



ArcGIS Best Practices

Central Oregon GIS User Group, July 16, 2019

By

John Sharrard, Esri Solutions Engineer, jsharrard@esri.com

GIS
INSPIRING
WHAT'S
NEXT

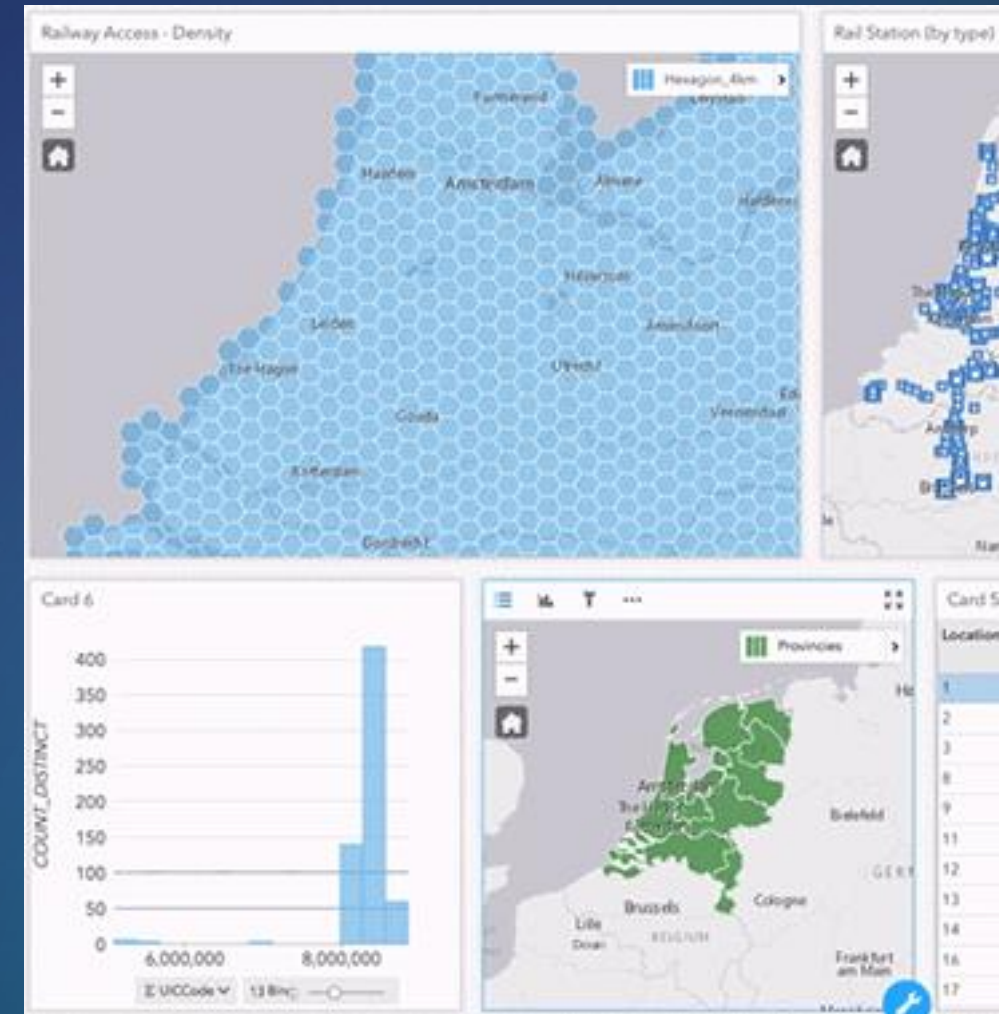
“...You wouldn’t build a house without a blueprint...”

- Warren Peterson



*“...So don't build your
life **GIS** without one
either!”*

- Warren Peterson



Best Practice: Patterns of Use

Common geospatial functions that re-occur across business models and environments

Mapping & Visualization



Understand locations and relationships with maps and visual representations

Data Management



Collect, organize, and maintain accurate locations and details about assets and resources

Field Mobility



Manage and enable a mobile workforce to collect and access information in the field

Monitoring



Track, manage, and monitor assets and resources in real-time

Analytics



Discover, quantify, and predict trends and patterns to improve outcomes

Design & Planning



Evaluate alternative solutions and create optimal designs

Decision Support



Gain situational awareness, and enable information-driven decision making

Constituent Engagement



Communicate and collaborate with citizens and external communities of interest

Sharing & Collaboration



Empower everyone to easily discover, use, make, and share geographic information

The patterns are a framework for driving value

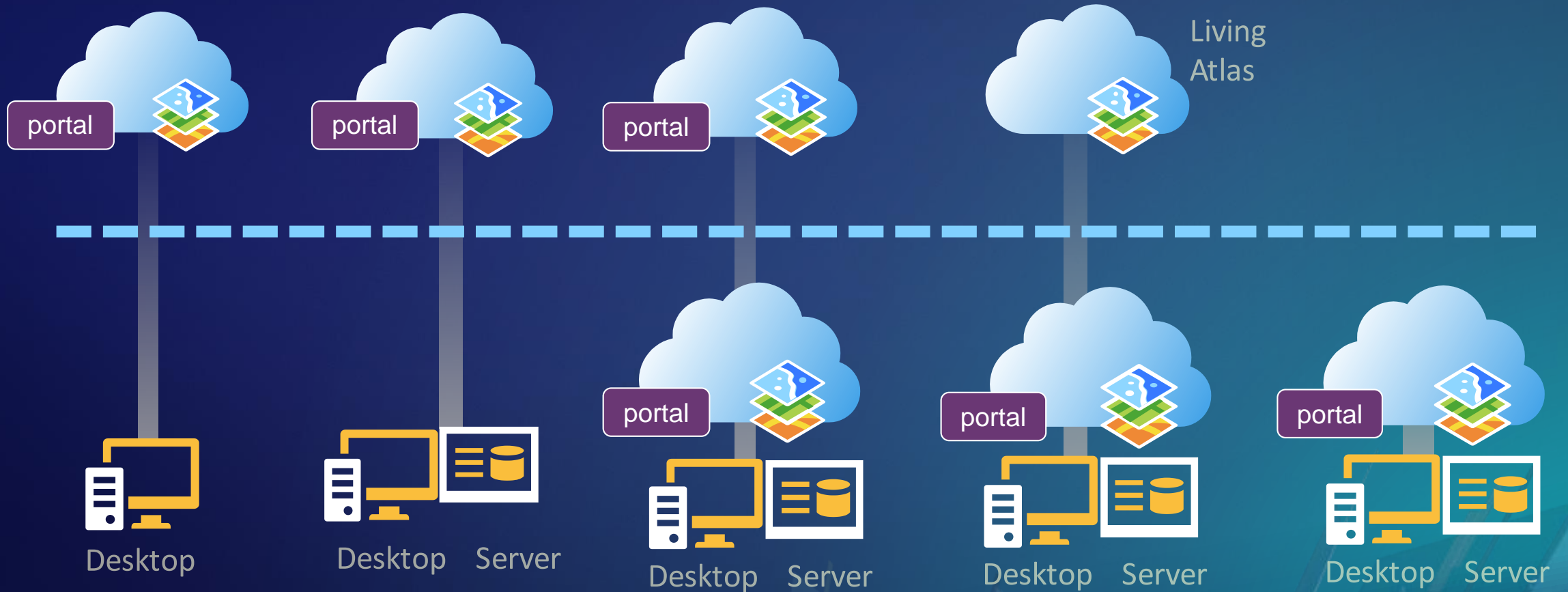


Best Practice: Determine your implementation pattern

ESTABLISH THE FOUNDATION OF YOUR GIS



Consider your implementation pattern

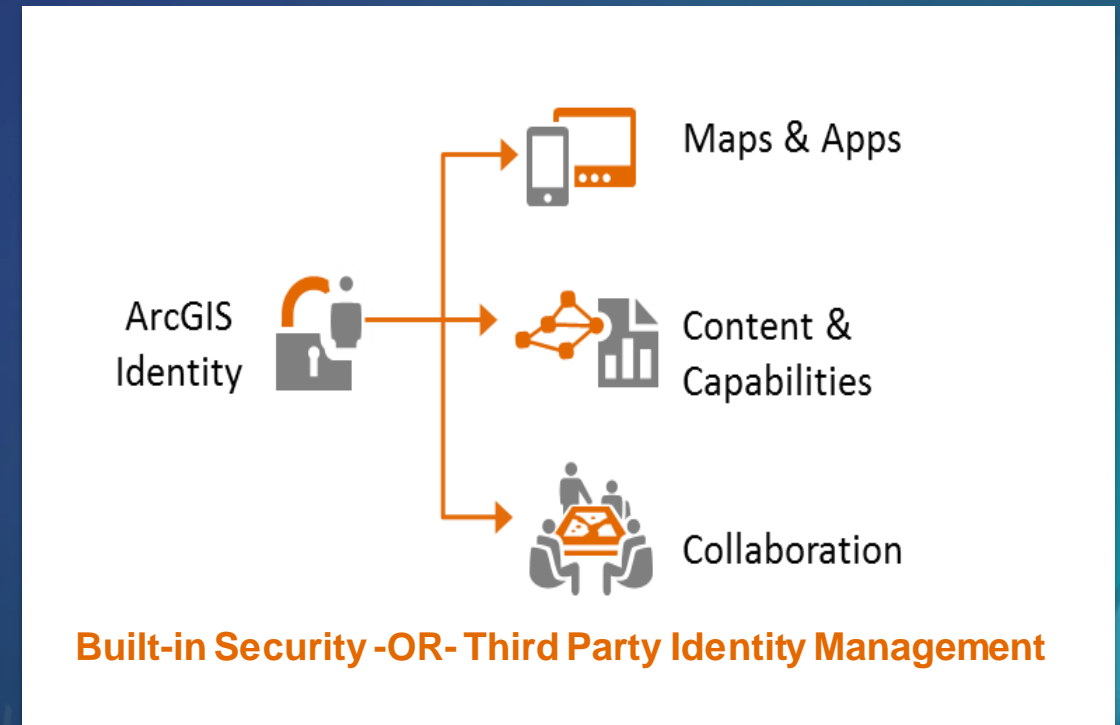


✓ *Let your needs guide you*

Best Practice: Manage Identities

Uniquely and securely describe user access to maps, apps, data, and analysis

- Configure in the portal
 - Users
 - Roles
 - Privileges
- Incorporate in your apps



Identity enables participation!

ArcGIS User Types

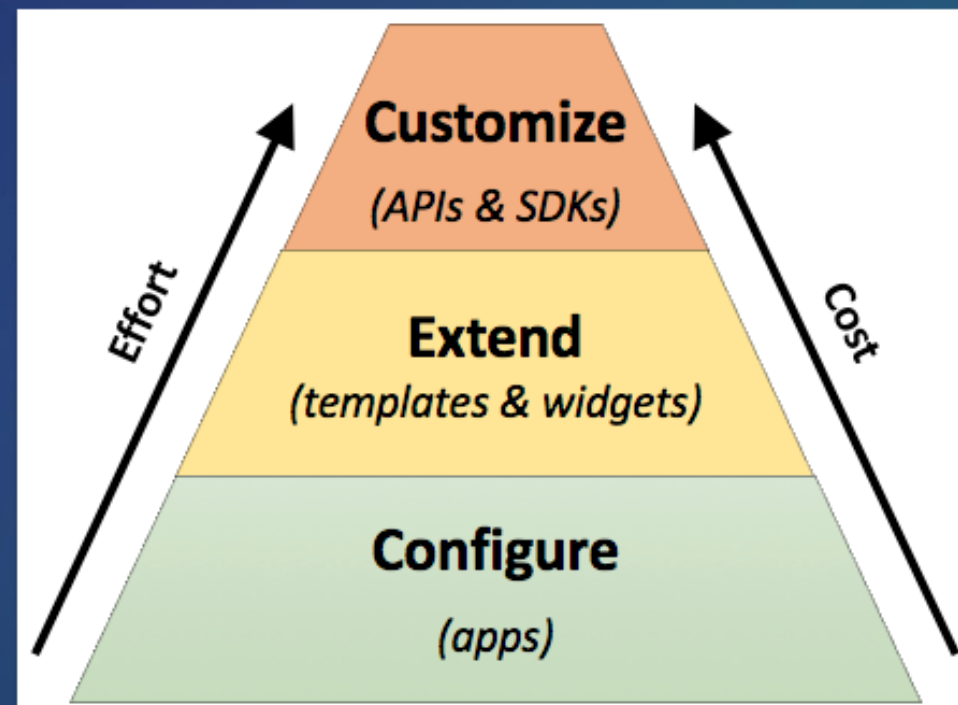


Now Part of ArcGIS Online and Enterprise

Best Practice: Application Implementation Strategies

Minimize cost and maximize development resources

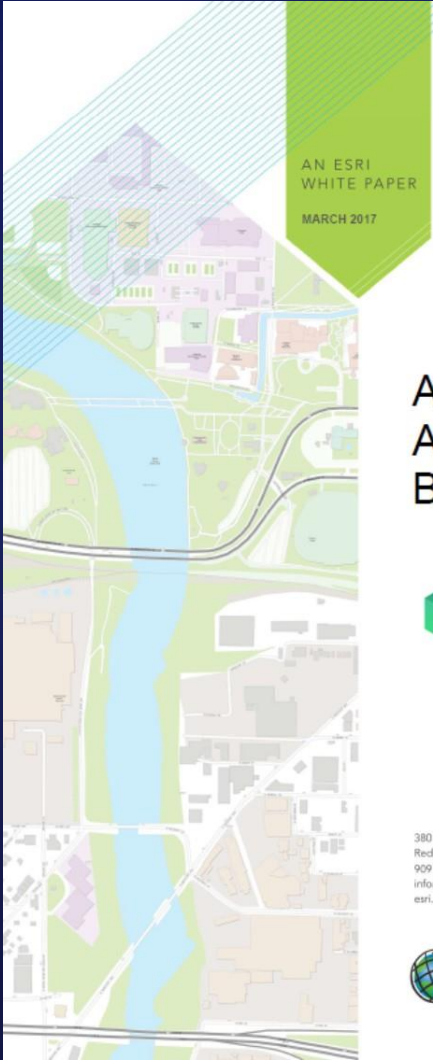
- **Configure *First***
- **Extend *Existing* Apps & Templates**
- **Use the ArcGIS Web *APIs* and *SDKs***



Configure first for the lowest cost and least effort

Deviations from “core” increase risk!

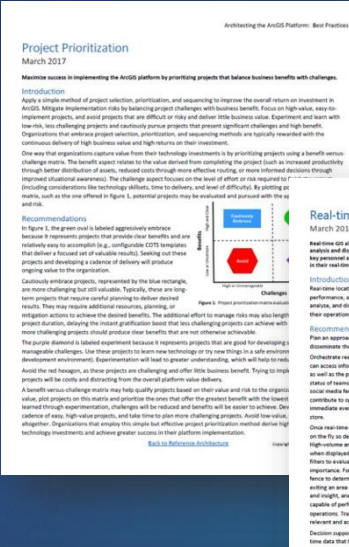
Best Practices Documented



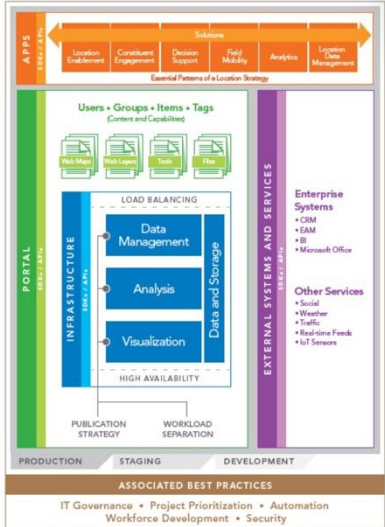
Architecting the ArcGIS Platform: Best Practices



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909 793 2853
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esri.com



ArcGIS Conceptual Reference Architecture



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March 2017



ArcGIS Portal Implementation Considerations

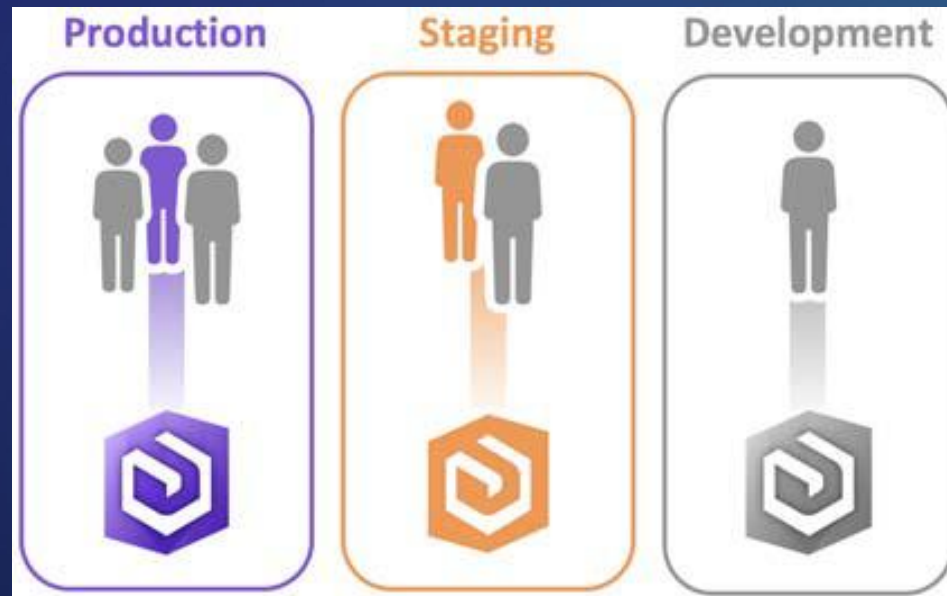


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Best Practice: Environment Isolation

Separate and distinct compute environments

- **Production:** *an operational, real-time compute environment*
- **Staging:** *a separate, mirrored, pre-production environment*
- **Development:** *a limited scale environment sufficient for primary code and data modeling*



Reduce risk and protect operational systems from unintentional changes and negative business impacts

Steps for Success for Your ArcGIS Organization Portal(s): A Best Practices Approach

Presented by John Sharrard, Esri Solutions Engineer, jsharrard@esri.com

but...

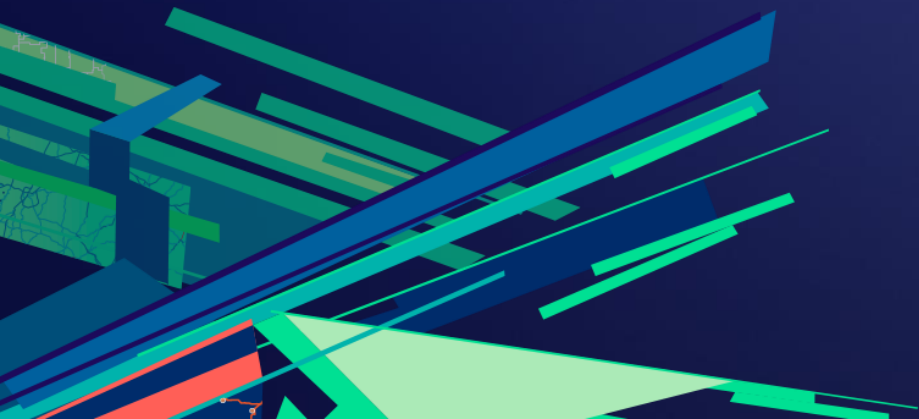
Derived from Bern Szukalski's annual presentation at User Conference (see link below for Bern's wonderful blog)



**GIS
INSPIRING
WHAT'S
NEXT**

Best Practice: Establish the vision and governance

UNDERSTAND YOUR ROADMAP TO SUCCESS
AND WHAT SUCCESS MEANS



Vision and Governance

Find the right people

- Who are the champions?
- Who are the stakeholders?
- Who is the audience?



