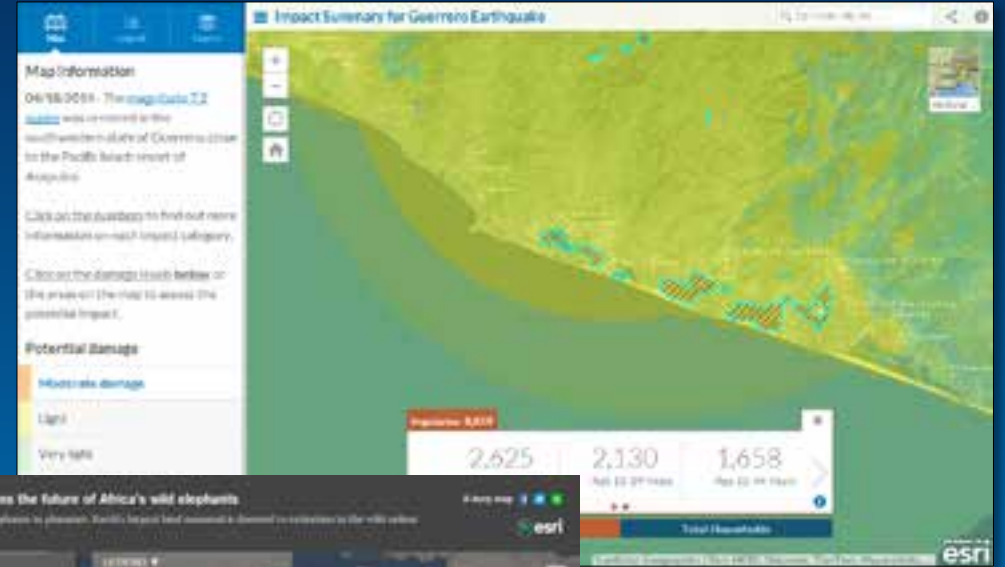
# Web Maps

How we communicate geographically

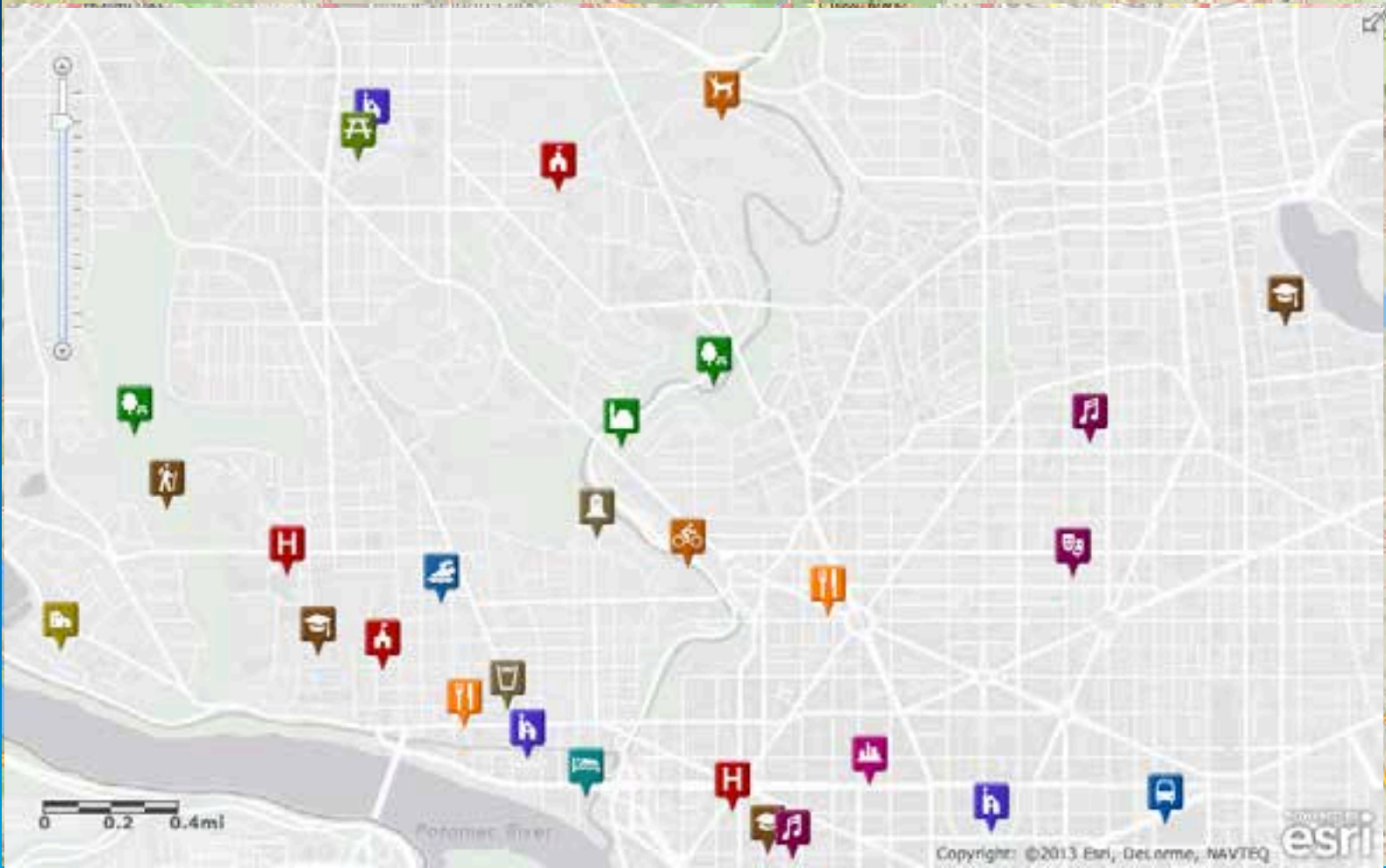


# Apps

Putting together the entire information experience



# A great app starts with a great map



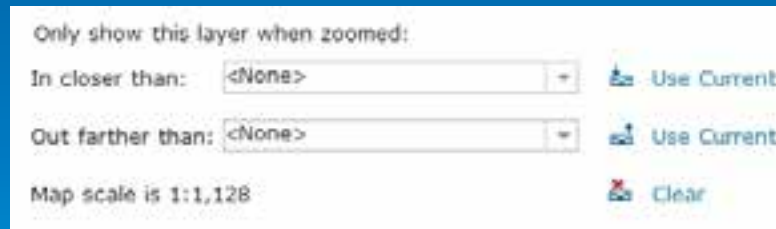
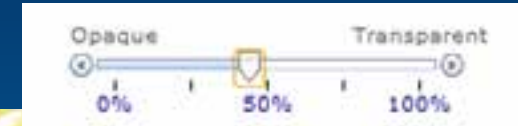
# Crafting the map experience