Discover what they need

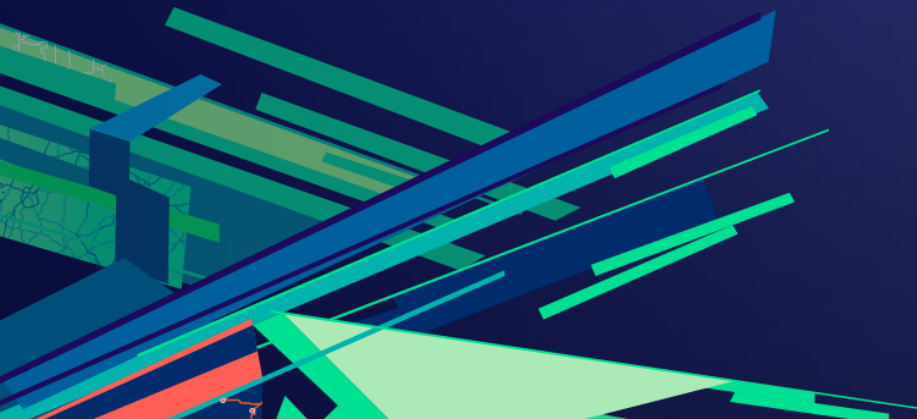
- What is the mission and vision?
- What workflows will it support?
- What are the deliverables?

Consider the following

- Establish a curator, or group of curators
- Form a governance committee
- Meet early and often

Best Practice: Create a great destination

BUILD YOUR DREAM HOME



The first impression

- Appealing design
- Featured gallery, with branding
- Featured links and resources
- Links to city website and Open Data
- Gallery and Group tabs

✓ Consider all page elements

💡 Add home page as item

The screenshot shows the MapIT Minneapolis website. At the top is a header with the title 'MapIT Minneapolis' and a background image of the Minneapolis skyline. Below the header is a featured gallery with four items: 'Dangerous Dogs Map', 'Rental Housing in Minneapolis', 'Vacant & Condemned Properties', and 'Good Cause Restriction of Additional Rental Licenses'. Each item has a thumbnail image and a title. Below the gallery is a welcome message: 'Welcome to MapIT Minneapolis! The City's enterprise mapping platform'. This is followed by a paragraph explaining the platform's purpose: 'This is your gateway to intelligent maps, focused applications and other "geoinformation" for Minneapolis. Answering the "where" question for any project, initiative or important decision is now easy for everyone!'. Another paragraph describes the platform's capabilities: 'You can use this portal to access maps, information, analytical tools, and even make your own maps. MapIT Minneapolis includes City maps and data along with map data from other sources to help you use the power of maps to make informed decisions.' Below the text is a grid of ten icons with corresponding labels: 'Ask A Question' (red question mark), 'Create A Map' (green map icon), 'Map Data in Excel' (blue Excel icon), 'Add Authoritative Content' (blue map icon with checkmark), 'Analyze Your Data' (green network icon), 'Enrich Your Data' (green grid icon), 'Share With A Group' (orange people icon), 'Share Your Story in a Web Application' (orange map icon), and 'Embed Your Map in a Website' (orange website icon). At the bottom, there is a section titled 'For more information on how to use the mapping portal, be sure to:' followed by three bullet points: 'check out the help documentation;', 'get the latest information about ArcGIS Online; and', and 'contact GIS support staff.' Below this is a footer with two buttons: 'opendataminneapolis' and 'Minneapolis GIS'. A small link icon is visible in the bottom right corner.

MapIT Minneapolis

Dangerous Dogs Map

Rental Housing in Minneapolis

Vacant & Condemned Properties

Good Cause Restriction of Additional Rental Licenses

Welcome to MapIT Minneapolis!
The City's enterprise mapping platform

This is your gateway to intelligent maps, focused applications and other "geoinformation" for Minneapolis. Answering the "where" question for any project, initiative or important decision is now easy for everyone!

You can use this portal to access maps, information, analytical tools, and even make your own maps. MapIT Minneapolis includes City maps and data along with map data from other sources to help you use the power of maps to make informed decisions.

Ask A Question

Create A Map

Map Data in Excel

Add Authoritative Content

Analyze Your Data

Enrich Your Data

Share With A Group

Share Your Story in a Web Application

Embed Your Map in a Website


For more information on how to use the mapping portal, be sure to:

- check out the [help documentation](#);
- get the latest information about ArcGIS Online; and
- contact GIS support staff.

opendataminneapolis Minneapolis GIS


Organization home

[Home](#) [Gallery](#) [Map](#) [Scene](#) [Groups](#) [Sign In](#)




CITY OF VICTORIA


City of Victoria Featured Content




[Law and Order Heritage Walking Tour](#)



[Rollicking Boomtown Heritage Walking Tour](#)



[Mysterious Chinatown Heritage Walking Tour](#)



[Haunted Victoria Heritage Walking Tour](#)

Victoria has been blessed with a wealth of natural and man-made riches, including stunning heritage architecture framed by ocean views and mountain vistas. It is this rare juxtaposition of heritage charm, scenic backdrop and modern city-scape that makes Victoria one of the most uniquely special places in Canada. Millions visit our city every year and enjoy the natural beauty, temperate climate and heritage charm Victoria offers its citizens every day.


www.victoria.ca

VicMap: www.victoria.ca/map

Victoria, BC, Canada

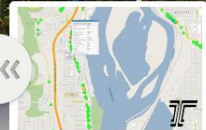
[Esri.com](#) | [Help](#) | [Terms of Use](#) | [Privacy](#) | [Contact Esri](#) | [Report Abuse](#) | [Contact Us](#)

[Home](#) [Gallery](#) [Map](#) [Scene](#) [Groups](#) [Sign In](#)




ODOT ArcGIS Online

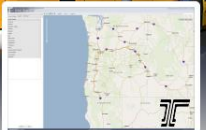
Web Maps & Apps




[CHAMPS Production Data](#)



[ODOT Project Tracking](#)



[ODOT's TransGIS](#)



[Transportation Planning Online Database \(TPOD\)](#)

Welcome to ODOT ArcGIS Online!

The Oregon Department of Transportation's (ODOT) interactive portal through which ODOT Staff, business partners, and others can access web maps, applications, and tools to display and consume geospatial data pertaining to transportation in Oregon.

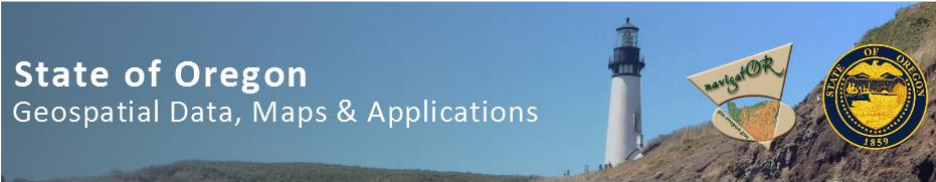
Disclaimer
The products on this site are for informational purposes and may not have been prepared for legal, engineering or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information. Questions? Contact the [ODOT GIS support team](#).




[Esri.com](#) | [Help](#) | [Terms of Use](#) | [Privacy](#) | [Contact Esri](#) | [Report Abuse](#)

Organization home

State of Oregon

Geospatial Data, Maps & Applications









Story Maps

Featured Apps

Documentation

Oregon's ArcGIS Online helps make creating, collaborating, and sharing geospatial content easier than ever! You can explore all of this great content by viewing our featured [Story Maps](#), featured [applications](#), or use the links below to see what individual agencies are building. State employees or agencies wanting to join ArcGIS Online can refer to the [documentation site](#) for more information.

View Participating Agency Pages



Oregon Geospatial Enterprise Office

Oregon Department of Transportation

Oregon Department of Forestry

Oregon Chief Financial Office

My City Houston

City of Houston, Texas- Maps & Applications





Houston Map Viewer

Houston City Service Info

Counties Voting Precincts

Houston Transportation and Annexation

Welcome to the official City of Houston's My City ArcGIS Maps

The City of Houston's Enterprise GIS team focuses on the development and continuing enhancement of an Enterprise Geographic Information System that serves the needs of all City of Houston departments, staff and citizens. Through coordinated data development, best practices data management and state of the art mapping services, City of Houston Enterprise GIS seeks to improve access to information as well as the quality of underlying data from which information is derived. Visit <http://mycity.houston.tx.gov>



ENTERPRISE GIS

We serve the GIS and geospatial needs across departments and the citizens.

MY CITY OPEN DATA

Download cloud based GIS data.

TERMS OF USE

Find out the rules, guidelines, and disclaimers to using of city's data.



MAP GALLERY

Better stuff than at the Louvre. Mercator would be so proud!

HOUSTON EVENTS ON MAP

Finding great things to do, and bringing you MOSE Signature Events on map.

CITY HALL PARKING

Find parking around City Hall during the City Council Meetings, and other events.

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Organization settings – Esri vector basemaps

General

Home Page

Gallery

Map

Items


Groups

Utility Services

Map

Configure the components people in your organization will use to author maps.

Basemap Gallery



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

Esri Default

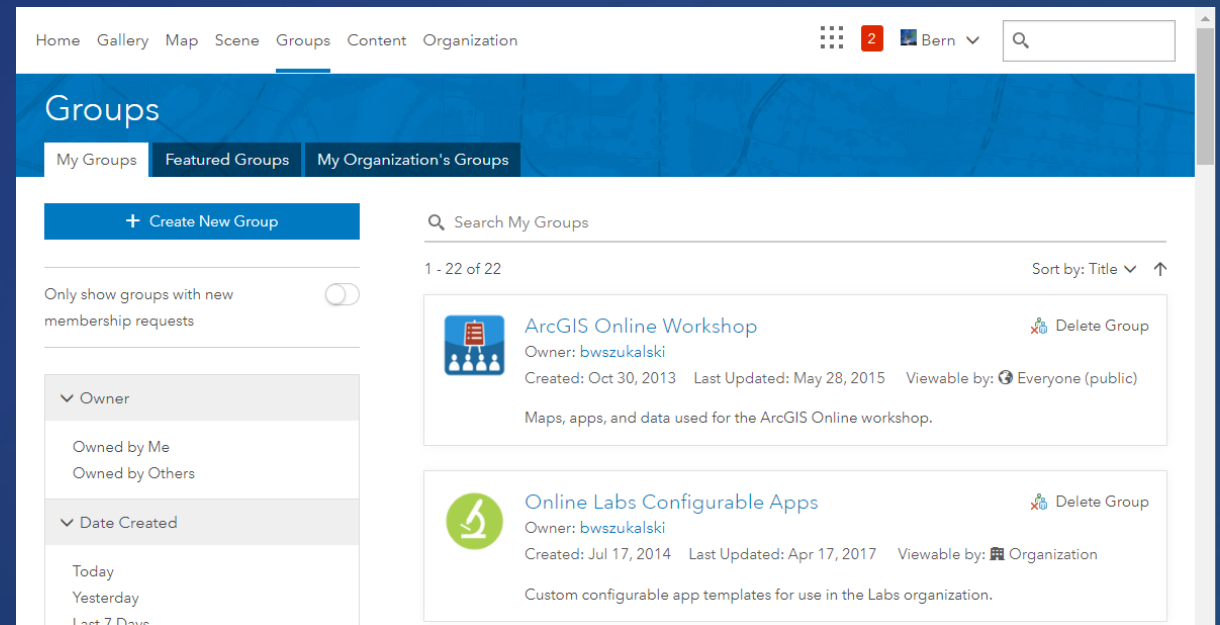
☒ Use Esri vector basemaps in supported ArcGIS apps. [?](#)



Create a custom basemap gallery that includes both

Groups are building blocks

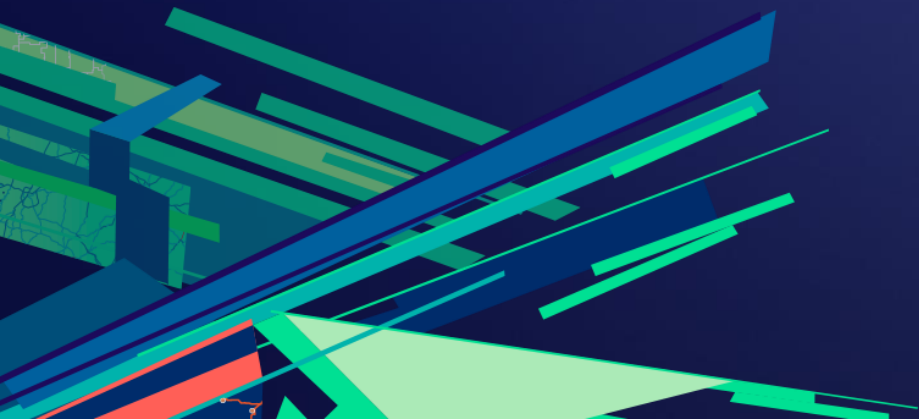
- For your organization
 - Basemaps, configurable apps
 - Galleries, featured content
 - Public galleries
- For members and their work
 - Mirror organization structure
 - Support organization projects, workflows, and initiatives



More details on groups later...

Best Practice: Establish a brand

AN EASILY RECOGNIZED VISUAL IDENTITY



What is a brand?

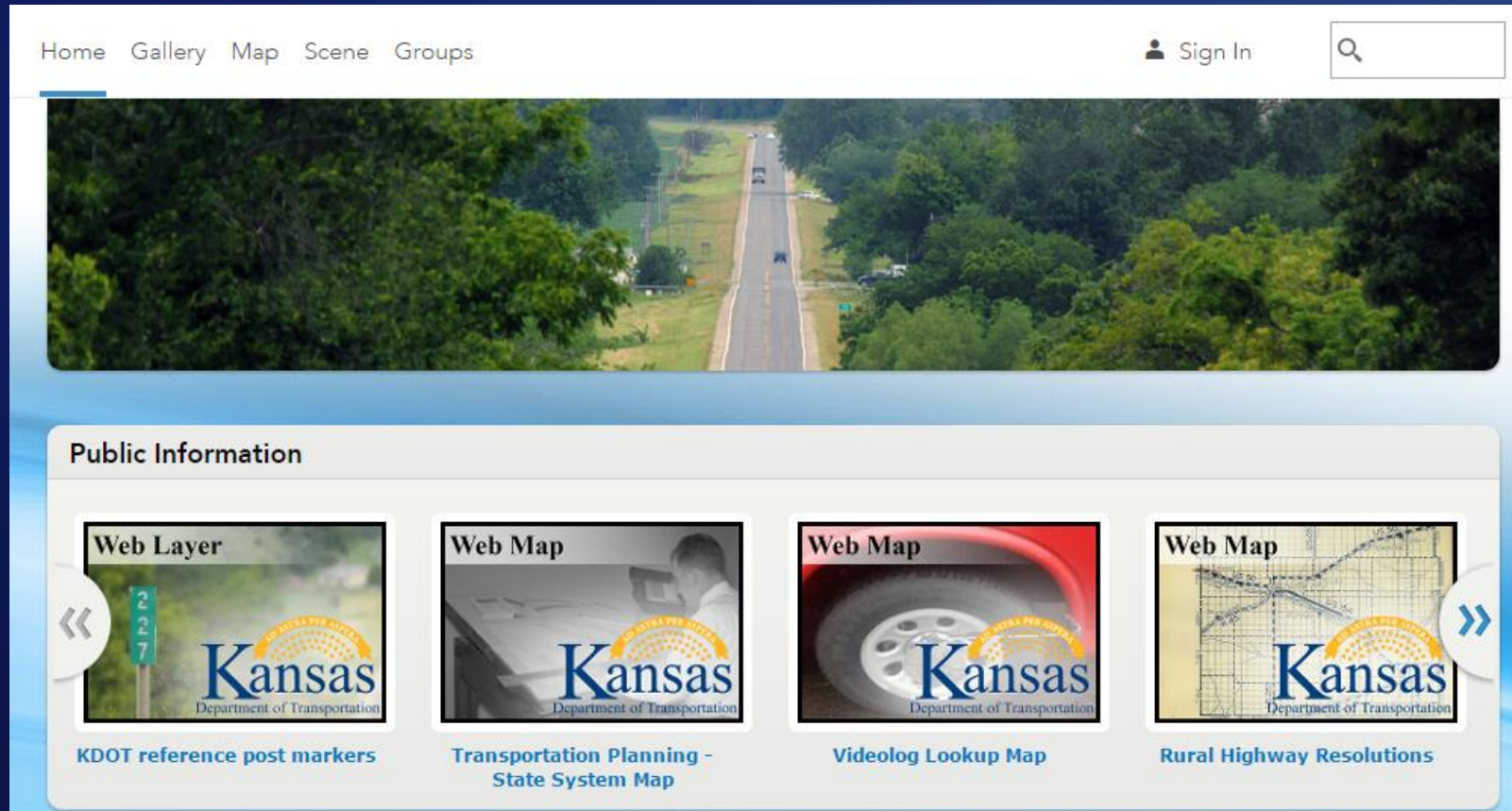
brand

/brand/


noun

- Unique design, sign, symbol, words, or a combination.
- Creates an image that identifies a product and differentiates it.
- The image becomes associated with a level of credibility, quality, and satisfaction in the consumer's mind.

Organization branding



Organization profile



KYTC GIS

This user has not provided any personal information.

or



Montana State Library

The Montana State Library, Geographic Information, develops and maintains an extensive collection of Montana's geographically referenced information about the cultural and natural resources for the state. Visit: <http://geoinfo.msl.mt.gov/> | Phone: 406-444-5354

[Profile](#) [Items](#) [Groups](#)

?

Organization profile

Use for best public content



Neighborhoods


Neighborhoods

Feature Layer by City_of_Minneapolis

City of Minneapolis Neighborhoods boundaries.

Last Updated: Dec 2, 2015 Created: Jun 28, 2012

★★★★★ (ratings: 0) views: 206876



City Boundary

City Boundary

Feature Layer by City_of_Minneapolis

The official boundary of the City of Minneapolis.

Last Updated: Nov 21, 2016 Created: Mar 9, 2012

★★★★★ (ratings: 0) views: 243551



Minneapolis GIS

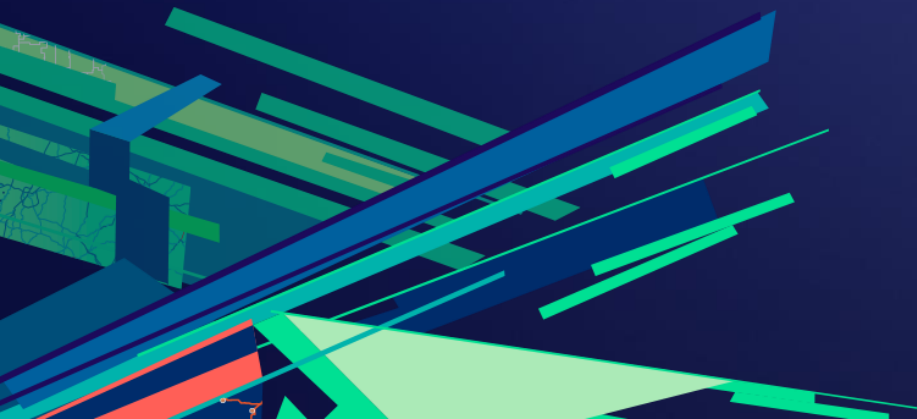
This is the official City of Minneapolis account. Data published from this account is maintained by City of Minneapolis Employees and published by the City of Minneapolis GIS Team. The City of Minneapolis GIS office can be reached by phone at (612) 673-2431 or by email at gis@minneapolismn.gov.

[Profile](#) [Items](#) [Groups](#)

✓ More on public authoritative content later...