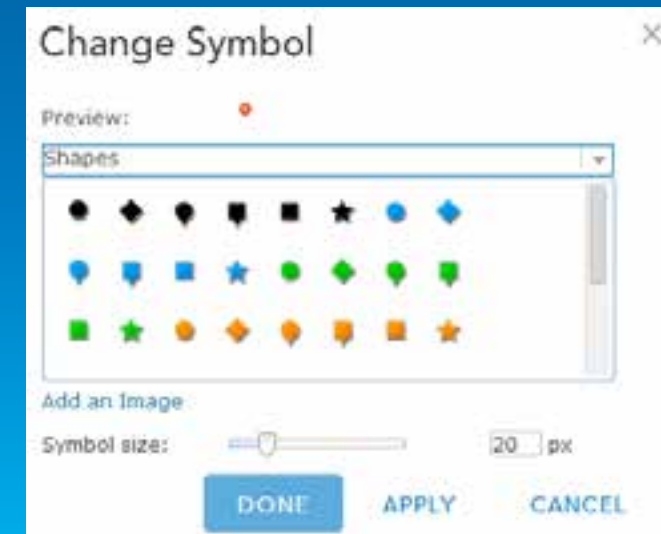
Layer Pop-ups



Transparency



Display Scale Range

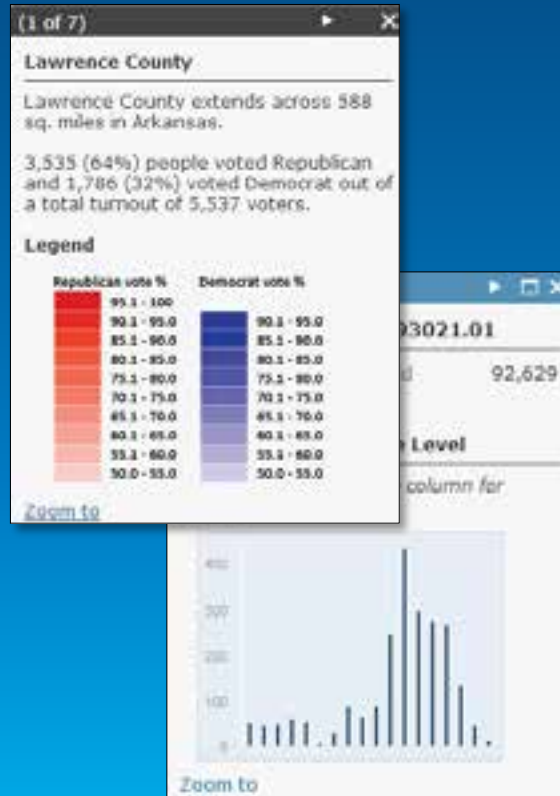


 Options depend on layer type

# Pop-ups

Turning a list of attributes into a meaningful display of information

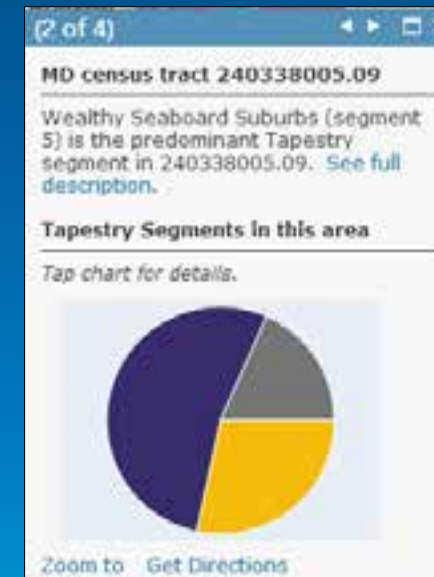
## Charts



## Images and Links



## Formatted text and Charts





# Map Viewer vs. Web App Templates

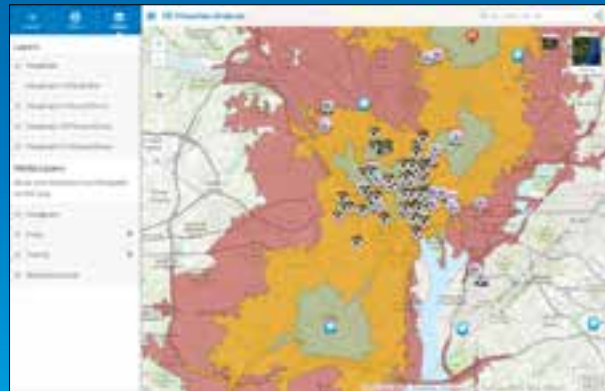
Deliver your information in the right context



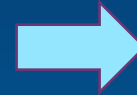
Map viewer (for authoring)



Storytelling basic template



Public information template

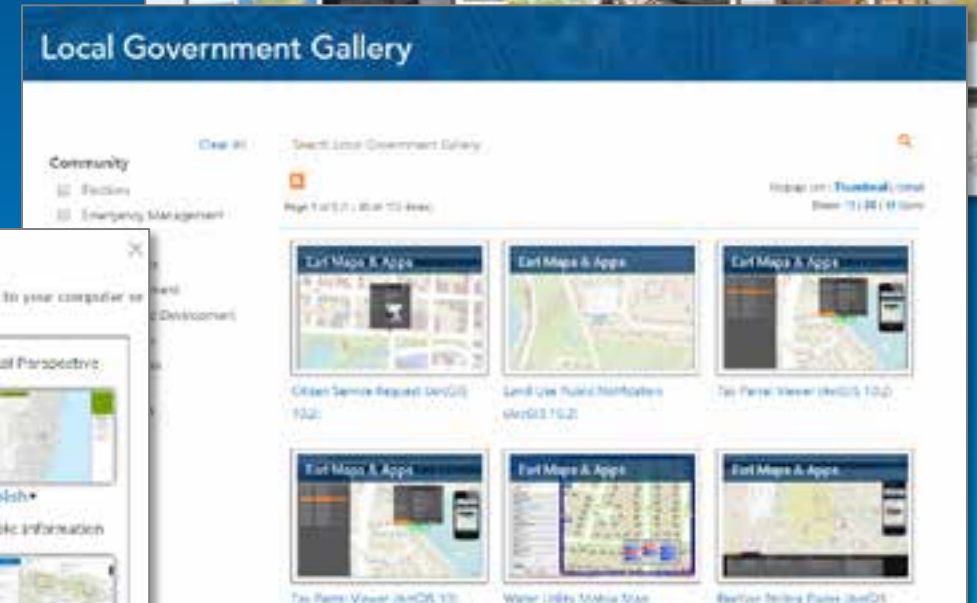


Story map tour



# Where do I find Web App Templates?

- ArcGIS Web Map App Template Gallery
- ArcGIS Online
  - Items
  - Groups
- Story Maps
  - [storymaps.arcgis.com](http://storymaps.arcgis.com)
- Solutions templates
  - [solutions.arcgis.com](http://solutions.arcgis.com)



# What types of web app templates are there?

- **Hosted**
  - **Templates stored in cloud**
  - **Include configuration capabilities**
  - **Recommended when possible**
- **Downloadable**
  - **Source on GitHub**
  - **Must host on own server**
  - **Unlimited customization potential**

# What can I do with this great app I just made?

- Use in browser
- Use on device
- Embed in website

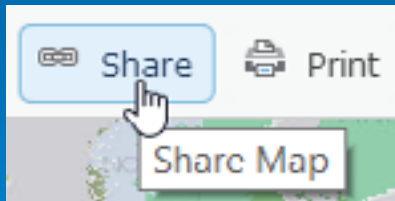


# Web Map App Template Gallery


Choose from gallery to publish, preview, or download

- Publish
- Preview
- Download

MAKE A WEB APPLICATION



# Publish, Download, or Preview



The image shows a screenshot of a map application interface. At the top, there is a 'Legend' section. Below it is a map view showing a yellow and orange terrain. Under the map, there is a 'Publish' dropdown menu with three options: 'Publish', 'Download', and 'Preview'. A mouse cursor is hovering over the 'Publish' option. Three callout boxes provide instructions for each option:

- Publish:** Click publish to couple and host your map with the application template
- Download:** Download source to customize and host on your own
- Preview:** Preview application

# Configure and publish from your account

Then save and share like any other item

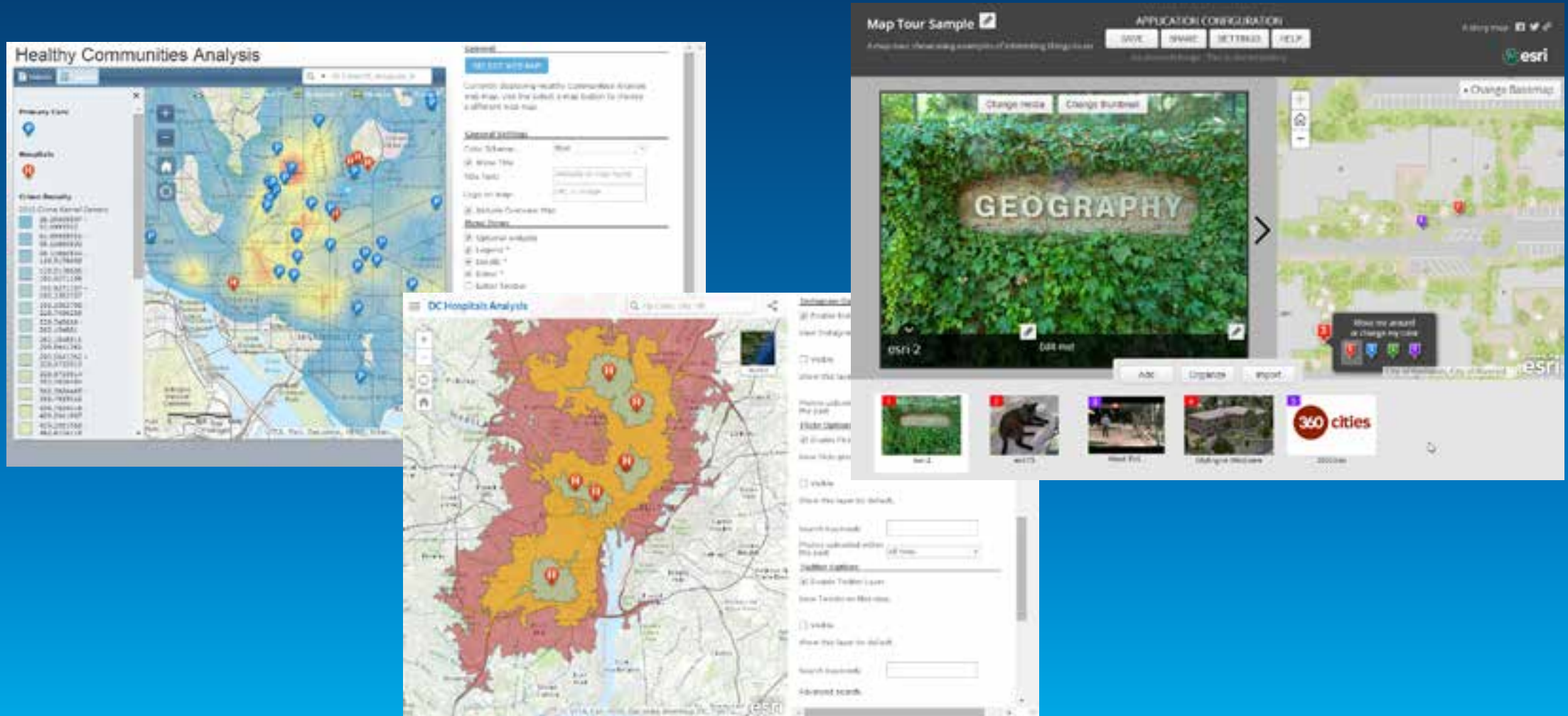
Configuration Settings

The screenshot displays the configuration settings for a web map in ArcGIS Online. The main map area shows a heatmap of crime density in Washington, DC, with various layers like 'Primary Care' and 'Hospitals' overlaid. The configuration panel on the right is titled 'Configuration Settings' and includes the following sections:

- General:** A 'SELECT WEB MAP' button and a description: 'Currently displaying Healthy Communities Analysis web map. Use the Select a map button to choose a different web map.'
- General Settings:**
  - Color Scheme: Blue
  - Show Title:
  - Title Text: Defaults to map name
  - Logo on map:  URL to image
  - Include Overview Map:
- Map Items:**
  - Optional widgets:
  - Legend:
  - Details:
  - Editor:
  - Editor Toolbar:
  - Time Slider:
  - Print:
  - Layer List:
  - Basemaps:
  - Bookmarks:
  - Measure:
  - Share:
  - Search:
  - Search for locations within current extent:
- Print Settings:**
  - Display Legend on Print:

A note at the bottom of the configuration panel states: '\* These menu items will appear in the application when the web map has layers that require them.'

# Each app template has unique configuration options and experience





# Choose the right user experience

Presenting Information and Social Media



# Public Information Map (PIM)



# Choose the right user experience

Comparison of multiple maps or layers



# Story Map Swipe

## Access to basic health care is inadequate in many parts of the U.S.

A story map [f](#) [t](#)

These county maps present two ways of examining a fundamental public health challenge. To the left of the slider bar: a look at doctor's offices relative to population. To the right: primary health providers.



The availability of basic health care varies radically from place to place across the nation.

To the left of the vertical slider bar, counties outlined in orange had no doctor's office in 2009, according to the Census Bureau. Clark County, Mississippi, for example, had a population of over 17,000 but no doctor's office, while Manhattan had a doctor's office for every 500 residents.

The map to the right shows the relative availability of primary health care providers by county. Enhanced access to health care is key to improving the health of Americans.

### LEGEND

#### Left side

Countries with no doctor's office:



People per doctor's office in 2005:

Very high need

High need

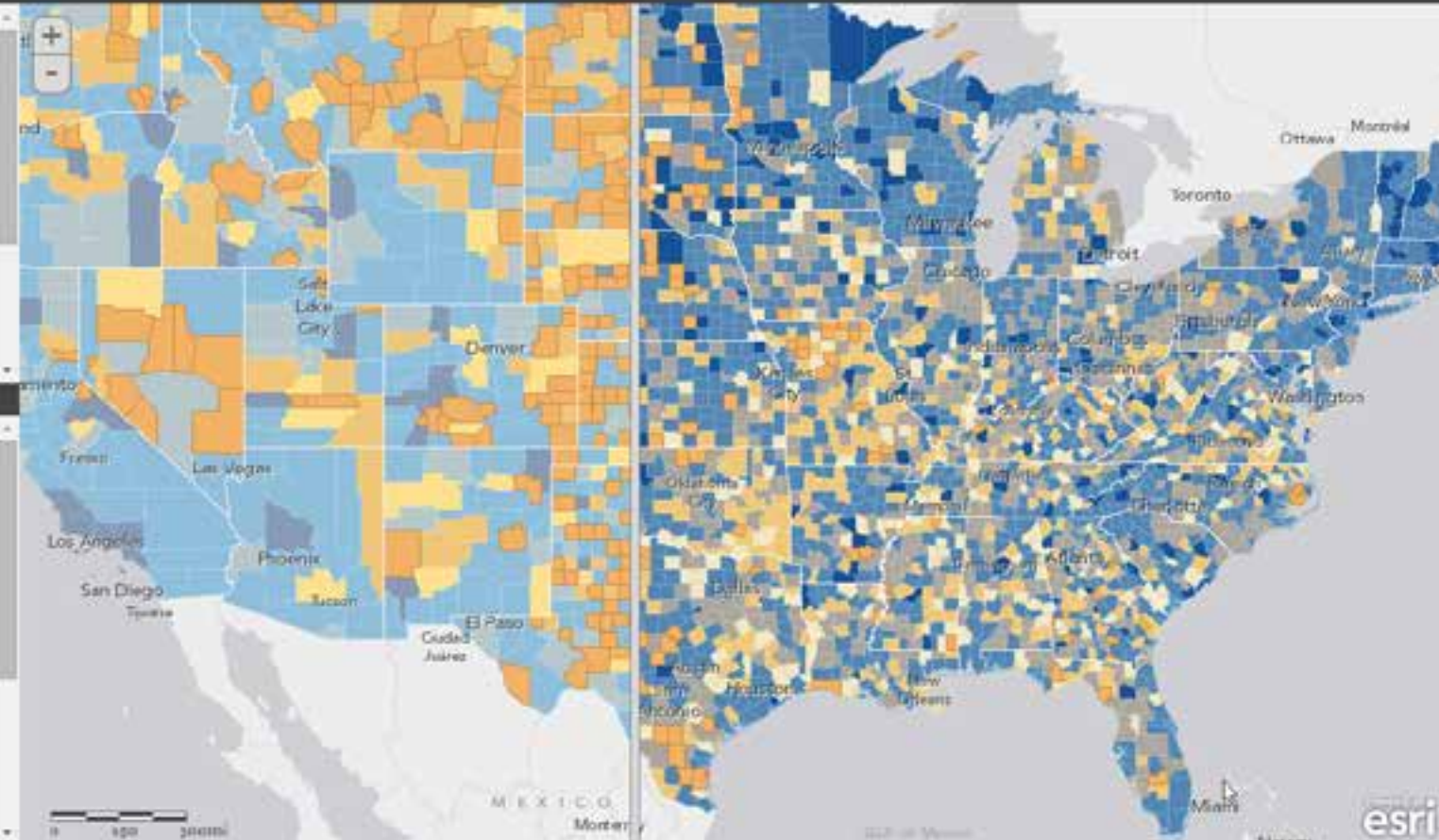
Average

Low need

Very low need

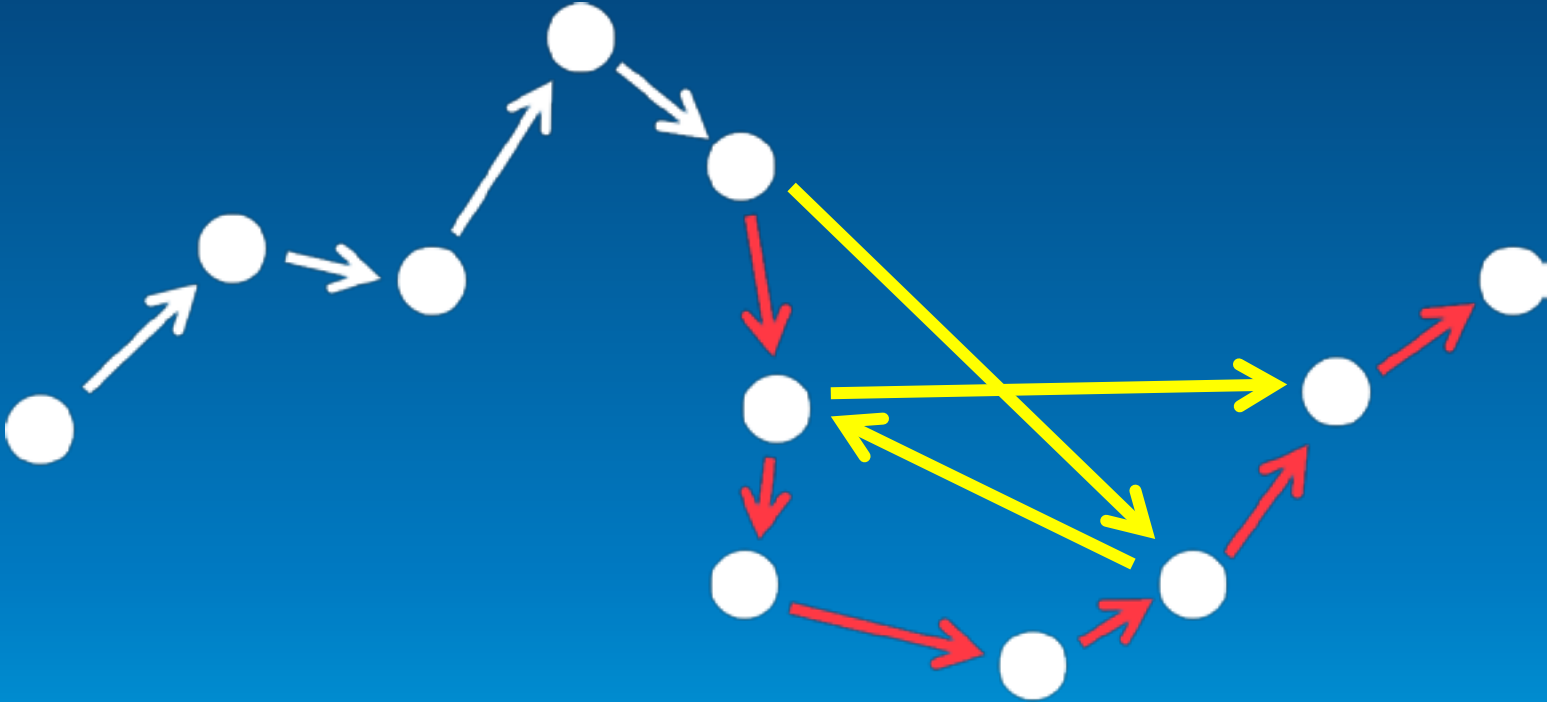
#### Right side

Countries with no primary care providers in 2005:



# Choose the right user experience

A path to follow but room to explore



# Story Map Tour

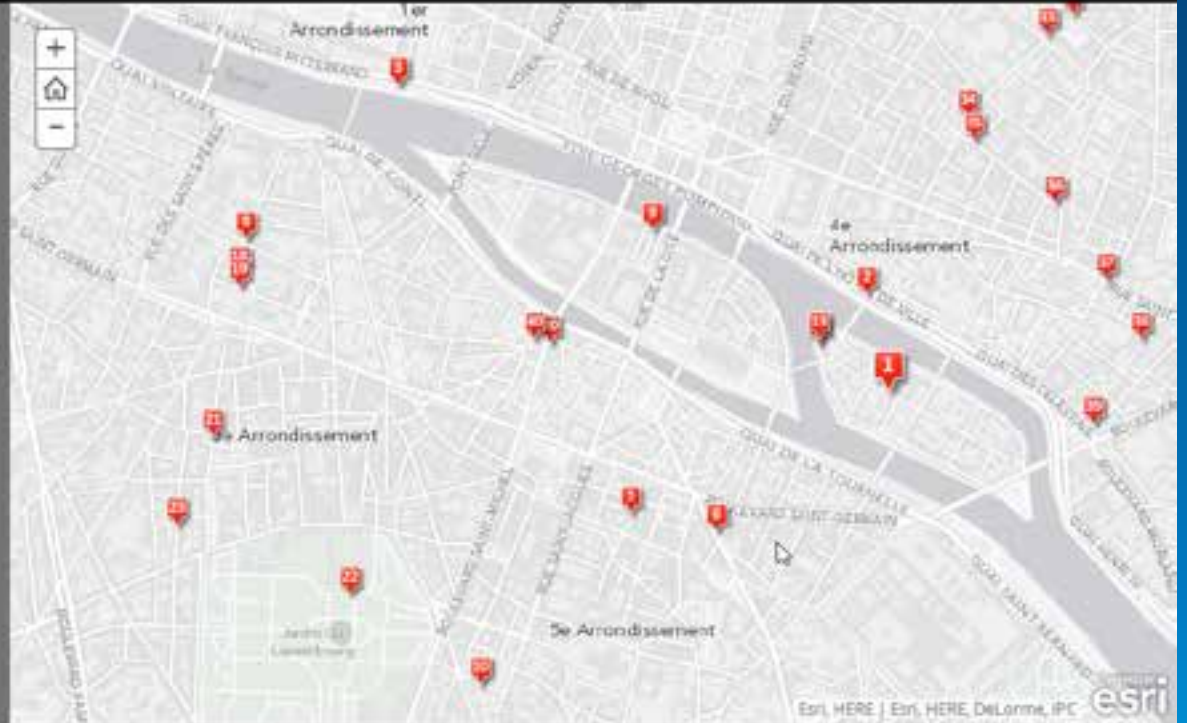
## Urban Art Gallery: Celebrating Paris's Visual Kaleidoscope

From fountains to carved facades, from graffiti to pavement markings, from store windows to market stalls, the streets of Paris offer an ever-changing feast for the eyes.