Best Practice: Turn content into information building blocks

THE FUEL FOR YOUR ORGANIZATION,
THE KEY TO SELF-SERVICE MAPPING



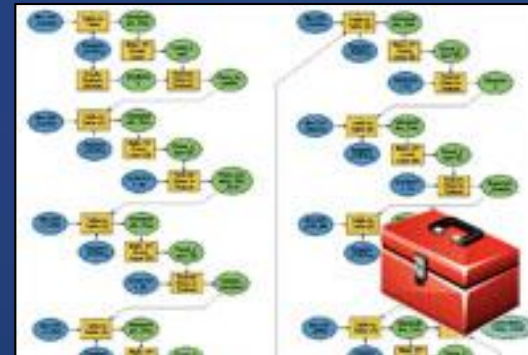
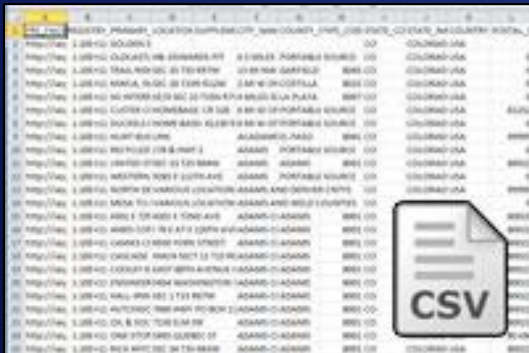
Information building block taxonomy

- Apps
- Maps
- Layers
- Files and Services

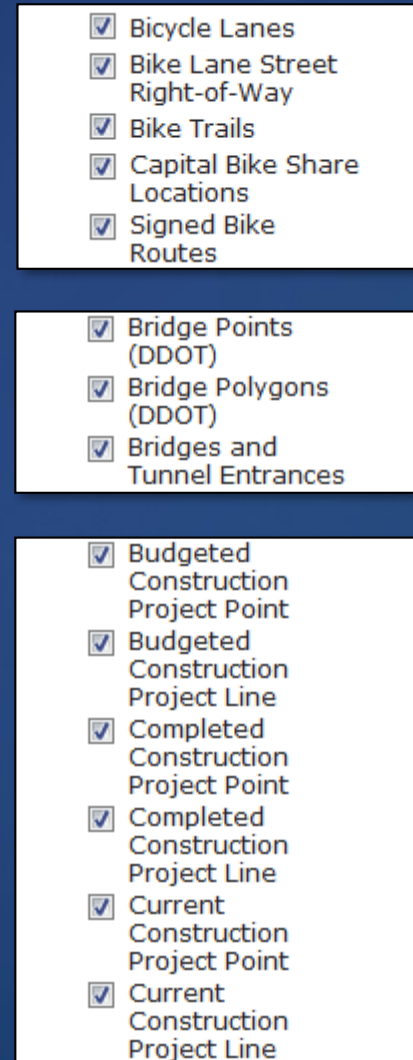
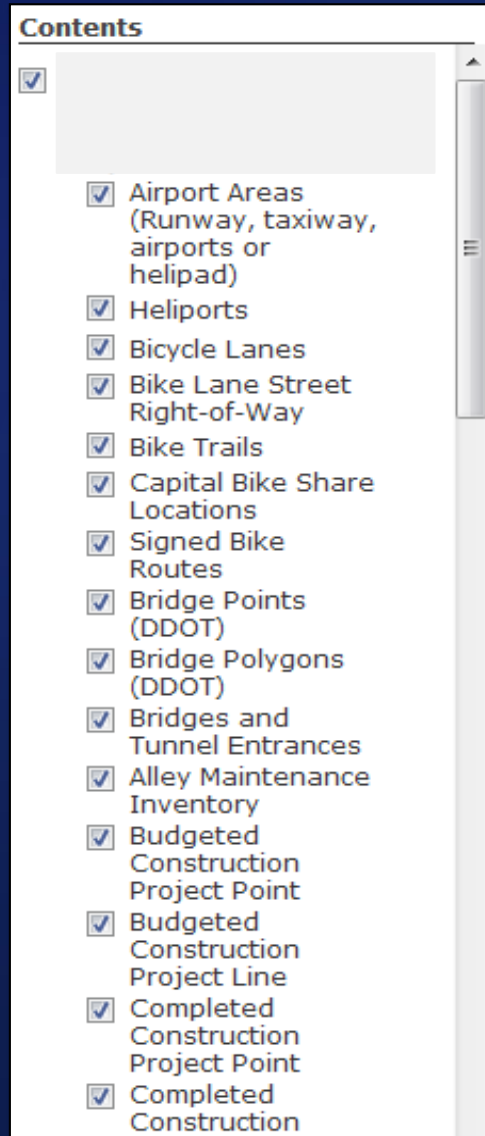


Add existing content


- ArcGIS services
- Shapefiles, spreadsheets, map templates, and more...
- Publish new hosted layers as needed



Optimize for reuse



Consider service type

- Hosted map service
 - Hosted feature service
 - Enterprise map service
 - Enterprise feature service
 - Image service
 - Vector tile
 - Raster tile
 - Scene service
 - Elevation service
 - WMS / WFS
- 

Views

- Common feature layer with multiple user *views* onto the layer
- A view is a live-linked feature layer defined by an expression
- Different privileges and access can be set

Public



- Add new sightings to the map
- Only view sightings that have been reviewed by city staff

City Staff (field)



- Add new sightings to the map
- View sightings regardless of their review status

City Staff (reviewers)



- Update and delete sightings when reviewing (duplicates, fake reports)
- View only sightings that are pending review

Registering your ArcGIS services

Add Item [X]

Add an item from your computer or reference an item on the Web.

The item is: On the web

☒ ArcGIS Server web service ☐ KML
☐ OGC (WMS) ☐ Document

URL:

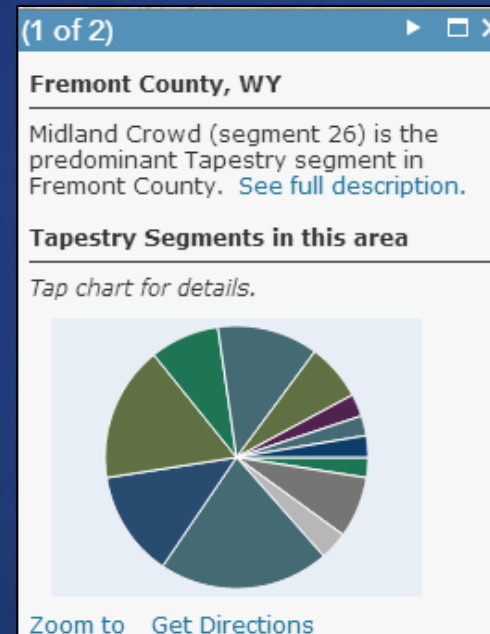
Supported Items

Title:













Tags: United States x 2010 x population x demographics x
[Add tag\(s\)](#)

ADD ITEM **CANCEL**

(1) Add service



(2) Configure

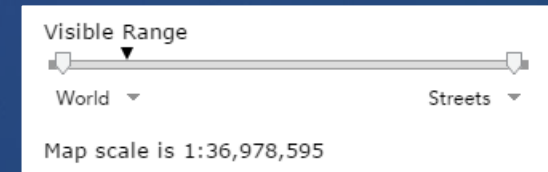
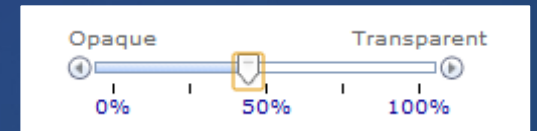
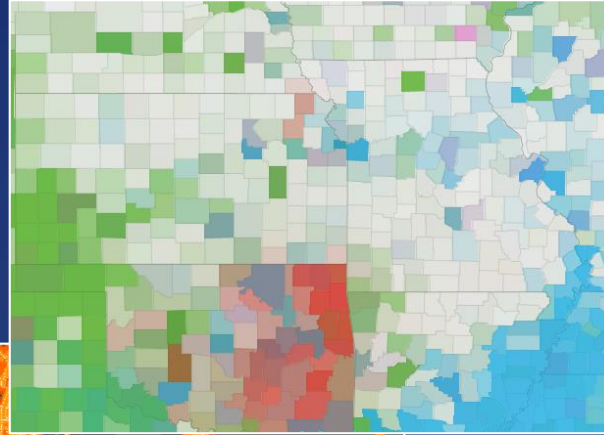
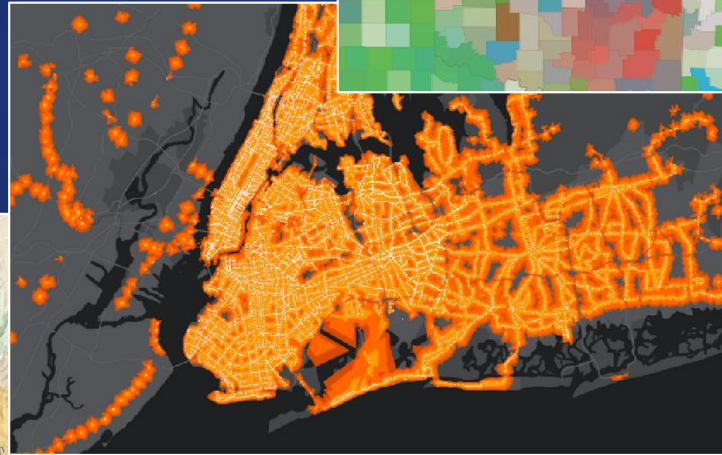
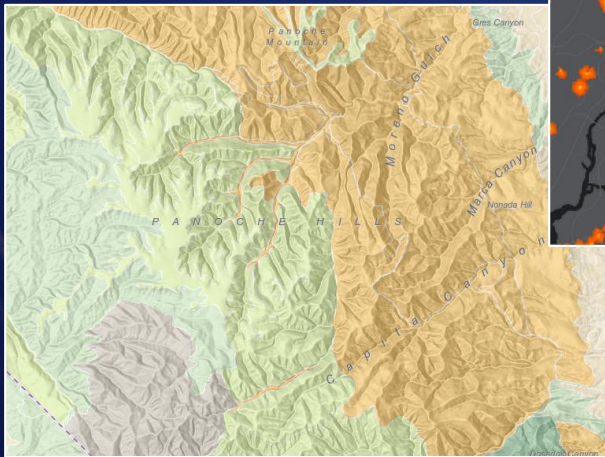
-  Zoom to
-  Transparency
-  Set Visibility Range
-  Move up
-  Move down
-  Rename
-  Remove
-  Copy
-  Hide in Legend
-  Refresh Interval
-  Show Item Details
-  Save Layer

(3) Save layer



Refining your layers

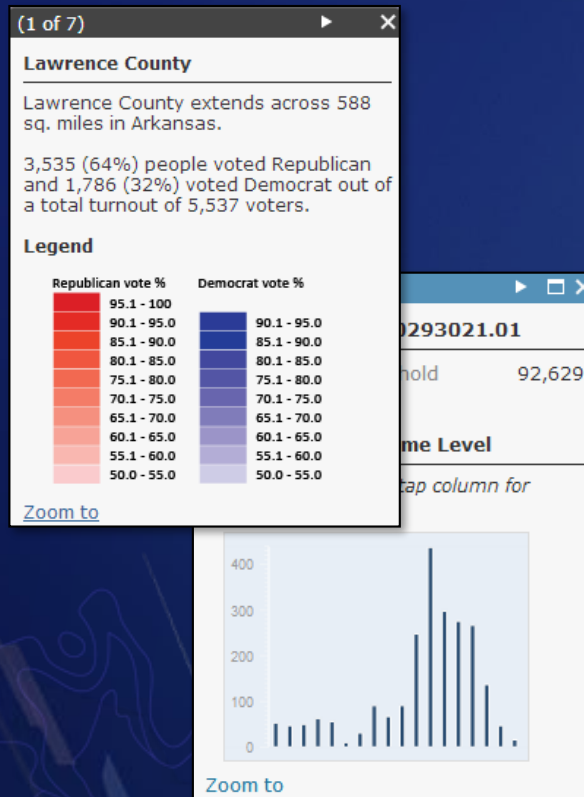
- Transparency
- Scale dependencies
- Labels



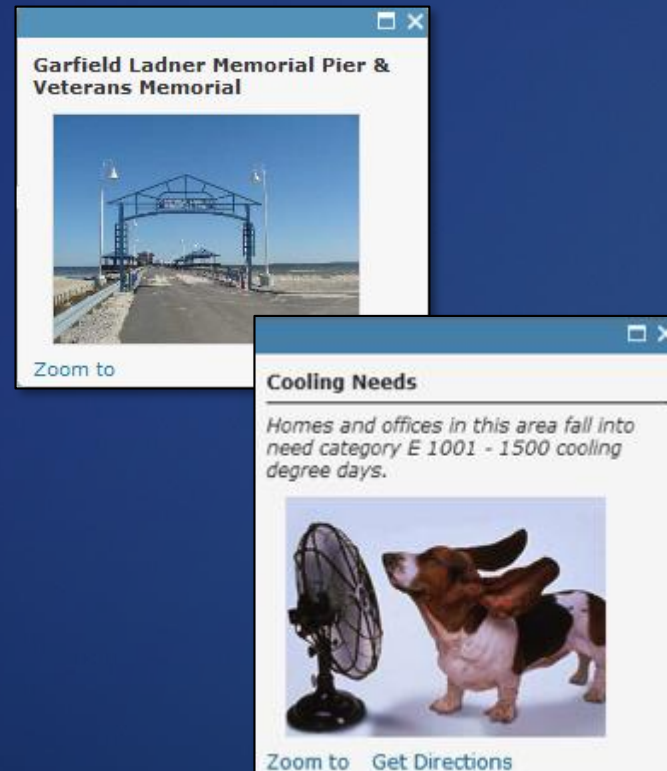
Pop-ups

Consider the entire information experience

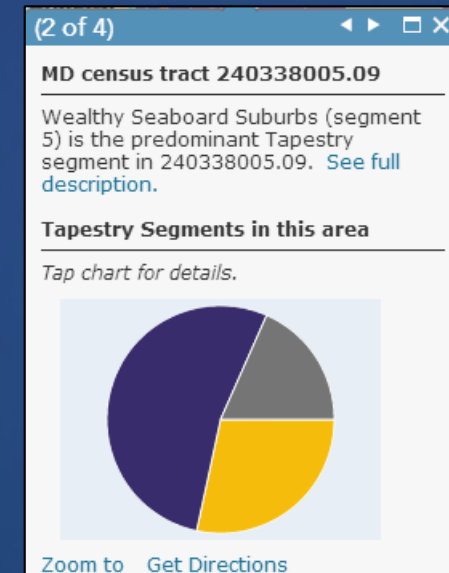
Charts



Images and Links



Formatted text and Charts

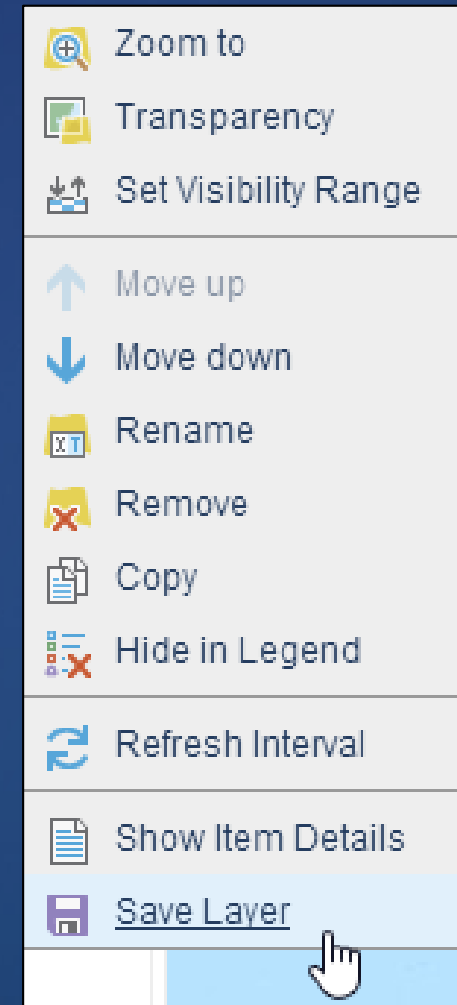


Use Save Layer

- Enabled for layer item owner
- Preserves style, pop-ups, scale, transparency, etc.
- Makes layers ready-to-use
- Can be overridden in maps

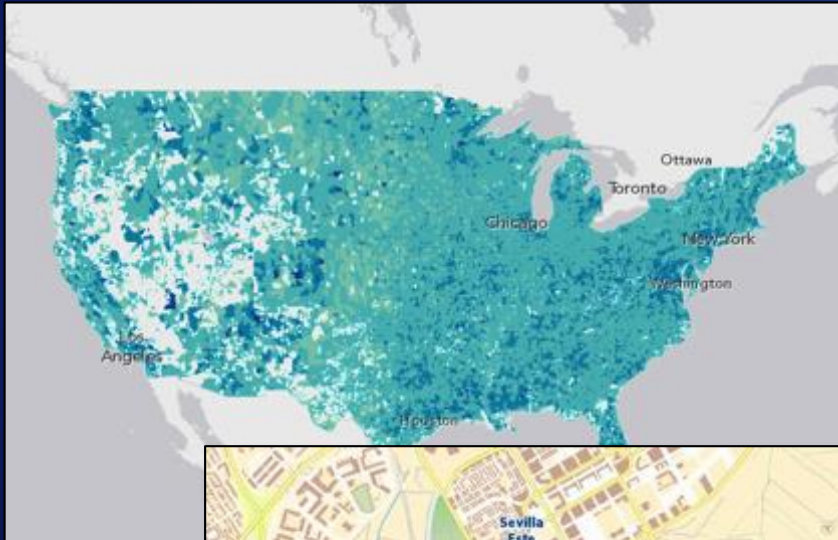
✓ *Don't share unconfigured layers*

💡 *Think of layers as building blocks, and craft accordingly*



Maps

Reflect the complete experience from the basemap on through layers

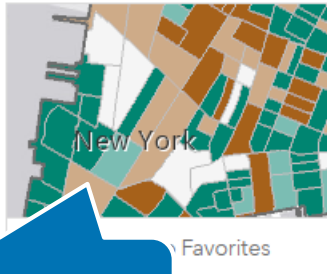


✓ Check that layers work well together in your map

Item details

2015 Clothing/Accessory Store Market Opportunity in the United States

Overview



This map shows opportunity within the clothing/accessory market in the U.S. in 2015, by state, county, ZIP Code, tract and block group. ArcGIS Online subscription required.

Premium Content

by esri

Last Modified: April 30, 2015

Web Map

Open in Map Viewer

ArcGIS for Desktop

Web App

Share

Concise summary

Good thumbnail

Description

This map shows the market opportunity for clothing and accessory stores in the U.S. in 2015 in a multiscale map (by state, county, ZIP Code, tract and block group). The map uses the Leaning Tower of Pisa/Surplus Factor, an indexed value that represents opportunity (leakage), saturation (surplus), or balance within a market. This map focuses on the opportunity for clothing/accessories stores (NAICS 448)

The pop-up is configured to include the following information for each geography level:

- Count of clothing/accessory stores - NAICS 448
- Total annual NAICS 448 sales (supply)

Great description

Details

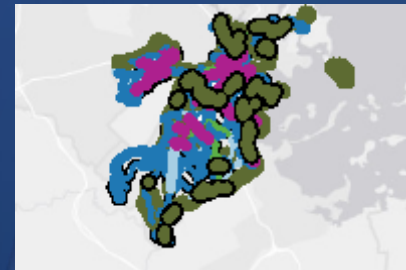
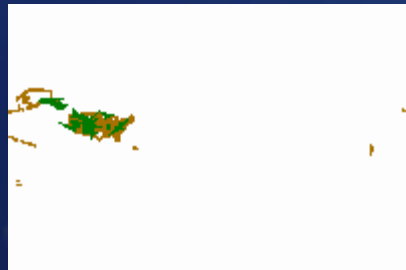
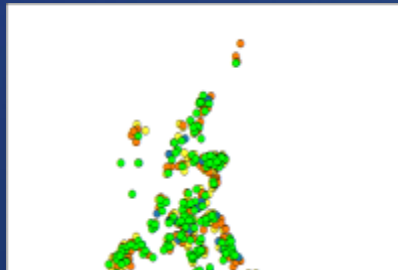
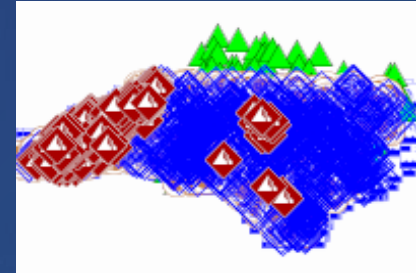
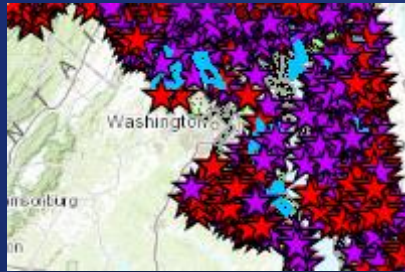
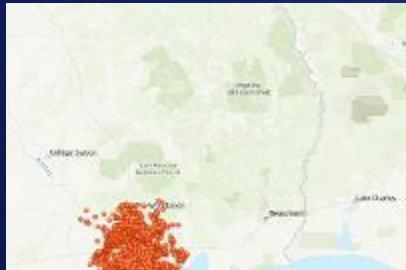
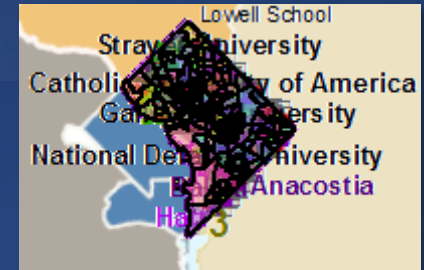
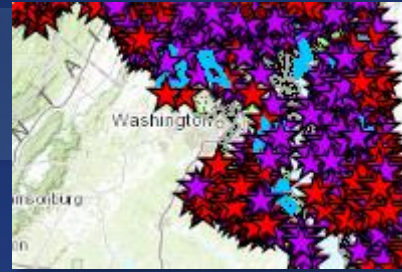
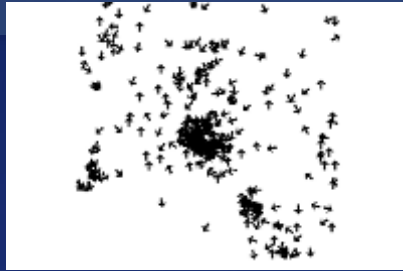
0 ratings, 150 views

Good tags, Usage notes
Etc...

owner



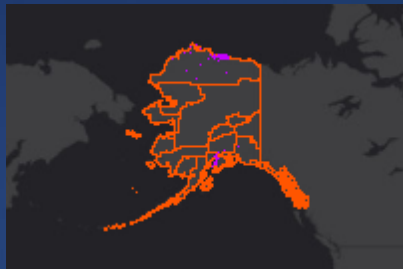
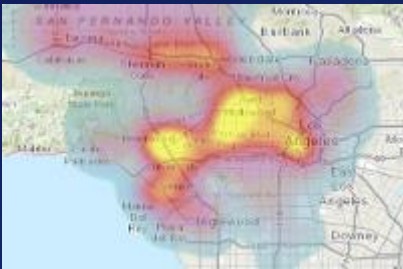
Thumbnails



Woof!