A story map [n](#) [t](#) [w](#) [e](#)



Happy face, Île Saint-Louis



Esri, HERE | Esri, HERE, DeLorme, IPC



Happy face, Île Saint-Louis



Pavement markings, Quai d'Orléans



Moving rings, Quai de Louvre



Clarke Orléans, Passage des Petres, Latin Quarter



Rue Jean de Beauvais, Latin Quarter



Boulangerie, Rue Morge



Graffiti artist collaboration, Rue



LADUREE  
Petite window art, Rue Jacob



Bird market, Île de la Cité



Four Seasons, Rue Foch



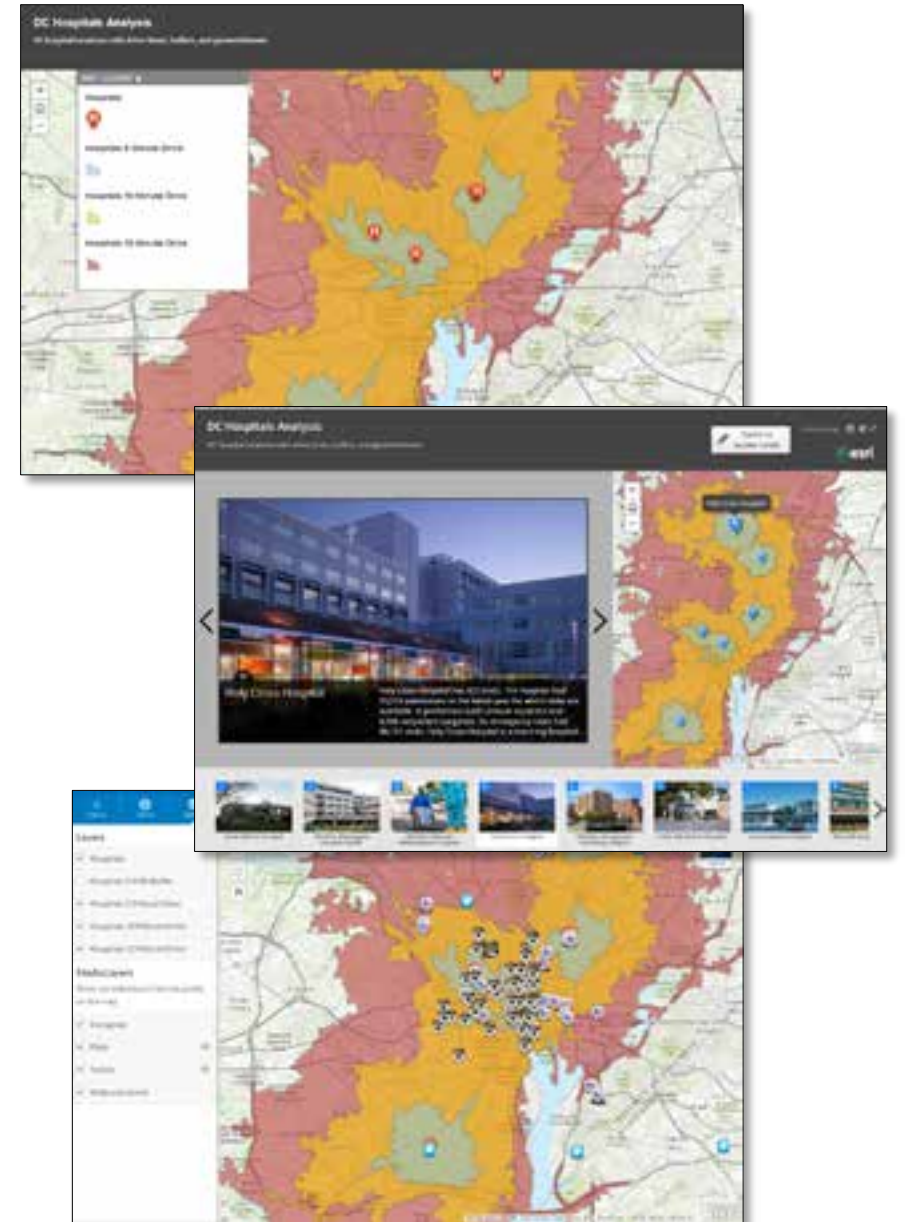
Four Seasons, Rue Foch

# Things to keep in mind

- **What purpose does your app serve?**
- **Who is the intended audience?**
- **How and where will your app be used?**
- **What do end users need to accomplish?**



# Using Hosted Templates







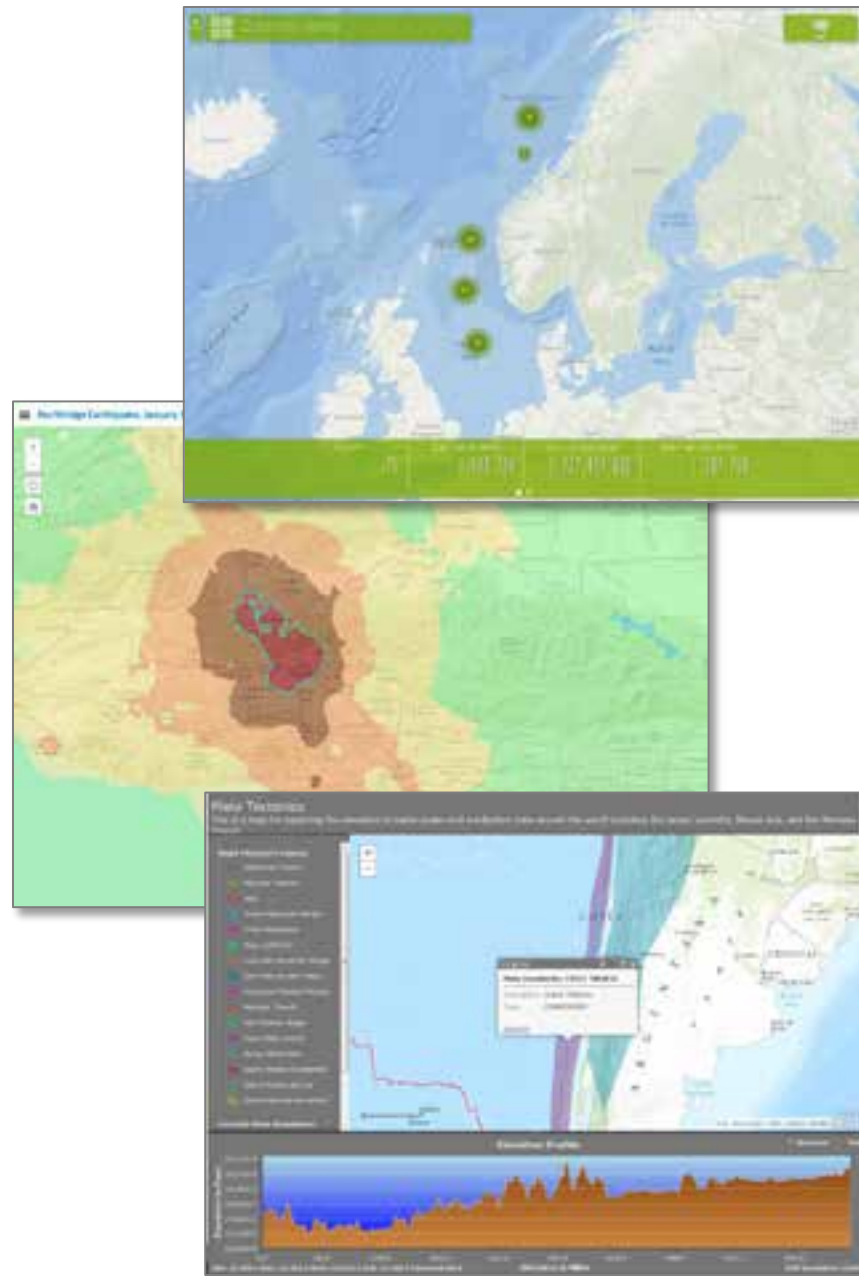


# Hosted Templates Life Cycle

# Current templates and archives

- **Current templates are available via galleries**
- **Templates continually evolve**
- **Retired hosted templates are remain hosted**
- **Web App Builder presents other alternatives**

# Tour of New Templates



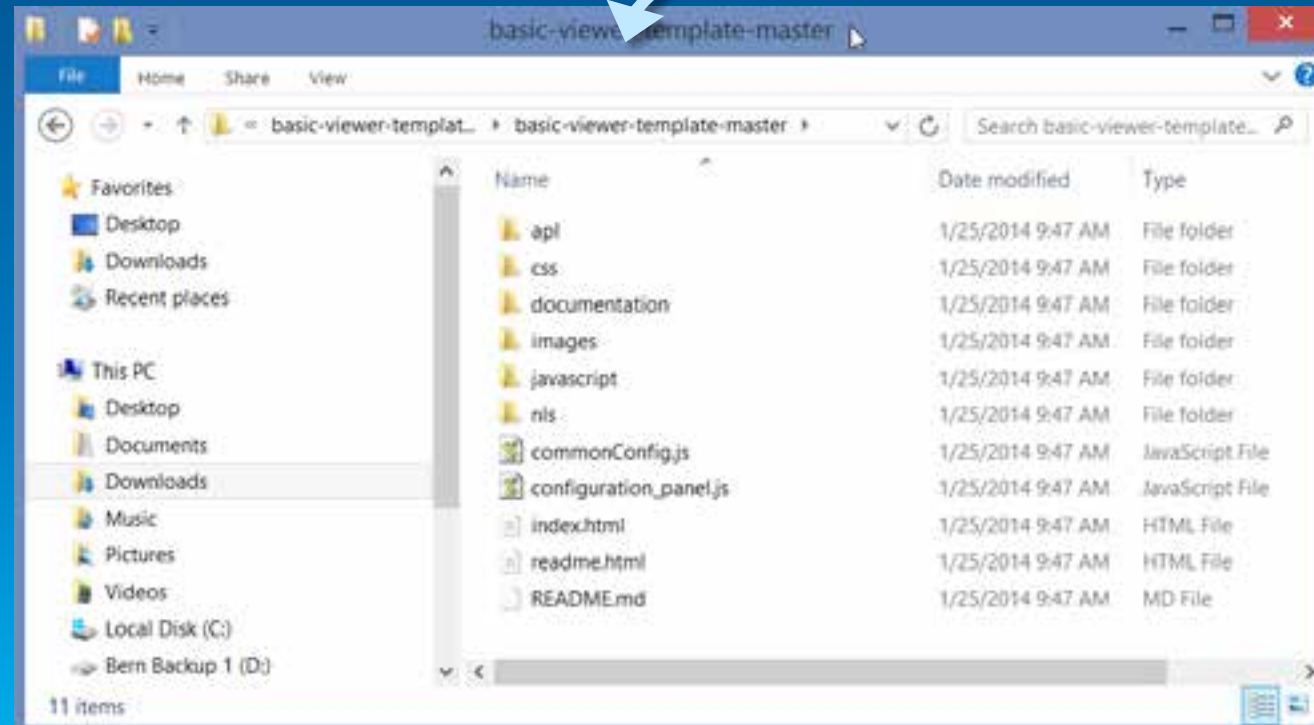




# Working With Template Source Code

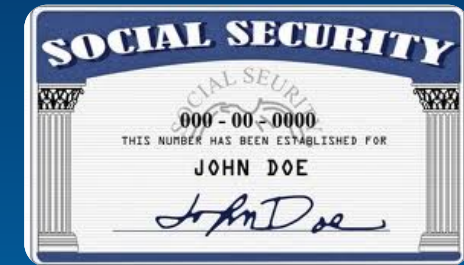
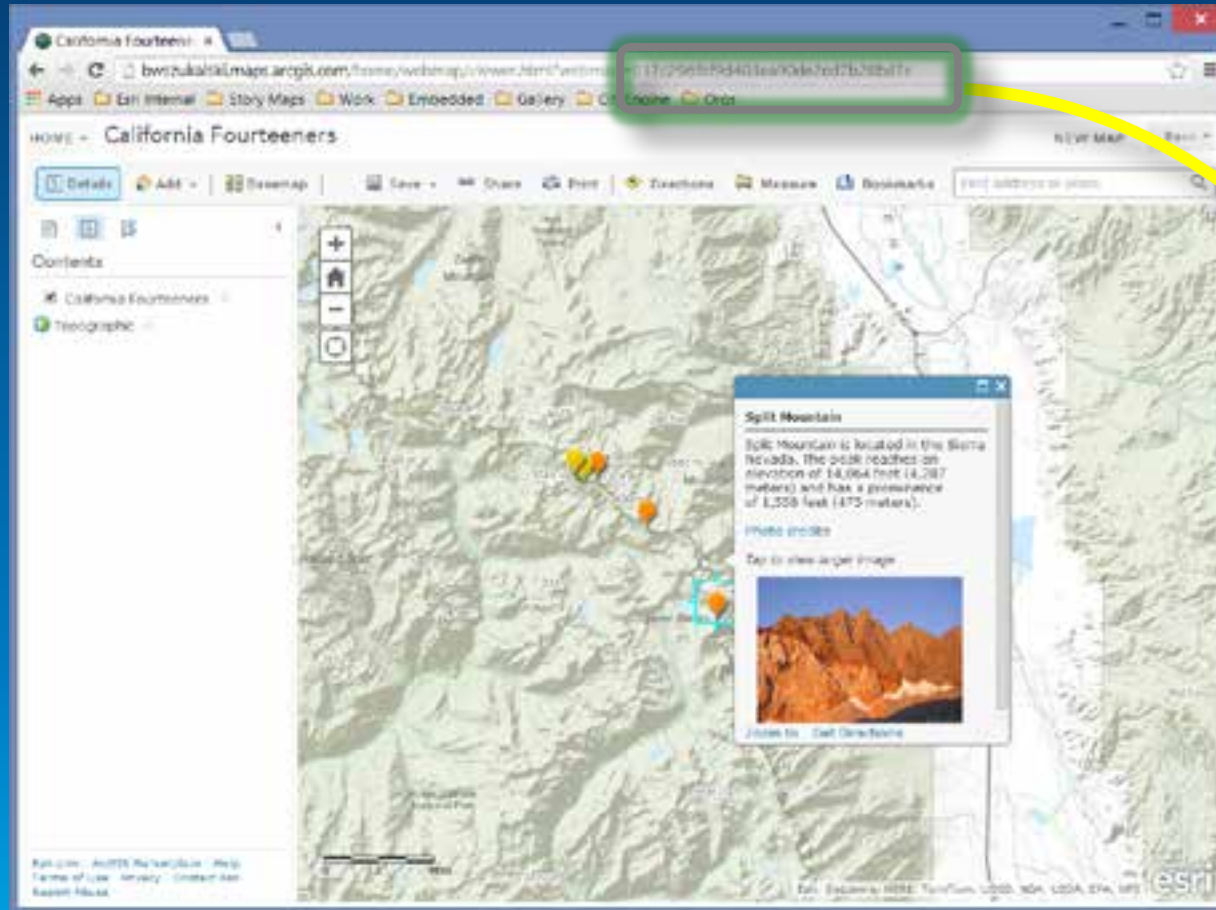
# Template source code available for customization

- Source download from GitHub
- Delivered as Zip file
- Edit using any text editor