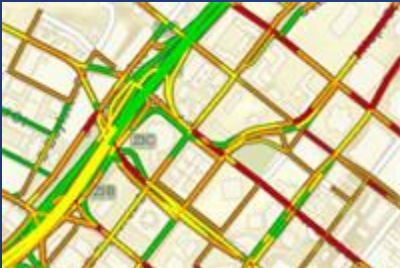
Location hints



Graphic hints



Content hints



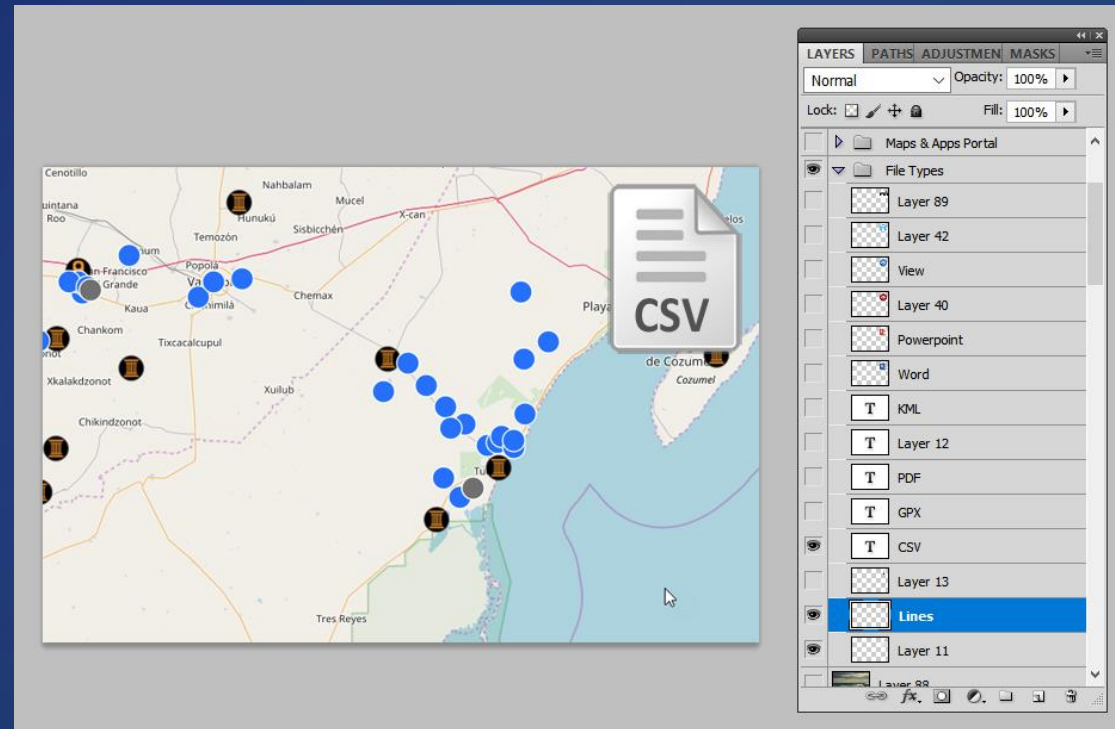
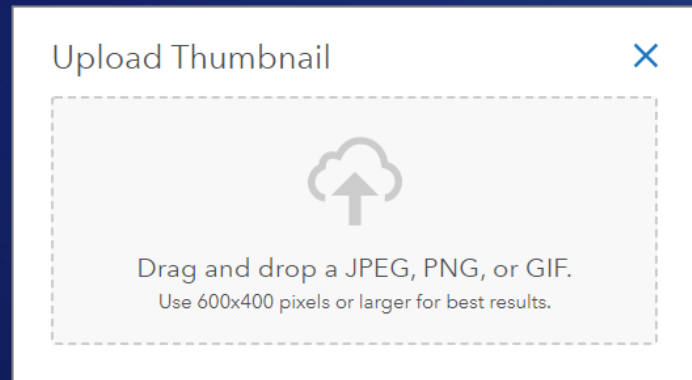
A	B	C	D	E
1	B Address	ZIP	City	State
2	D 26951 Aliso Creek Rd	92656	Aliso Viejo	CA
3	D 2111 Se Bristol St	92660	Newport Beach	CA
4	D 4547 Campus Dr	92612	Irvine	CA
5	D 2112 S State College Blvd	92806	Anaheim	CA
6	D 24941 Elder Ave	92557	Moreno Valley	CA
7	D 3100 W Florida Ave	92545	Hemet	CA
8	D 1964 W Ramsey St	92220	Banning	CA
9	D 11879 Artesia Blvd	90701	Artesia	CA
10	D 1171 E Imperial Hwy	92870	Placentia	CA
11	D 4050 Lincoln Blvd	90292	Venice	CA
12	D 15055 Imperial Hwy	90638	La Mirada	CA
13	D 2300 N Tustin Ave	92705	Santa Ana	CA
14	D 4407 Brockton Ave	92501	Riverside	CA
15	D 17504 Avalon Blvd	90746	Carson	CA
16	D 9922 Elmwood Blvd	90241	Downey	CA



Hybrid



Editing thumbnails



Free tools available on GitHub
Third-party tools are available

Item description boiler plate text

Description

A group containing a collection of resources supporting research in community and physiological ecology.

Forest trees cover over 1/3 of the land surface, and they are prominent determinants of the carbon cycling and the climate. Given their importance for the wellbeing of humans and the environment, it is critical that we understand the patterns in forest structure at a global scale, and the processes governing the functioning of terrestrial ecosystems. We use global datasets of forest inventory data to understand the functional biogeography of forests, and its relationship to climate change and functioning at broad spatial scales. This research will also help us to understand the processes governing forest growth and restore forests in the fight against biodiversity loss, poverty and climate change.

The Crowther Lab is a research group based at ETH Zürich. We are a collection of researchers, scientists and technical staff with a range of expertise from microbiology to digital marketing, all working with one thing in mind - the climate. We study the ecological processes that influence the climate to help us predict and combat anthropogenic climate change.

Terms of Use

Information provided in the Michigan DNR Open Data Portal is accurate to the best of our knowledge and is subject to change on a regular basis, without notice. While the Michigan DNR makes every effort to provide useful and accurate information, we do not warrant the information to be authoritative, complete, factual, or timely. Information is provided on an "as is" and an "as available" basis. The State of Michigan disclaims any liability, loss, injury, or damage incurred as a consequence, directly or indirectly, resulting from the use and application of any of the contents of this web site.



Can be automated using Python
Third-party tools are available

Item completeness guide

Item Information

X Hide

LowHigh

Make your item easy to find, understand, and use by providing this information.

☐ Add a longer summary

☒ Add a thumbnail

☐ Add a description

☒ Add a title

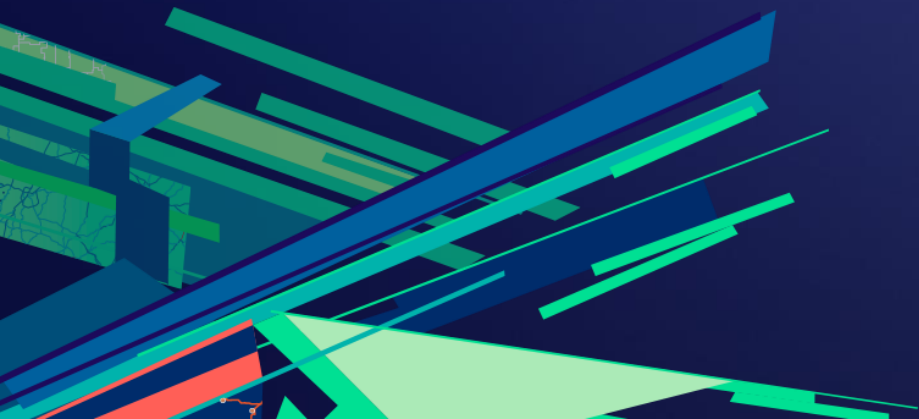
☐ Add more tags

☐ Add terms of use

 A measure of item completeness

Best Practice: Organize your organization

ESTABLISH A FRAMEWORK FOR SUCCESS



Groups are a framework for your organization

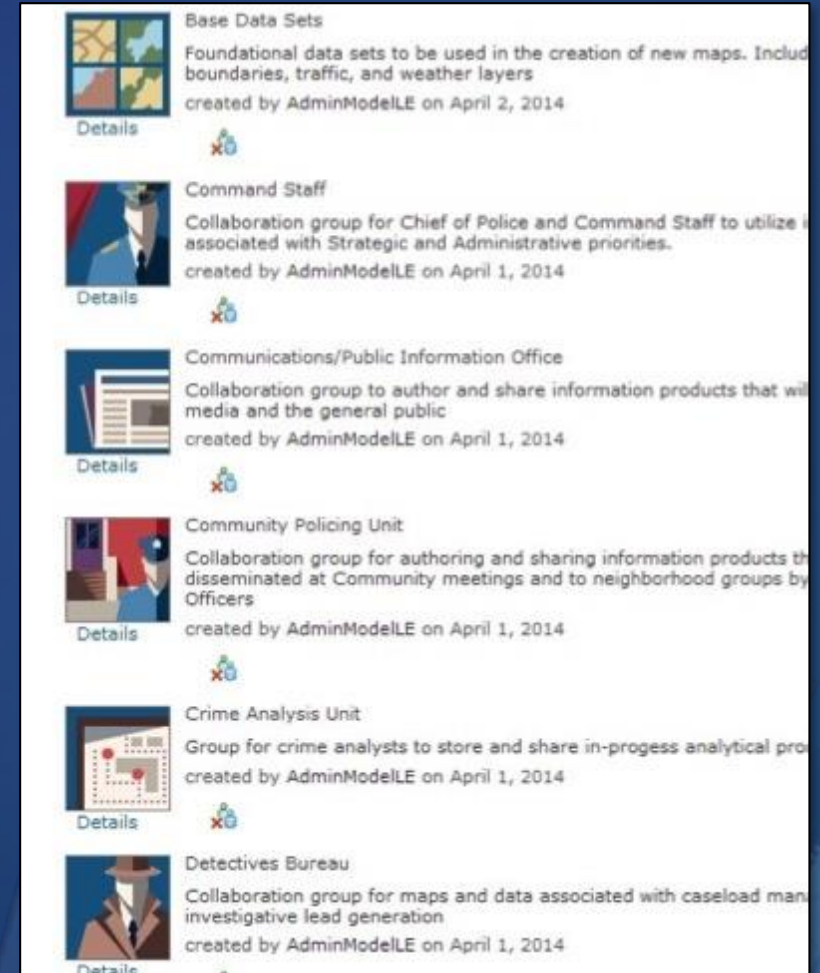
Supporting departments, projects, workflows, collaboration

- Access to resources
- Collaboration within the organization
- Collaboration between organizations



What groups do you need?

- Departments in your organization
- Org chart
- Current projects
- Solution templates



Group best practices

- Use consistent visual cues
- Intuitive naming conventions
- Add useful descriptions
- Pre-populate with content
- Auto-assign members



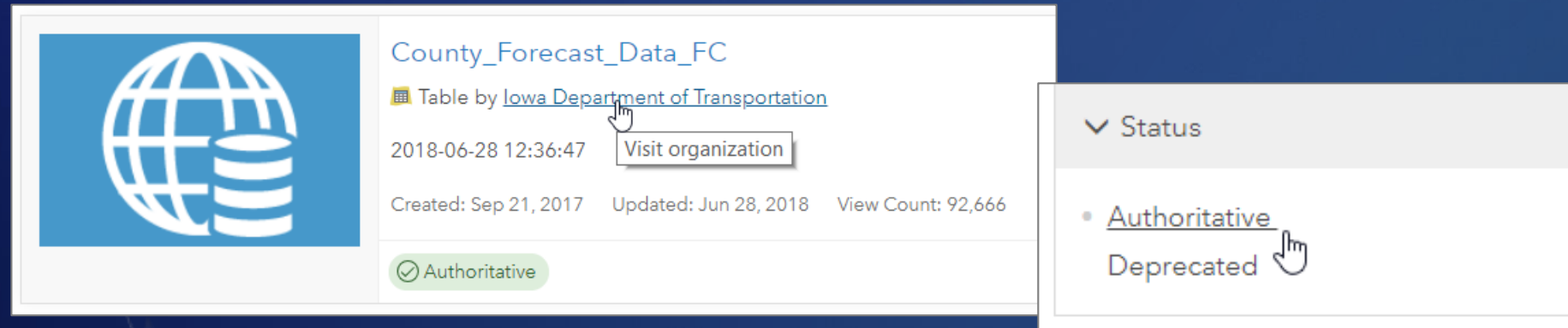
Create a destination

The screenshot displays a list of groups in the ArcGIS Groups interface. Each group entry includes a thumbnail icon, a title, a description, and a 'Details' link. The groups are organized into two columns. The first column lists groups related to resilience, while the second column lists groups related to civic analytics and economic/health topics. The visual cues include consistent iconography (e.g., fire for public safety, globe for resilience) and a uniform layout for each group entry.

Group Name	Description	Owner	Created Date
Public Safety Resilience Featured	Law enforcement and fire rescue teams need to learn how to better equip your first responders and tools they need to be ready when called.	climate_resilience	April 3, 2016
Resilience Featured Maps & Apps	Group containing maps and apps appearing on the ribbon at resilience.maps.arcgis.com	climate_resilience	March 7, 2016
Resilience Gallery Maps & Apps	Group containing maps and apps appearing on the ribbon at resilience.maps.arcgis.com	climate_resilience	March 7, 2016
Resilience Public Gallery	Group containing maps and apps appearing on the ribbon at resilience.maps.arcgis.com	climate_resilience	March 7, 2016
Transportation and Infrastructure Resilience	Thriving communities need strong transportation infrastructure. Use these resources to learn how to make systems more resilient.	climate_resilience	March 18, 2016
Boston	Boston maps, apps, and more.	bszukalski_can	June 3, 2016
Chicago	City of Chicago maps, apps, and more.	bszukalski_can	June 3, 2016
Civic Analytics Network Featured Gallery	Maps and apps featured on the Civic Analytics Network.	bszukalski_can	April 28, 2016
Civic Analytics Network Open Data	A group containing content used to support the Civic Analytics Network.	bszukalski_can	June 8, 2016
Economic	Economic opportunity maps, apps, and more.	bszukalski_can	June 3, 2016
Health	Health related maps, apps, and more.	bszukalski_can	June 7, 2016
Homelessness	Homelessness maps, apps, and more.	bszukalski_can	June 7, 2016

Content Status

- Items can be designated authoritative or deprecated
- Members can search by Status
- Only searchable within your organization*



The screenshot shows a content item card for "County_Forecast_Data_FC" with a globe icon. It includes a timestamp "2018-06-28 12:36:47", a "Visit organization" button, and creation/update/view count information. Below the card, a status dropdown menu is open, showing "Authoritative" (selected) and "Deprecated" options.

County_Forecast_Data_FC

Table by [Iowa Department of Transportation](#)

2018-06-28 12:36:47 Visit organization

Created: Sep 21, 2017 Updated: Jun 28, 2018 View Count: 92,666

✓ Authoritative

▼ Status

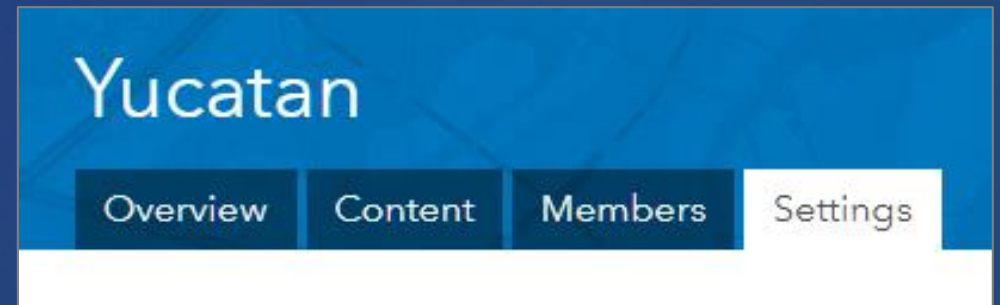
- Authoritative
- Deprecated



**More on publicly discoverable authoritative content later...*

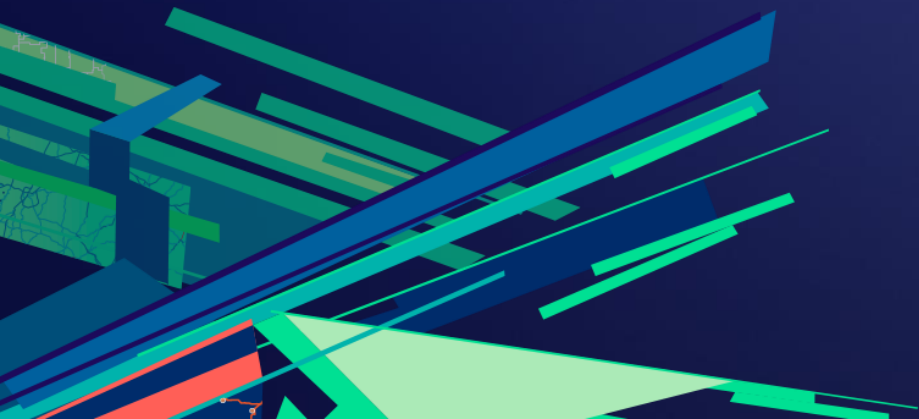
Group settings

- Groups can be:
 - Private (only owner and members can find)
 - Organization only
 - Public
- Membership:
 - Users can request membership
 - Admission by invite only
 - Anyone
- Contributors:
 - Only group owner
 - All members of the group