# Map Identifier

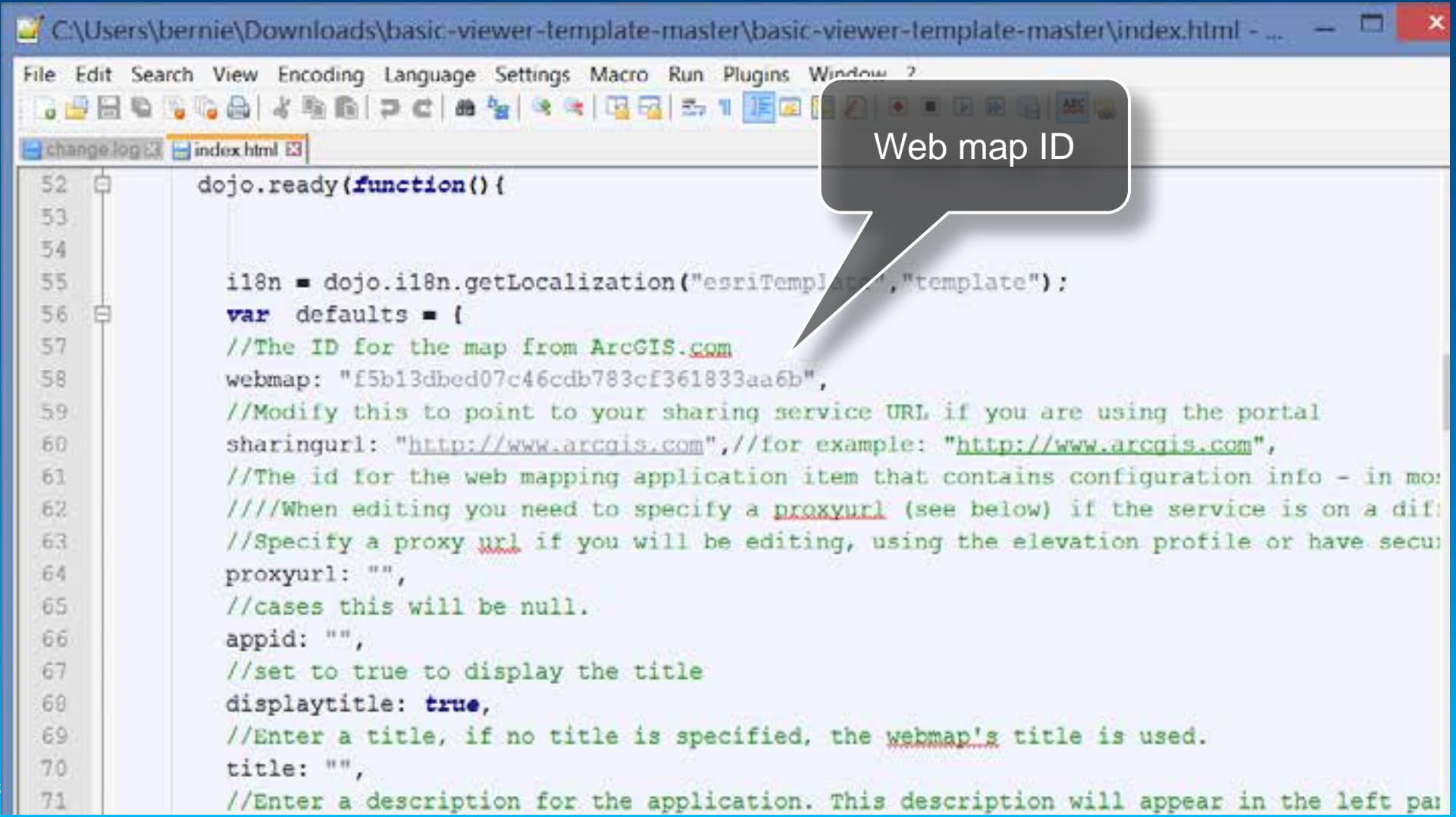
Each map has a unique identifier, like a social security number



[www.arcgis.com/home/webmap/viewer.html?webmap=ef5920f160bd4239bdeb1348de3a3156](http://www.arcgis.com/home/webmap/viewer.html?webmap=ef5920f160bd4239bdeb1348de3a3156)



# Template source code



```
52  dojo.ready(function(){
53
54
55      il8n = dojo.il8n.getLocalization("esriTemplate", "template");
56      var defaults = {
57          //The ID for the map from ArcGIS.com
58          webmap: "f5b13dbed07c46cdb783cf361833aa6b",
59          //Modify this to point to your sharing service URL if you are using the portal
60          sharingurl: "http://www.arcgis.com", //for example: "http://www.arcgis.com",
61          //The id for the web mapping application item that contains configuration info - in mo:
62          //When editing you need to specify a proxyurl (see below) if the service is on a dif:
63          //Specify a proxy url if you will be editing, using the elevation profile or have secur:
64          proxyurl: "",
65          //cases this will be null.
66          appid: "",
67          //set to true to display the title
68          displaytitle: true,
69          //Enter a title, if no title is specified, the webmap's title is used.
70          title: "",
71          //Enter a description for the application. This description will appear in the left pa:
```

Web map ID

## Demo 3

# Downloading and Tweaking

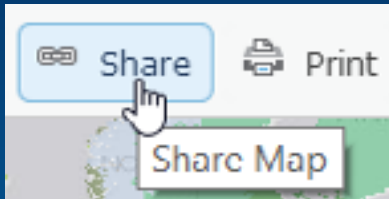
```
Downloads\Storytelling-MapTour-2.2.3\index.html - Notepad++ [Administrator]
View Encoding Language Settings Macro Run Plugins Window ?
PE HTML
<title>
<meta http-equiv="Content-Type" content="text/html; charset=utf-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge,chrome=1">
<meta name="apple-mobile-web-app-capable" content="yes">
<meta name="viewport" content="width=device-width, initial-scale=1.0, maximum-scale=1.0, user-scalable=0">
<link type="image/icon" rel="SHORTCUT ICON" href="//resources.esri.com/favicon.ico">
<link type="image/ico" rel="icon" href="//resources.esri.com/favicon.ico">
-
- correctly reference your Map Tour in search engine:
- create and fill out extensively an ArcGIS.gps item that link to your final application
- edit the following four tags as well as the upper title tag on line 4
<meta name="description" content="This story map was created with the Esri Map Tour application in ArcGIS Online.">
- [Facebook sharing tags]
<meta property="og:title" content="Map Tour"/>
<meta property="og:description" content="This story map was created with the Esri Map Tour application in ArcGIS Online.">
<meta property="og:image" content="resources/icons/globe.png"/>
-
This template is released under the Apache License V1.0 by Esri http://www.esri.com/
Checkout the project repository on GitHub to access source code, latest revision, developer documentation
https://github.com/Esri/map-tour-storytelling-template
</script type="text/javascript">
-----
/*
 * Template configuration (ignored on Portal)
 */
-----
configOptions = {
  // Enter either a web map ID or a web application ID
  // - Using a Map Tour application ID created through the interactive builder in ArcGIS.gps allow to set
  // the settings like the header configuration without having to edit any configuration here
  // - Web map and application can be dynamically specified through url parameters (webmap andappid)
  // if the authorizedOwners property is specified (see below)
  // - If an application id is specified, the webmap configuration isn't used
  webmap: "",
  appid: "",
  // Optional list of authorized application or web map owners
  // Has to be specified when using appid or webmap url parameters (e.g. ["user1"], ["user1", "user2"])
  authorizedOwners: [""];
  // Select the application layout between "three-panel" and "integrated"
  layout: "three-panel";
  // The application header title, if no title is specified, the webmap's title is used
  title: "",
  // The application header subtitle, if not specified the ArcGIS.gps web map's summary is used
  subtitle: "",
  // Optionally force a web map layer to be used as the tour points data source (can be overridden through
  // Otherwise the upper visible point layer is used (excluding map notes)
}
```





# Embedding Maps, Templates, Galleries

# Embedding maps



EMBED IN WEBSITE

Copy / Paste HTML

## Share

**Embed in Website**

**Copy and paste HTML to embed in website**

```
<iframe width="500" height="400" frameborder="0" scrolling="no" marginheight="0" marginwidth="0" src="http://resilience.maps.arcgis.com/home/webmap/embedViewer.html?webmap=7a560116489a43e0ad699c3d35f1f5e1&extent=-23.6032,-3.3225,132.139,62.7618"></iframe><br /><small><a href="http://resilience.maps.arcgis.com/home/webmap/viewer.html?webmap=7a560116489a43e0ad699c3d35f1f5e1&extent=-23.6032,-3.3225,132.139,62.7618" style="color:#0000FF;text-align:left" target="_blank">View Larger Map</a></small>
```

Small 300x260  Medium 500x400  Large 940x600  Custom Width  Height

Show zoom control.  Show location search.  
 Show scale bar.  Show basemap selector.  
 Show legend.  View Larger Map  
 Show description.