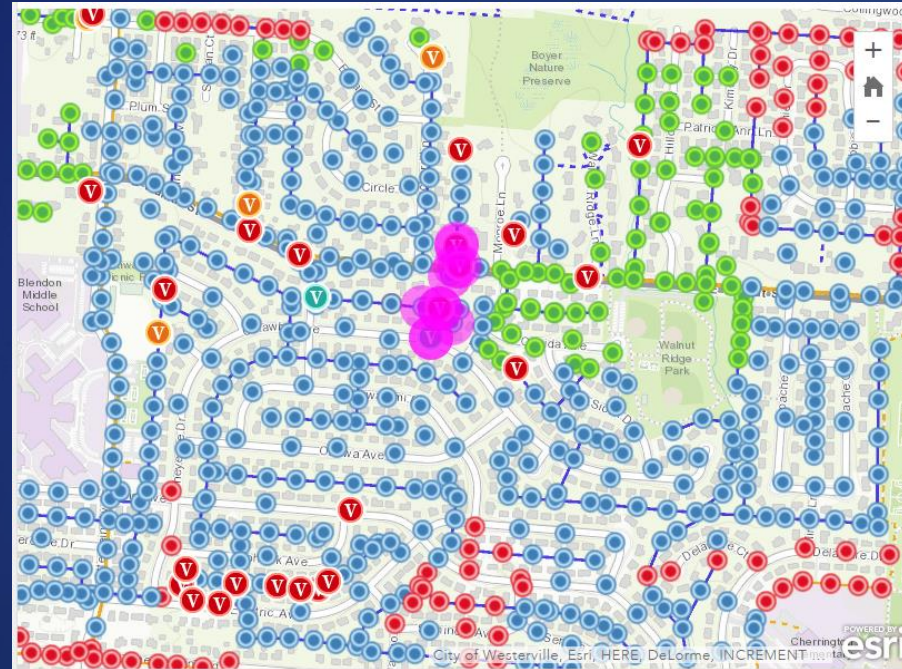


Best Practice: Create interesting and useful apps

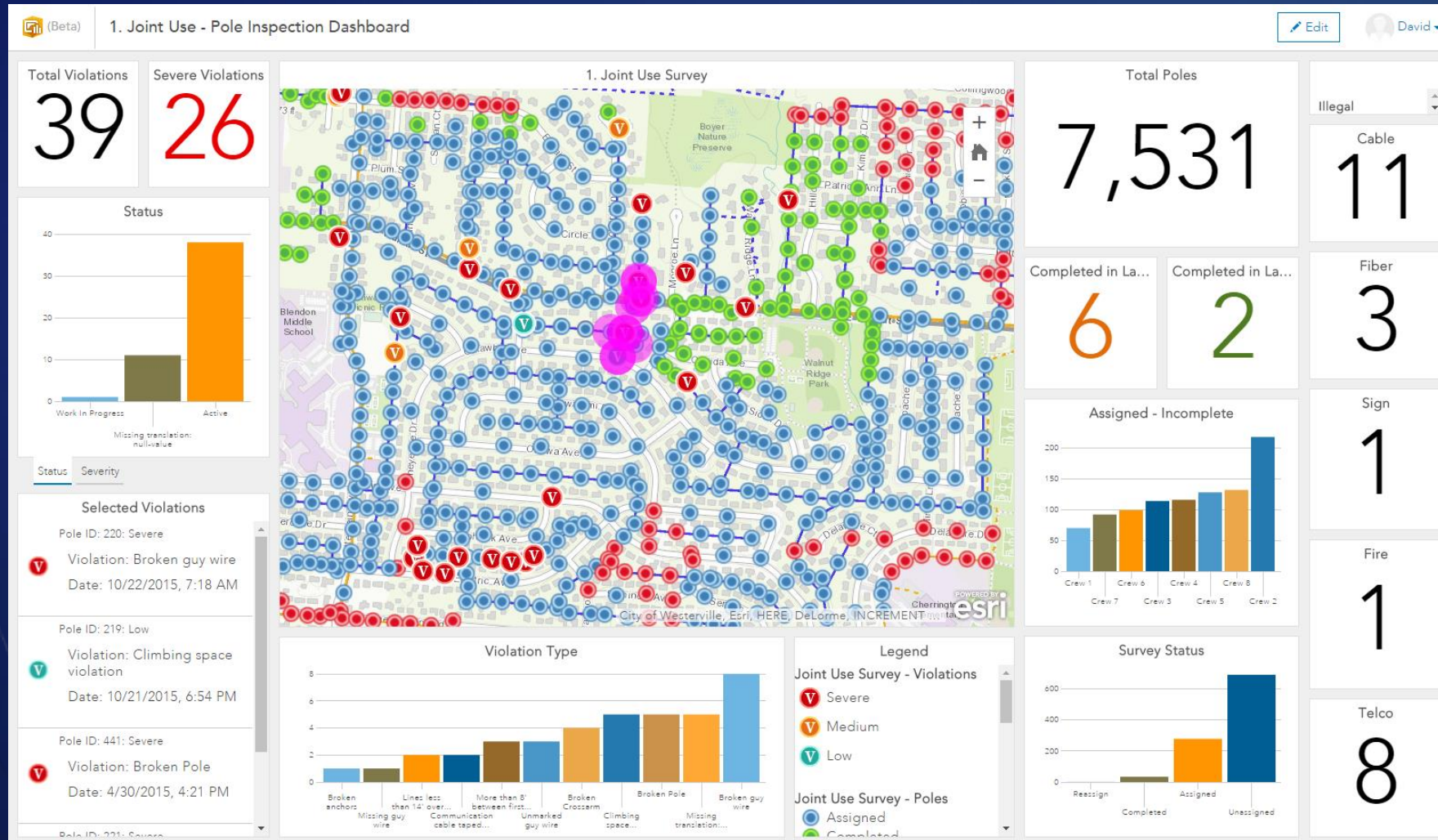
GREAT APPS THAT SUPPORT WORKFLOWS,
DELIVER ACCESS, TELL STORIES...



Apps complete the user experience

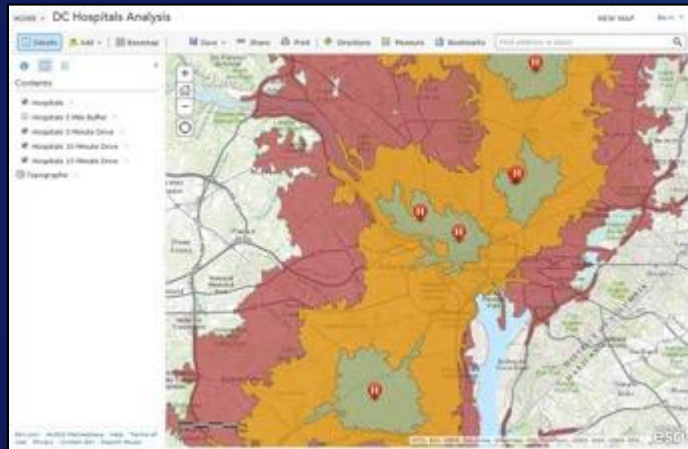


Apps complete the user experience

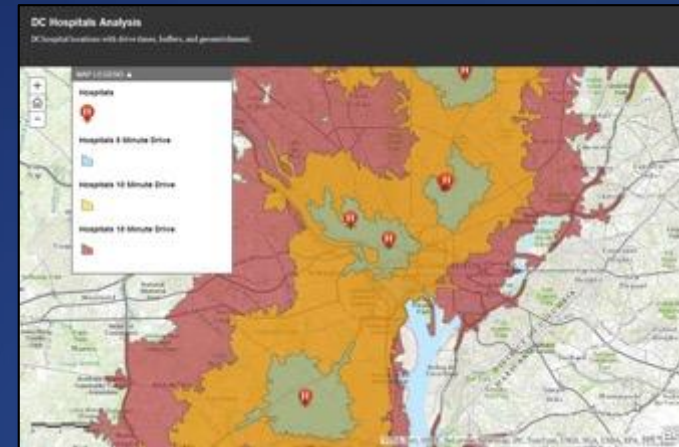


Map viewer vs. apps

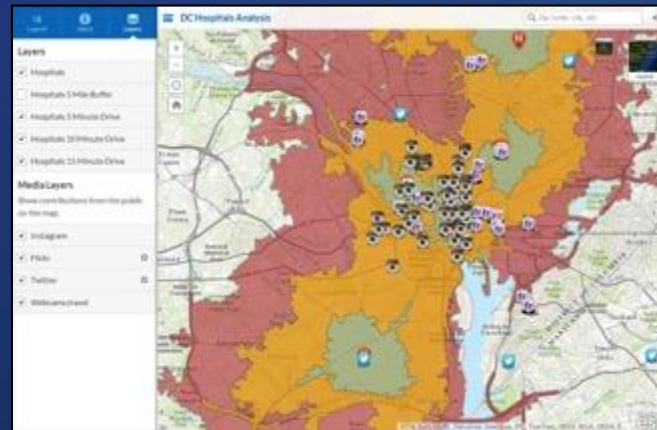
Deliver your map in the right context



Map viewer (for authoring)



Storytelling basic



Public Information



Story Map Tour



Try a "quick share"

Easy to configure

General	Theme	Options	Search
---------	-------	---------	--------

☐ Show popup content panel instead of popup window
☐ Display scalebar on map

Add a Locate button to the map. Note that the Locate button is only available if site is using https

☐ Display locate button on map

Toolbar Options

Select tools for the app toolbar.

Note: if the web map doesn't support the enabled capability the tool will not appear. For example if the map doesn't have bookmarks then the bookmark tool won't appear on the toolbar even if it is checked.

- ☒ Basemap Gallery
- ☒ Bookmarks
- ☐ Legend
- ☒ Map Details
- ☐ Measure Tool
- ☐ Overview Map
- ☒ Share Tools
 - ☐ Add embed option to share dialog

The Layer List widget displays a list of layers in the map. The layers visibility can be toggled on and off. Optionally you can include sub layers a legend and opacity slider as part of the Layer List widget.

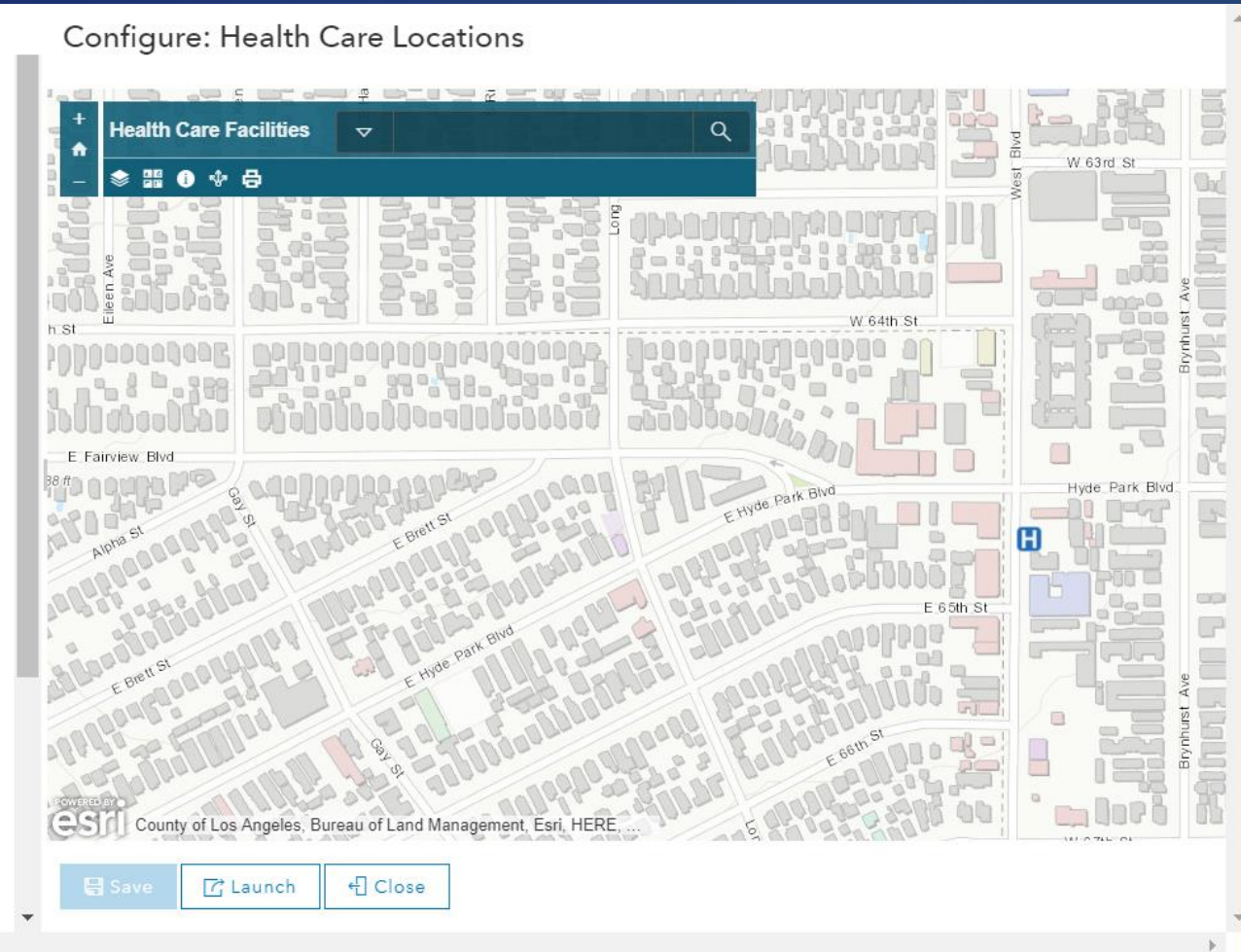
- ☒ Display layer list
 - ☒ Include sublayers in Layer List
 - ☒ Include legend in Layer List
 - ☒ Include opacity slider in Layer List

Display the Editor tool and optionally add a toolbar that provides additional editing capabilities including cut, merge and reshape.

☐ Display Editor

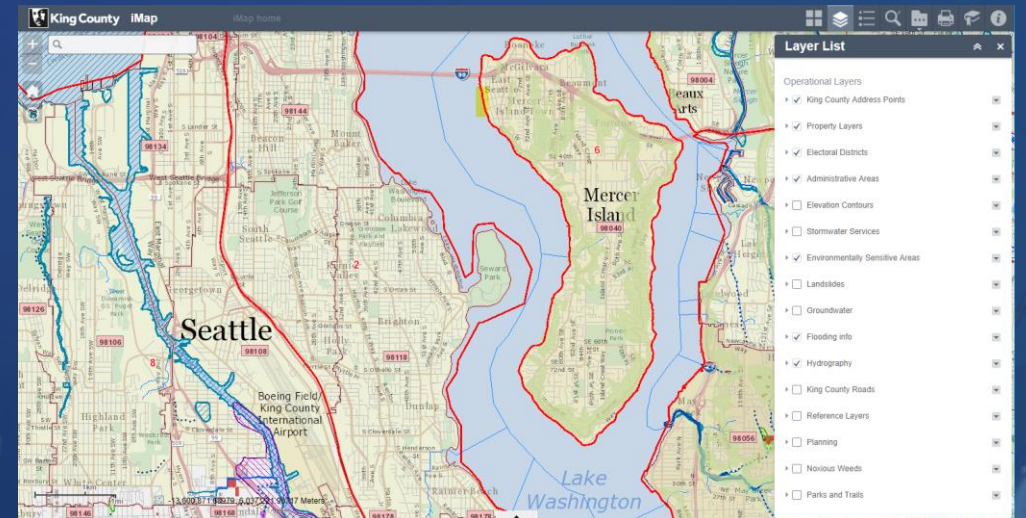
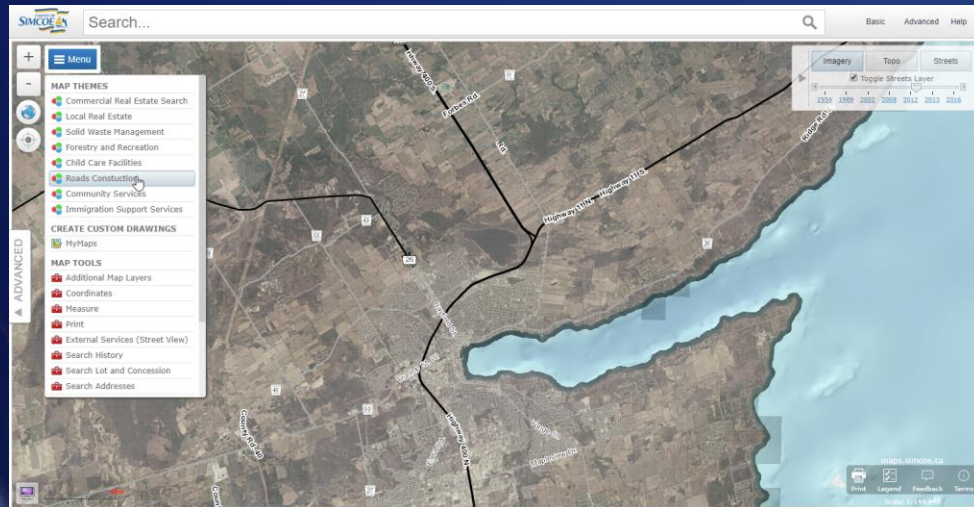
Display the print tool and optionally display a legend on the print page and all the print layouts associated with the print service used by the template.

- ☒ Print Tool




Web AppBuilder

- Build apps using widgets
- Easiest way to create custom configurable apps for your organization
- Developer edition



Alternative: Download source, modify and 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](#)

```
C:\Users\bernie\Downloads\basic-viewer-template-master\basic-viewer-template-master\index.html - ...
File Edit Search View Encoding Language Settings Macro Run Plugins Window ?
change.log index.html
52  dojo.ready(function() {
53
54
55      i18n = dojo.i18n.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 mos
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 secu
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
```

ArcGIS Solution templates for organizations

- Tailored to specific domains
- Follow best practices & trends
- Include:
 - Platform (ArcGIS organization) configurations
 - Configurable apps and map resources
 - Community



Local Government



State Government



Emergency
Management



Water



Electric



Gas



Defense



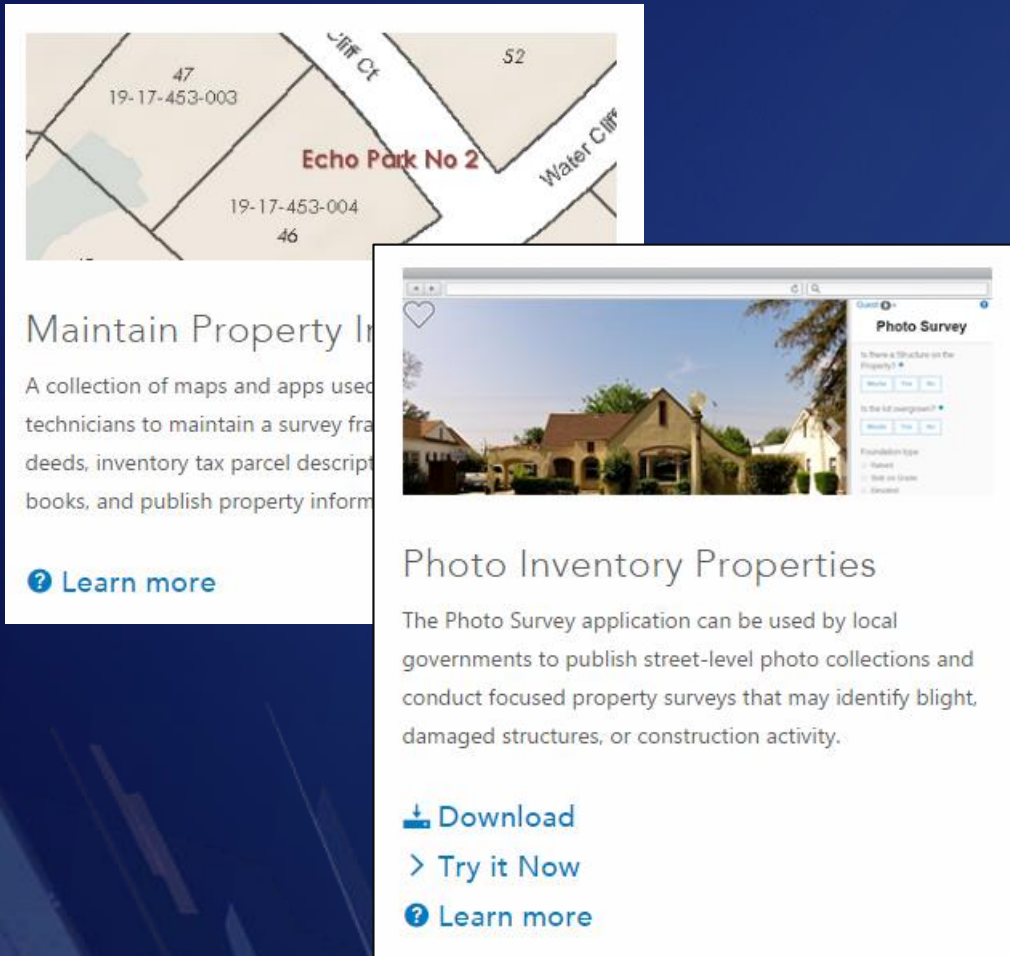
Telecommunications



Parks & Gardens



Example: ArcGIS for Local Government



Maintain Property Information

A collection of maps and apps used by technicians to maintain a survey framework, inventory tax parcel descriptions, deeds, inventory tax parcel descriptions, books, and publish property information.

[? Learn more](#)

Photo Inventory Properties

The Photo Survey application can be used by local governments to publish street-level photo collections and conduct focused property surveys that may identify blight, damaged structures, or construction activity.

[Download](#)

[Try it Now](#)

[? Learn more](#)

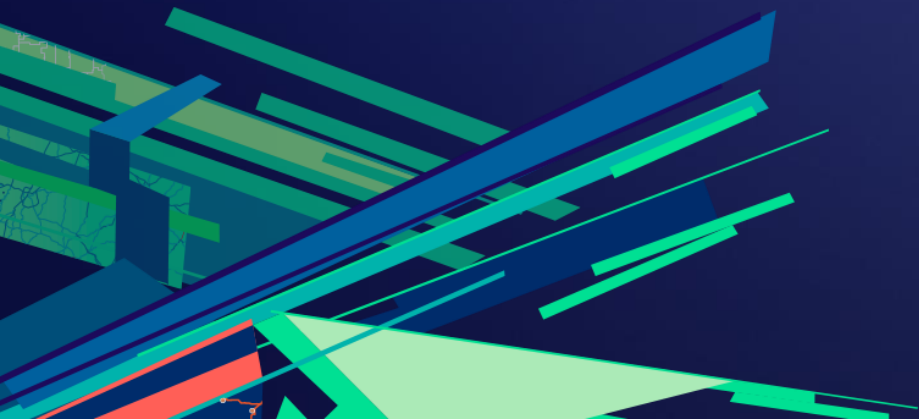


Note information model requirements



Best Practice: Invite members and make them feel welcome

PROVIDE A GREAT EXPERIENCE FOR MEMBERS



Invite users

1 How would you like to invite or add members to your organization?

☐ Add members automatically without sending an email.

☒ Send invitations to preestablished user names.

☐ Send invitations for existing users.

NEXT

(Pre-establish recommended)



Use enterprise logins
(Best)

Invite and establish Role

2 Preestablish new ArcGIS logins one at a time or in batch from a file.
Select any role without administrative privileges for the member to be a part of.

One at a time **From a file**

Email:

First Name:

Last Name:

Username:

Role:

Message Member Will Receive: Bern Szukalski has invited you to join an ArcGIS Online Organization, Esri's Disaster Response Program.

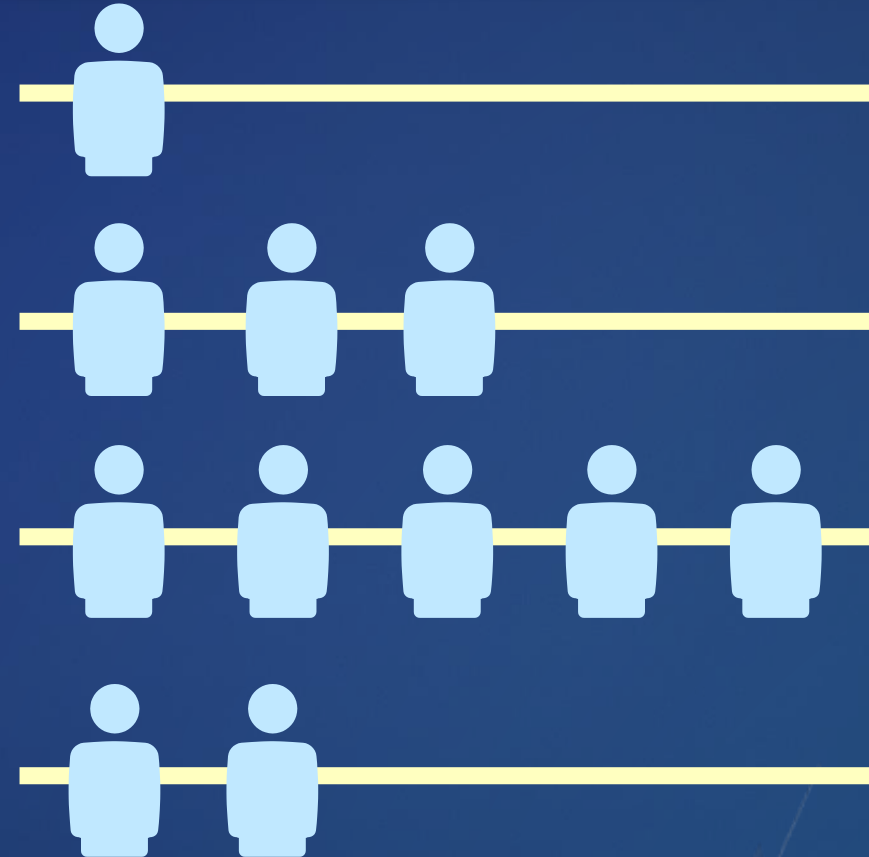
BACK **INVITE ANOTHER** **REVIEW INVITATION(S)**

As an admin...




- Assign roles
- Assign users to groups
 - Make sure groups have good content to get them started
- Assign credit limits (if desired)
- Ensure users complete a profile
- Monitor and manage


Organization roles

- Built-in roles
 - Administrator
 - Publisher
 - User
- Custom roles
 - Based on templates
 - Created by an administrator
- User Types




Organization settings – Budgeting credits

<div><div><div></div><div></div></div><div><div>Bern Szukalski</div><div>bwszukalski • Last logged in today</div></div><div>...</div></div>				
Level	Role	Credits remaining	Licenses	Groups
2	Administrator ▼	No limit		

<div><div><div></div><div></div></div><div><div>Kelly Hutchins</div><div>kelly_labs • Last logged in jun 29, 2018</div></div><div>...</div></div>				
Level	Role	Credits remaining	Licenses	Groups
2	Publisher ▼	No limit		Configure groups

Assign member to meaningful groups

Pre-populate groups with useful content

 **2014 West Africa Ebola Outbreak**

EDIT INVITE USERS MEMBERSHIP REQUESTS CHANGE OWNER DELETE GROUP JOIN THIS GROUP





Esri Disaster Response Program ArcGIS Online Group designated for sharing public examples of feature services, maps and applications related to the current West Africa Ebola outbreak. ▼

Group Content

All Results

Maps
Layers
Scenes
Apps
Tools
Files

☐ Show ArcGIS Desktop Content

	Title	Owner	Rating	Views▼	Date
	Ebola Outbreaks 1976-2015 A map of previous/current Ebola Outbreaks from 1976 to 2014 Web Mapping Application by BFlanagan_TS Last Modified: January 23, 2015 ★★★★★ (10 ratings, 1 comment, 276,415 views)				✕
	Ebola home Web Map by BFlanagan_TS Last Modified: January 12, 2015 ★☆☆☆☆ (0 ratings, 0 comments, 247,726 views)				✕
	West Africa Ebola Outbreak Web Map by DirectReliefServices Last Modified: May 28, 2015 ★☆☆☆☆ (0 ratings, 0 comments, 167,715 views)				✕
	West Africa Ebola Outbreak The current case load and death totals for the West Africa Ebola Outbreak in Guinea, Liberia, and Sierra Leone along with Direct Relief partner facilities. Web Mapping Application by DirectReliefServices Last Modified: February 9, 2015				✕



2014 West Africa Ebola Outbreak

Esri Disaster Response Program ArcGIS Online Group designated for sharing public examples of feature services, maps and applications related to the current West Africa Ebola outbreak.
owned by jshoultzDRP on August 11, 2014

[Details](#)



Gallery - Esri Disaster Response Program

This is the Group used to feature applications produced for disaster response.
owned by STRicheDRP on June 18, 2012

[Details](#)



Application Template Group - Esri Disaster Response Program

This is a group used for deploying customized web mapping application templates.
owned by jpedderDRP on January 30, 2014

[Details](#)

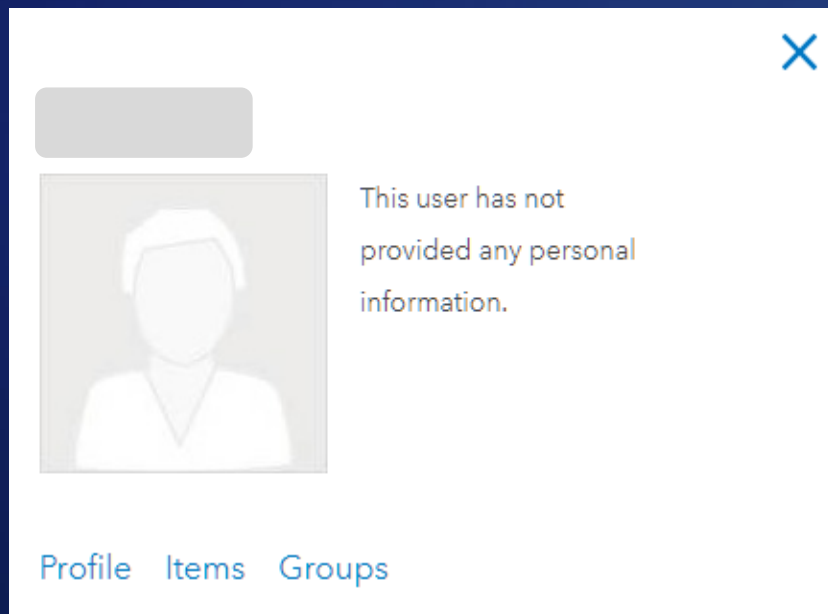


Featured Applications

This gallery highlights featured maps and applications related to Humanitarian Aid & Disaster Response.
owned by Esri_DisasterResponse_DM on September 13, 2012

[Details](#)

User profiles



Profiles

Bern's Profile



Click thumbnail to change image.

First Name

Bern

Last Name

Szukalski

New Email

bszukalski@esri.com

Confirm Email

Username
bwszukalski

Bio

Profile for Bern Szukalski at the ArcGIS Online Laboratory
https://bwszukalski.maps.arcgis.com
;Phone: 909 793-2853 x1315;Mobile: 909 499-0584;Twitter: @bernszukalski;Visit Esri at: http://www.esri.com

Link Your ArcGIS Accounts
Manage Linked Accounts

Password

[CHANGE PASSWORD](#)

Security Question

What city were you born in?

Answer

Who can see your profile?

- ☒ Everyone (public)
☐ Organization
☐ Private

Language

English-English

Region

United States

Units

US Standard

Level

2

Role

Administrator

Organization

ArcGIS Online Labs

Organization URL

https://bwszukalski.maps.arcgis.com

Licensed Products

ArcGIS Pro
GeoPlanner for ArcGIS
ArcGIS Community Analyst
ArcGIS Business Analyst


Thumbnail, name
email

Your Bio

Profile Visibility

Licenses

What a good profile looks like



Sandy Ebersole


Organization: Geological Survey of Alabama, Geologic Investigations Program; sebersole@gsa.alabama.gov; Specialties: Geology,



Lindsay Withers

GIS Cartography Manager at the The Trust for Public Land. The Trust for Public Land works to protect the places people love and to create close-to-home parks—particularly in and near where 80 percent of Americans live. Our goal is to ensure every child has easy access to a safe place to play in nature. We conserve working farms, ranches, and forests; lands of historical and cultural importance; rivers, streams, coasts, and water and other special places where people can experience nature at hand. The Trust for Public Land's Vision and GIS service uses cutting-edge research and innovative mapping techniques to protect parks, protect open space, and deliver community-driven conservation plans. To learn more about The Trust for Public Land and its GIS services, visit <https://www.tpl.org/how-we-work/plan>

[Profile](#) [Items](#) [Groups](#)



Stephanie Smith

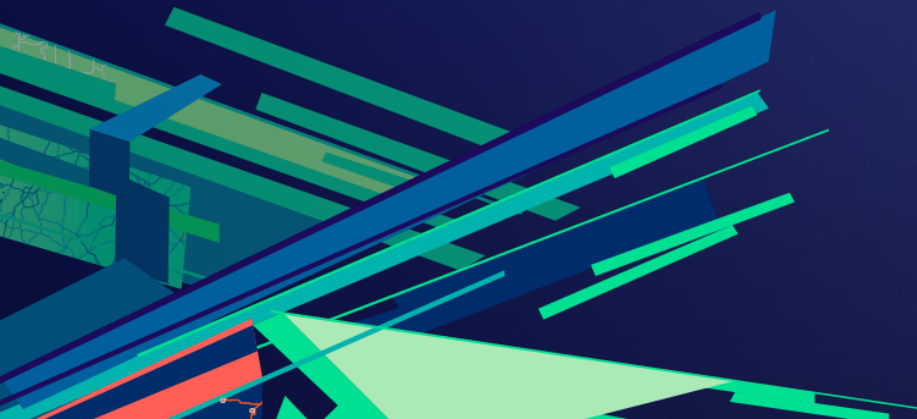
The mission of the Grand Canyon Trust is to protect and restore the Colorado Plateau – its spectacular landscapes, flowing rivers, clean air, diversity of plants and animals, and areas of beauty and solitude. The Trust was established in 1985 by Arizona Governor Bruce Babbitt and other leading conservationists as a national trust for projects in the Grand Canyon. Soon after, Trustee Stewart Udall made an impassioned plea that issues do not stop at the boundaries of the Park, and the Trust should be an advocate for both the Grand Canyon and the surrounding Colorado Plateau. The suggestion was adopted and Grand Canyon Trust emerged as a leading regional conservation organization, with offices across the Plateau and extensive connections among policymakers, land managers, scientists, and community leaders.

[Profile](#) [Items](#) [Groups](#)

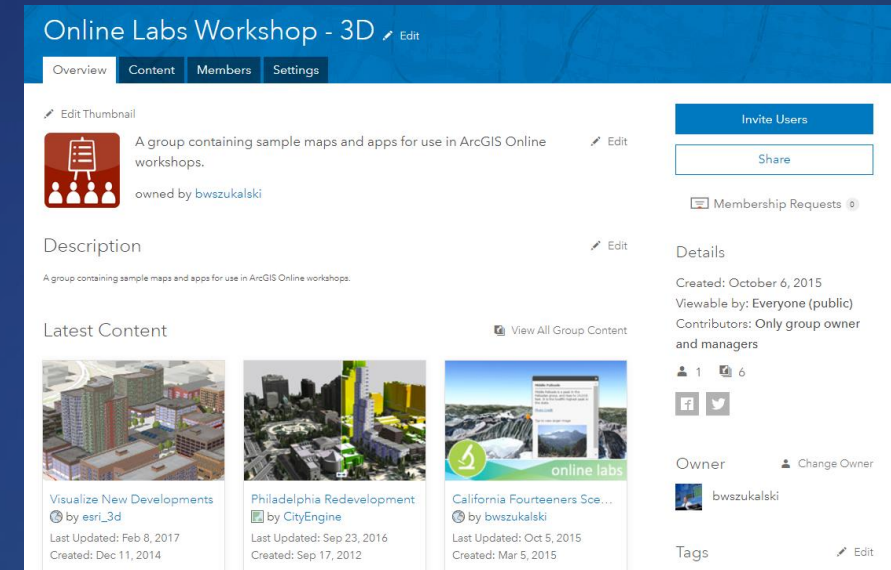
Best Practice: Open access to your data, maps, and apps beyond your organization

THE MORE USERS THE MORE VALUE

EXTEND YOUR REACH



Make your content discoverable



Groups and group galleries

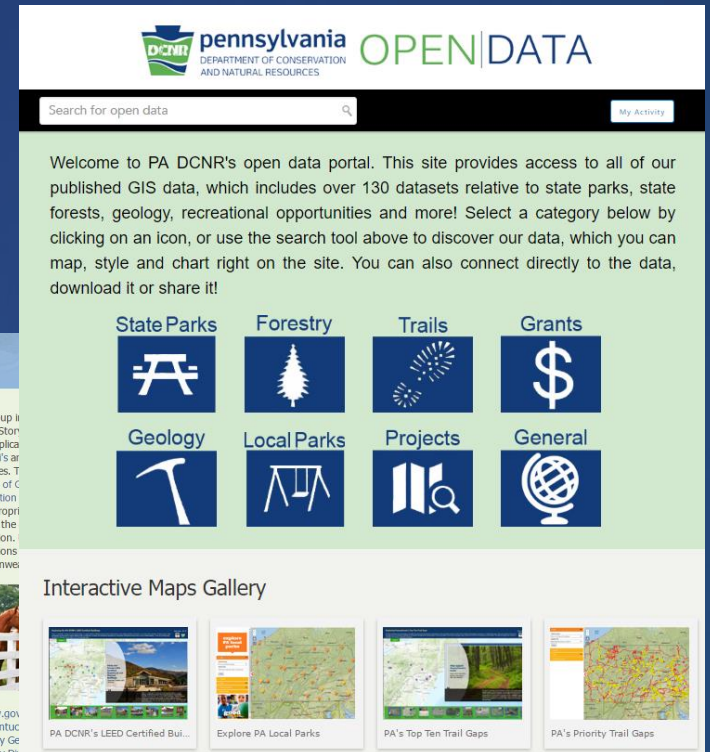
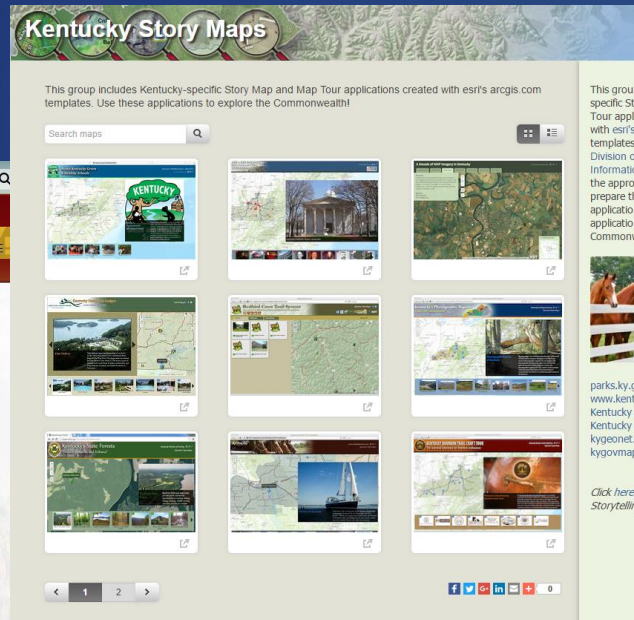
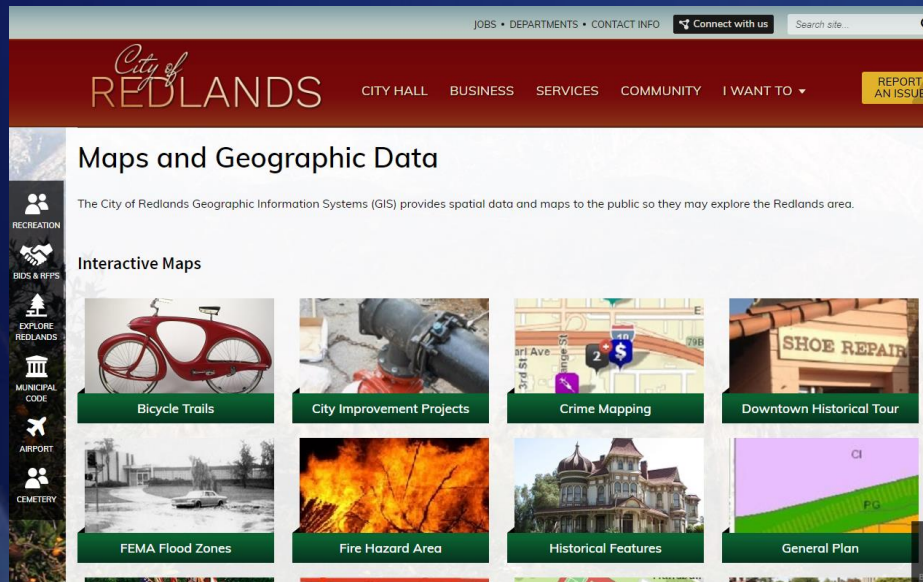
Description and Tags



Organization gallery

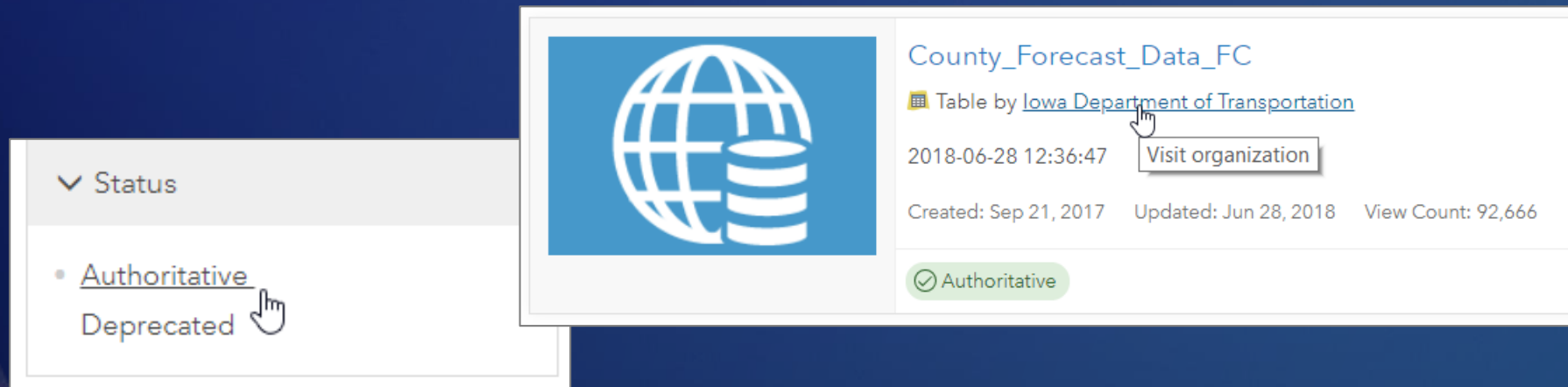
Other ways to deliver access to your content

- Embed maps and apps
- Group gallery apps & ribbons
- Open Data for ArcGIS



Authoritative public content

- Verify your organization via Esri customer service
- Public content marked authoritative will get badge
- Publicly searchable via Status



✓ Note that link goes back to org home

Open Data

- Built-in to your organizations
- Uses your organization content
- Group-based
- Multiple sites
- Serves data for
 - Developers
 - Contractors
 - Businesses
 - Citizens
 - Others...