Options

# Embedding apps

- Any app can be embedded using an `<iFrame>`

```
<p>Using an iFrame width = 100% x 600px</p>
```

```
<p><iframe width=100% height="600" frameborder="1"  
scrolling="no" marginheight="0" marginwidth="0"  
src="http://storymaps.esri.com/stories/maptour-  
palmsprings/"></iframe></p>
```

# Embedded Apps

## The Problem:

Medicare is not doing enough to take care of chronically ill patients, and the limitations of the health care system create a need for... (text partially obscured)

According to CMS, in 2013, 88 percent of Medicare enrollees suffered from two or more chronic conditions, and accounted for 98 percent of Medicare spending (roughly \$477 billion annually). Additionally, 88 percent of hospital readmissions involved beneficiaries with multiple chronic conditions. There are existing models of care that are meeting the needs of chronically ill patients — at their costs — but the real rigidity of these innovative care delivery models are limited to the Pacific Northwest, the Midwest, and Northeast, leaving millions of Medicare enrollees across the country without access to proven, integrated models of care.

### Medicare Beneficiaries with Chronic Conditions

Click the tabs below to see state-level data for 3 chronic conditions.

Heart Disease    Diabetes    COPD



\*\*State-to-state: click here to see the number of Medicare beneficiaries suffering from chronic diseases in each state\*\*

## SHARE YOUR CHRONIC CARE STORY

Please visit here to share your chronic care story.

### RELATED FILES

- The Top 100 Better Care Lower Cost Act (1/21/14)
- Wynne Floor Statement On Better Care Lower Cost Act (1/21/14)
- Summary Of Better Care Lower Cost Act (1/21/14)
- Drone's Care For The Business (1/20/14)
- What The Experts Are Saying About Drone's Care (1/21/14)
- What's The Difference Between ACA & The Same Care Lower Cost Act? (1/21/14)

### RELATED MULTIMEDIA

- Press Conference: Introducing The Better Care Lower Cost Act (1/21/14)
- Wynne Introduces The Better Care Lower Cost Act (1/21/14)
- To: Address Factors of Medicare vs. the Difference between ACA & BCRA (1/21/14)

### RELATED PHOTOS



OFFICE OF GOVERNOR MARTIN O'MALLEY

HOME EDUCATION SAFETY ENVIRONMENT FAMILIES JOBS PROGRESS

Maryland: Stronger Together Map

To learn about additional opportunities to volunteer, please visit [http://www.maryland.gov/volunteer](#) to find a volunteer center in your county. [\[Volunteer & more information\]](#)

Advanced Search    A-Z Index

TECHNOLOGY    LAWS & REGULATIONS    ABOUT EPA

enforcement Annual Results 2011 Fiscal Year

You are here: EPA Home > Compliance and Enforcement > Annual Results 2011 > Cases Map

### Concluded EPA Enforcement Cases Map for 2011 Fiscal Year

This interactive map shows information on enforcement actions and cases from 2011. They include civil enforcement actions taken by EPA at facilities, criminal cases prosecuted by EPA under federal statutes and the U.S. Criminal Code, and cases in which EPA provided significant support to cases prosecuted under state criminal laws. The indicators on the map generally mark the location of the site or facility where the violations occurred or were discovered.

#### How to Use the Map

Add or subtract EPA enforcement actions to and from the map by checking or un-checking the box next to the program of interest (e.g., air, etc.). Zoom the map to an exact location. Enter a city and state in the search box, then press the [Enter] key on your keyboard or use the zoom bar in the map's upper left corner. Click on the indicator to get information on the environmental enforcement case. See "Instructions About the Map" for additional information and needs accommodations related to a disability.

Find address or place: Enter city and state. Press [Enter] on your keyboard.

Legend    Details    Map    My Location

- Enforcement Actions
- Criminal
- Federal Facility
- Civil

## Demo 3

# Embedding Maps and Galleries

Ian









# Custom App Templates For Your Organization

# Configuring your organization

## Basemap Gallery



Select the group whose webmaps will be shown in the Basemap Gallery.

Basemap Upgrade group ▾ Sorted by: Title ▾  Ascending

Share the Esri default basemaps to this group when you click Save.

## Web App Templates



Web application templates contain sample layouts you can use to build web mapping applications with little or no development. Choose which group contains the web app templates you want to use.

My Org Custom Template ▾ Sorted by: Title ▾  Ascending

Share the Esri default web application templates to this group when you click Save.

Configure the utility services for your organization.

## Printing



Configure your print service. Enter the URL of your print service, or leave blank to use the default printing service.

Esri Default

Example: `http://gisserver.domain.com/arcgis/rest/services/Utilities/PrintingTools/GPServer/Export%20Web%20Map%20Task`

## Geocoding



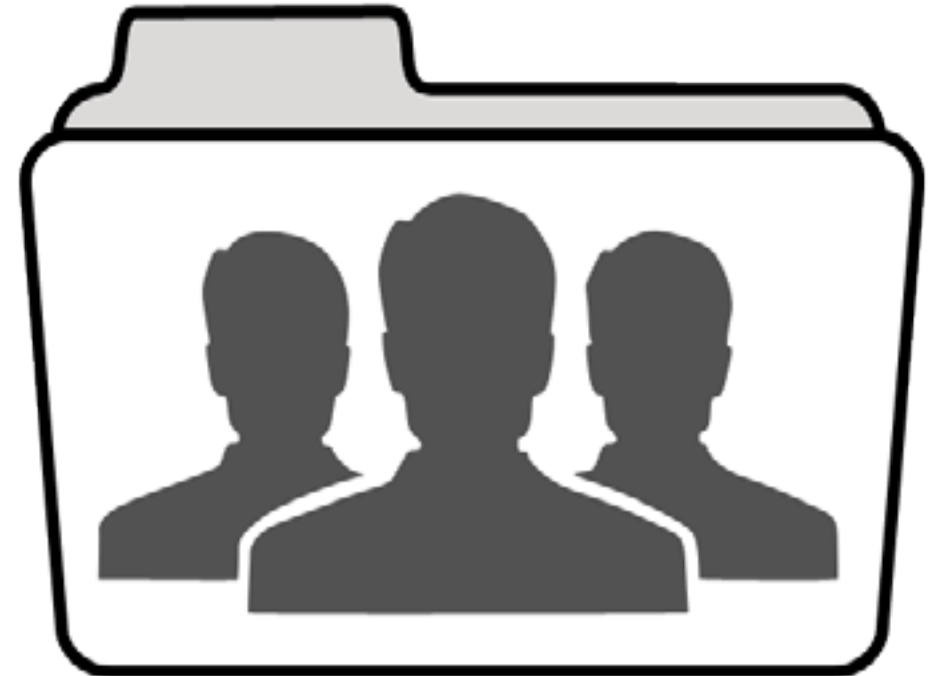
Establish the geocoders that members of your organization will have access to. Click Add Geocoder to reference a URL, specify a user friendly name, and set other properties. You can also reorder, configure, or delete your geocoders below.

ADD GEOCODER

Name		
↓	Esri World Geocoder	×
↑	Well Composite	✎ ×

# Create a Custom Template Group

Ian





# App Template Road Ahead

- **Performance improvements**
- **Continuing to update and enhance design**
- **Improvements in configuration experience**
- **New templates**
  - **Early Adopter Templates group**
- **Looking into better ways of categorization and search/discovery**



**Questions?**



Understanding our world.