The screenshot shows the Open Data Portal interface. At the top, a banner image of a city street with the text "Explore 48,632 Open Datasets from 3,155 Organizations Worldwide." Below this is a search bar with two input fields: "Find" (containing "Bus Routes, Park Services, Schools") and "Near" (containing "City, Country"), followed by a blue search button with a magnifying glass icon. Below the search bar is a photo of a city street with the caption "District of Columbia, photo by Rabi Samuel". Below the photo is a section titled "Newest Data" containing three data cards. Each card has a blue header with a white icon of two people, a title, a description, a date, and a hashtag.

Explore 48,632 Open Datasets
from 3,155 Organizations Worldwide.

Find Bus Routes, Park Services, Schools Near City, Country

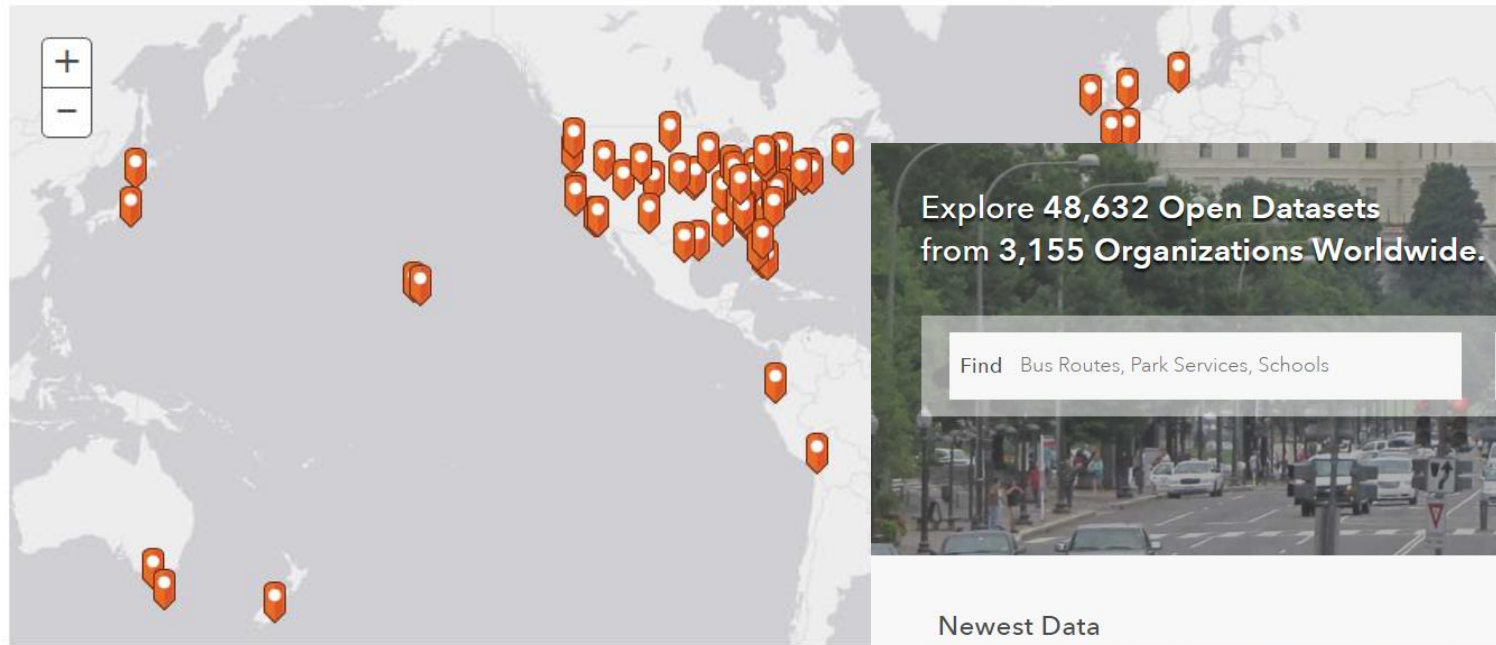
District of Columbia, photo by Rabi Samuel

Newest Data

ROUTE83.V EVT ORL MAINTENANT	ROUTE83 V EVT ORP MAINTENANT	GRSM BACKCOUNTRY SHELTERS
evenements routiers maintenant, routes departementales du VAR , representation ponctuelle et lineaire	evenements routiers maintenant, routes departementales du VAR , representation ponctuelle et lineaire	BEYOND DOUBT the most generally useful building in any park is a shelter, usually open but sometimes enclosed or enclosable, and then
June 26, 2016	June 26, 2016	June 26, 2016
#evenement	#evenement	#national park service

Open Data

Open Data Is All Over the World



Explore 48,632 Open Datasets
from 3,155 Organizations Worldwide.

Find Bus Routes, Park Services, Schools

Near City, Country



District of Columbia, photo by Rabi Samuel

Newest Data



ROUTE83.V EVT ORL MAINTENANT

evenements routiers maintenant, routes
departementales du VAR, representation
ponctuelle et lineaire

🕒 June 26, 2016

#evenement



ROUTE83 V EVT ORP MAINTENANT

evenements routiers maintenant, routes
departementales du VAR, representation
ponctuelle et lineaire

🕒 June 26, 2016

#evenement



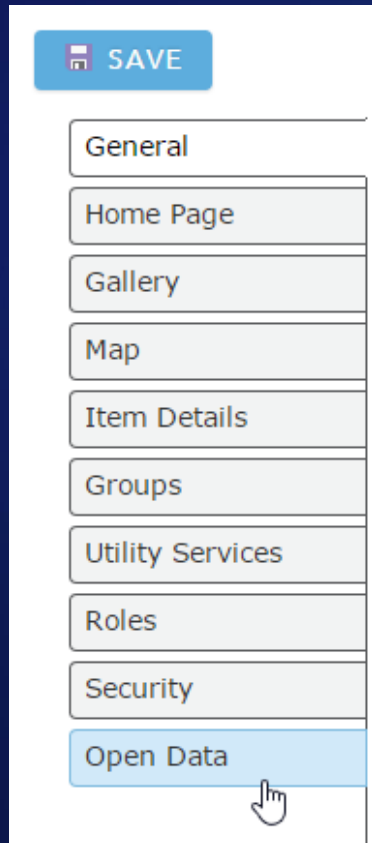
GRSM BACKCOUNTRY SHELTERS

BEYOND DOUBT the most generally useful
building in any park is a shelter, usually open but
sometimes enclosed or enclosable, and then

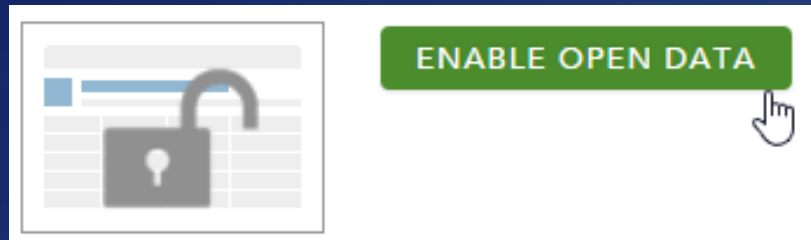
🕒 June 26, 2016

#national park service

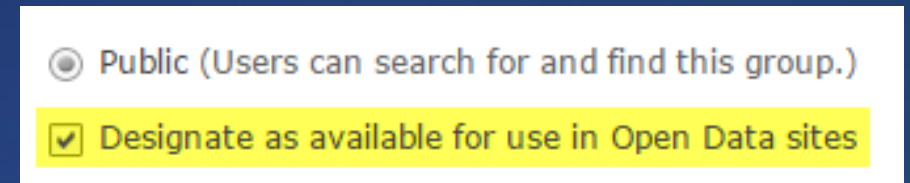
Configuring Open Data



(1) Settings

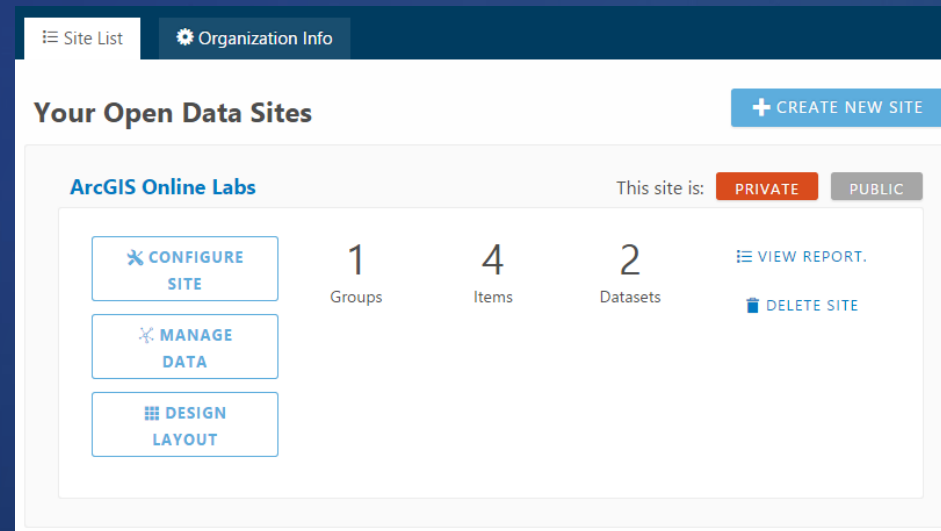


(2) Enable Open Data



(3) Designate participating Groups

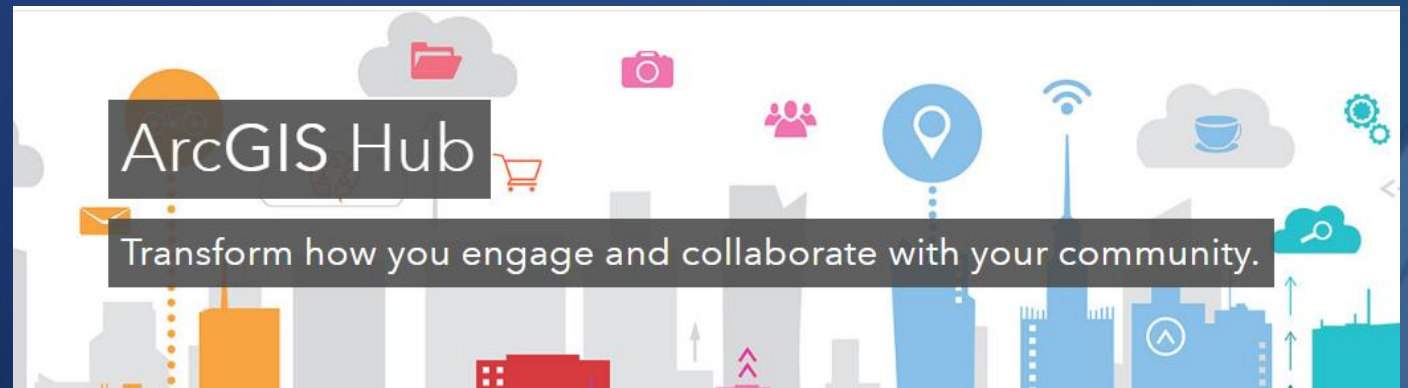
(4) Configure Sites



✓ Now configured via hub.arcgis.com

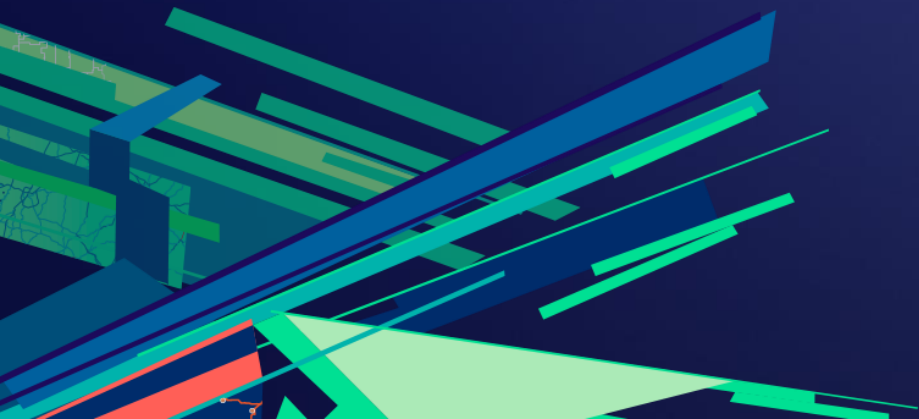
ArcGIS Hub

- Connects your org to citizens
- Initiatives
- Components:
 - ArcGIS Hub Open Data
 - ArcGIS Hub Collaboration
 - ArcGIS Hub Initiatives



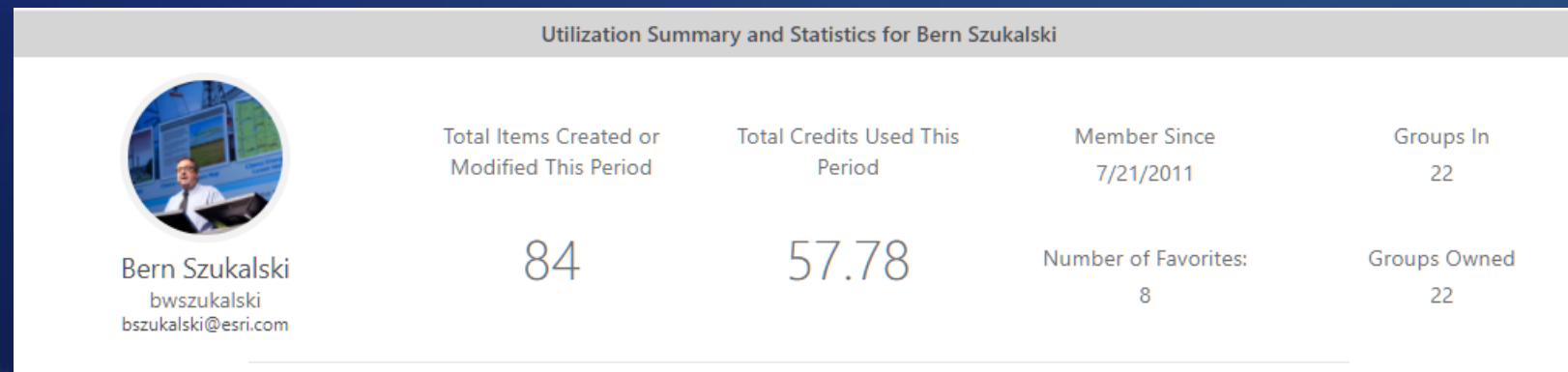
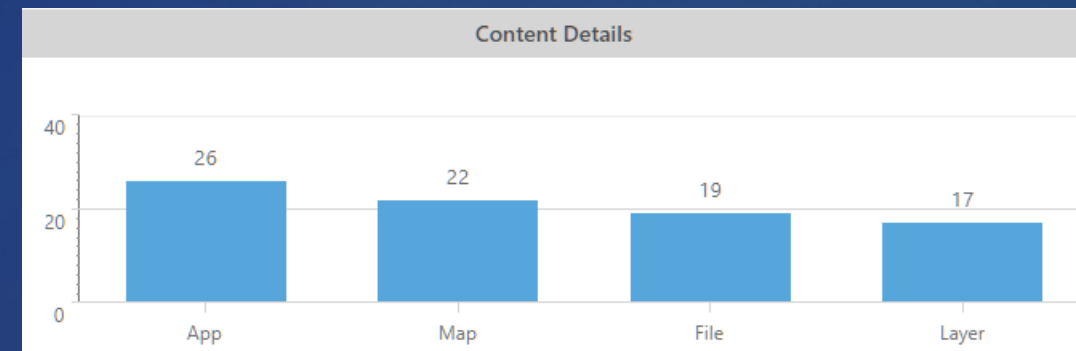
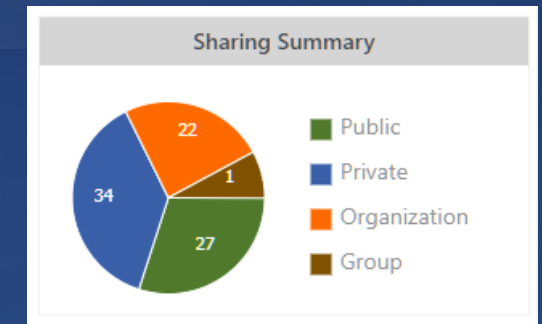
Best Practice: Curate, monitor, manage, and grow...

KEEP YOUR ORGANIZATION HEALTHY & VIBRANT

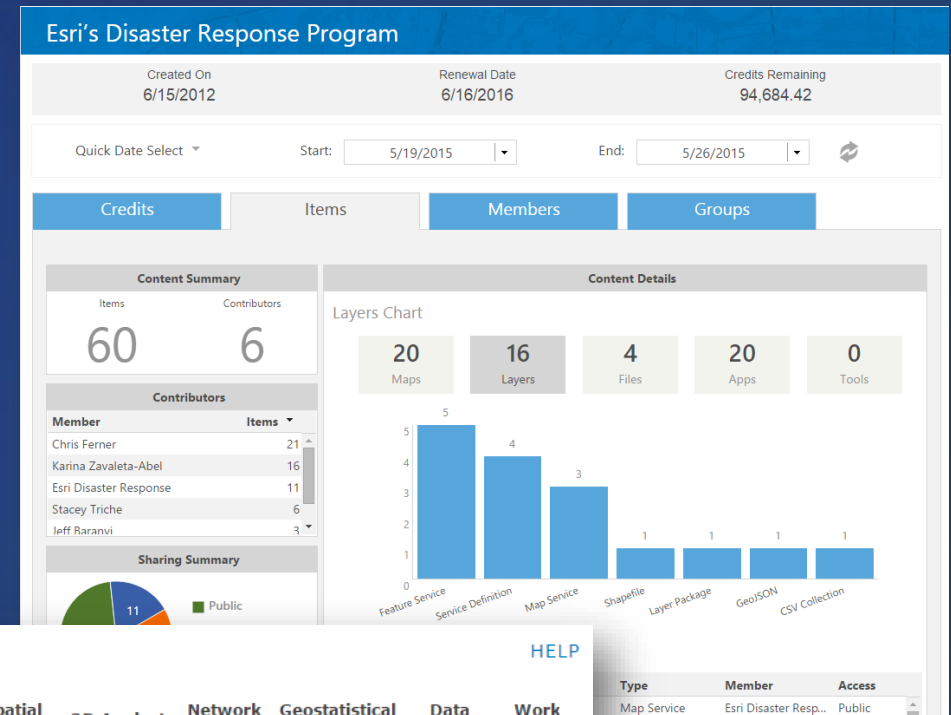
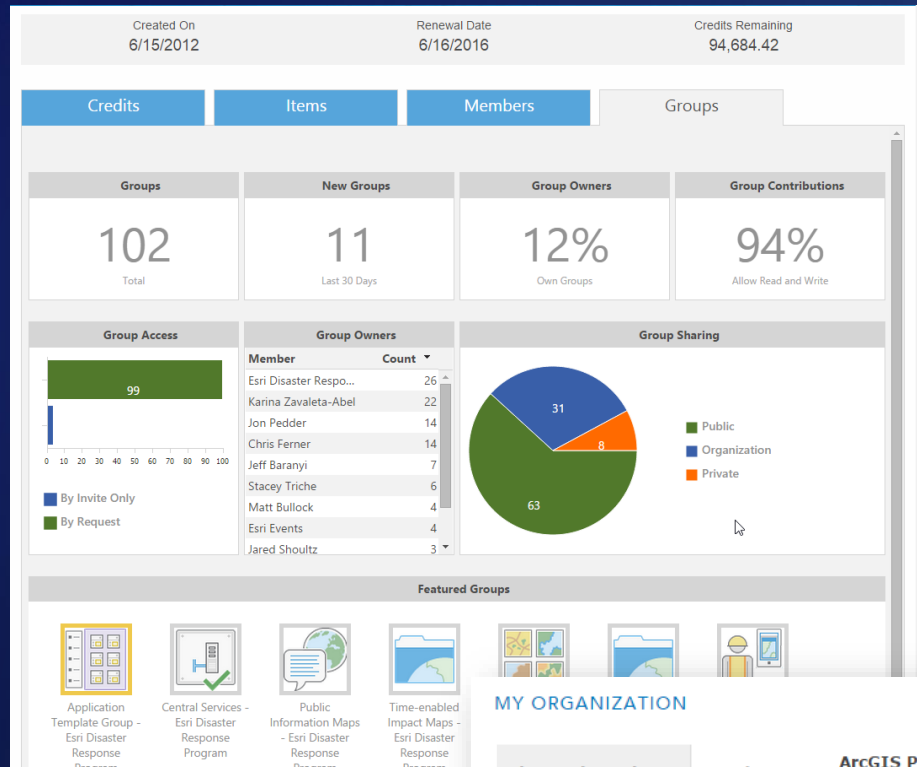


Member and item curation

- Usage by app
- Usage by member
- Members by role and credit usage
- Utilization summary
- Pro usage
- More...



Organization Status and Management



MY ORGANIZATION

Licensed Members		Product	ArcGIS Pro Basic	ArcGIS Pro Standard	ArcGIS Pro Advanced	Spatial Analyst	3D Analyst	Network Analyst	Geostatistical Analyst	Data Reviewer	Work Manager
Maximum	300	Licenses	100	100	100	100	100	100	100	100	100
Available	298	Available	100	100	98	98	98	98	98	98	98

Members [SELECT ALL](#)

Search by Name Selected Members

ArcGIS Marketplace – marketplace.arcgis.com



ArcGIS Marketplace

Discover a World of Apps, Content and Capabilities.



Admin Tools for ArcGISSM Online
GEO-Jobe
★★★★★ (29)



Admin Tools for ArcGISSM Online (Pro)
GEO-Jobe
★★★★★ (4)

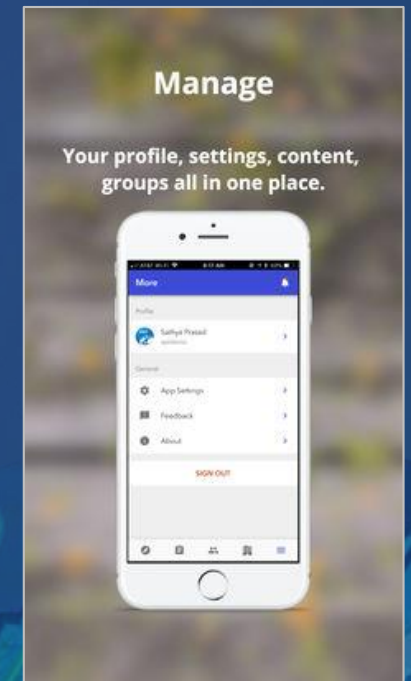
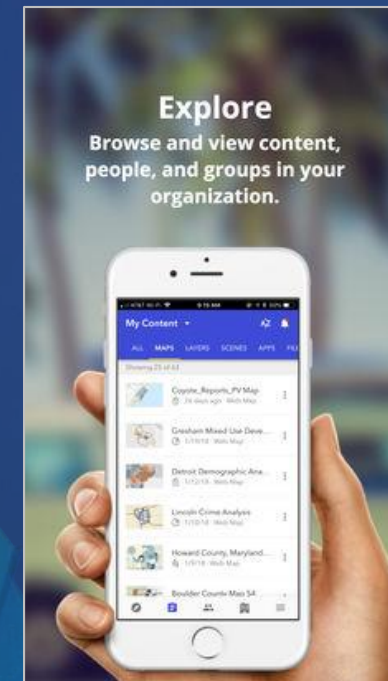
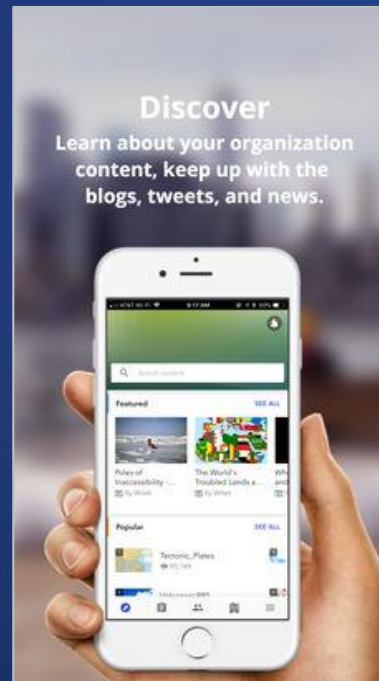
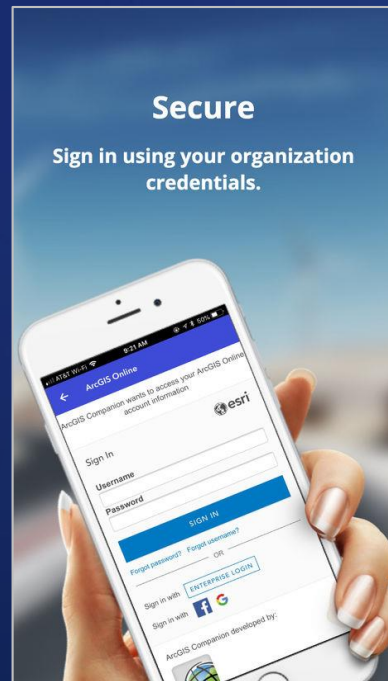
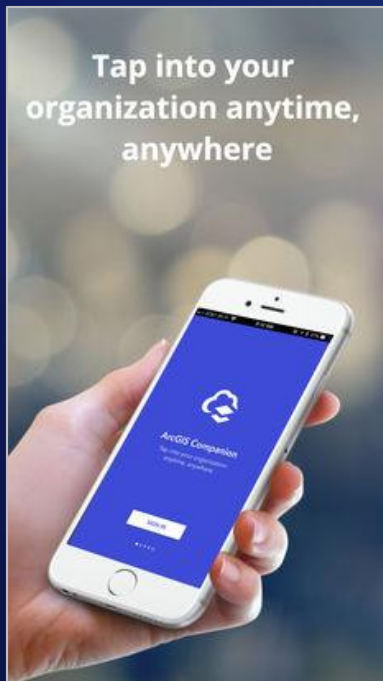


Mapfolio for ArcGISSM Online
GEO-Jobe
★★★★★ (8)

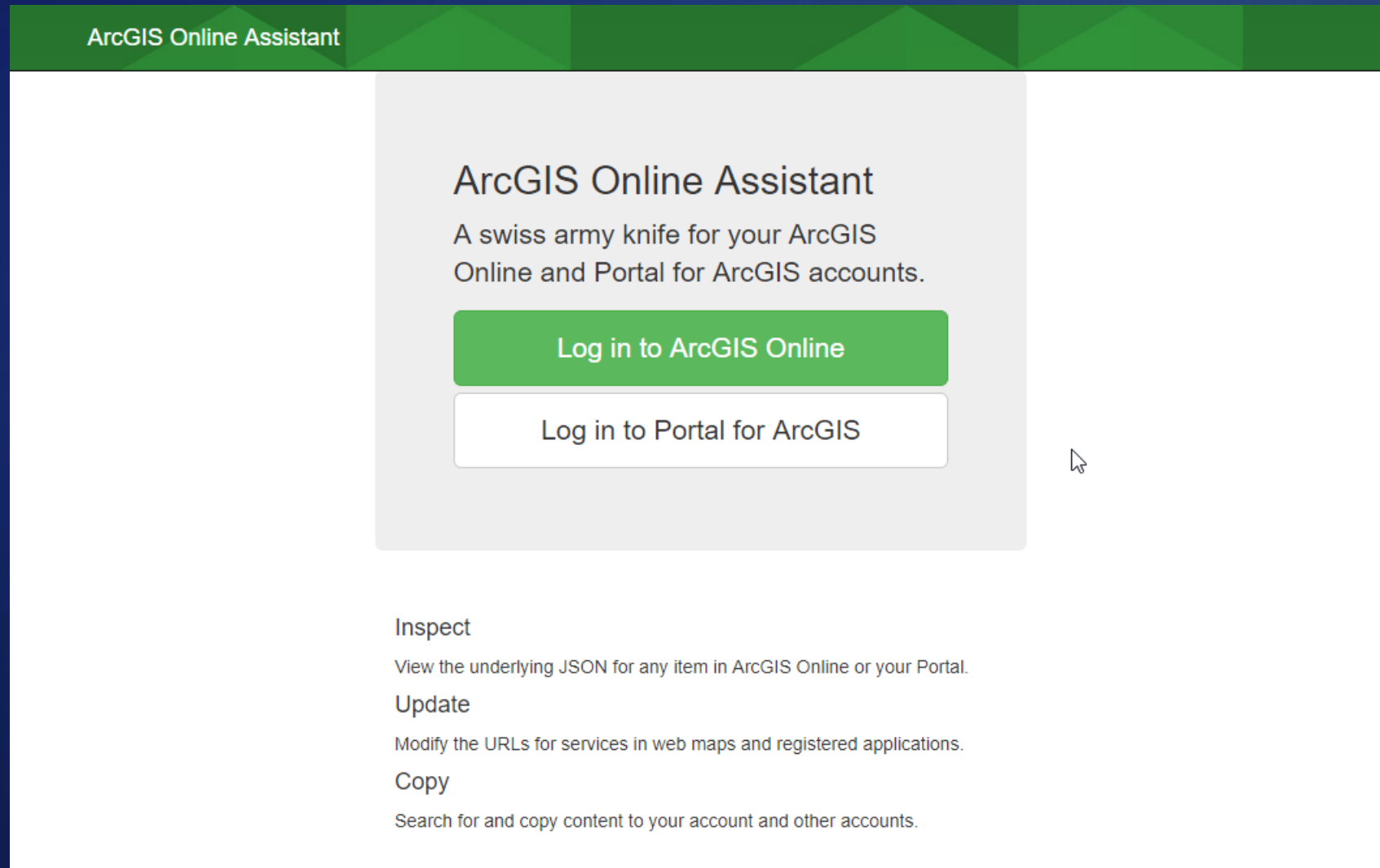


ArcGIS Companion

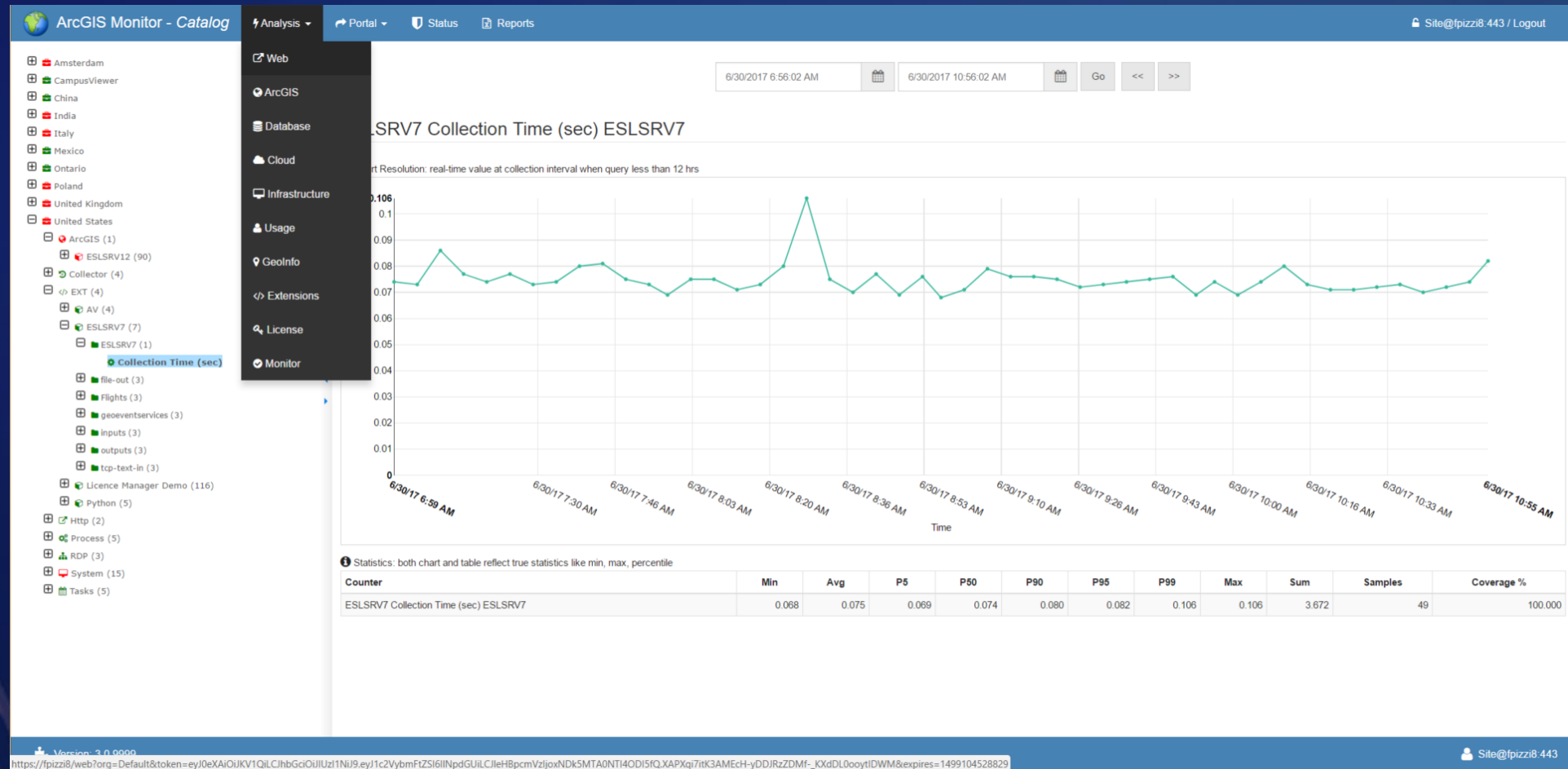
- Native app for portal access and administration



ArcGIS Online Assistant



ArcGIS Monitor



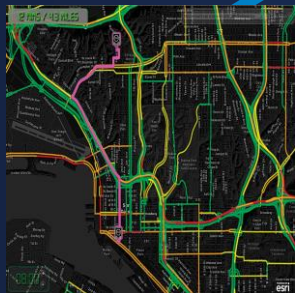
ArcGIS Enterprise Sites

- Available with ArcGIS Enterprise
- Enables you to create destinations within your organization
- Composed of *Sites* and *Pages*
- Creates a focused experience for a topic or audience

The vision



Data



Real-time



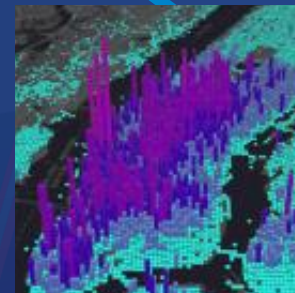
Imagery/Raster



Vector



BI

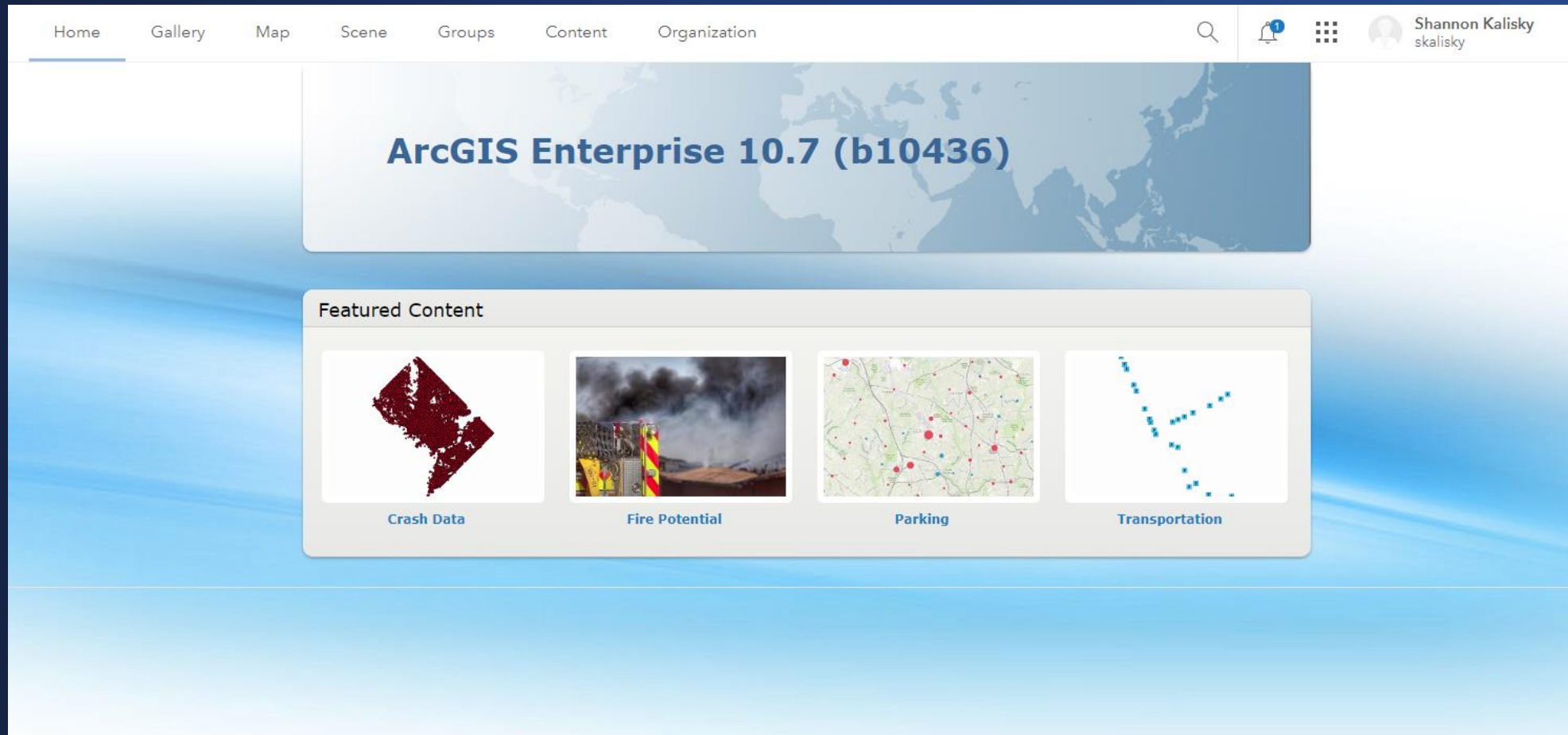


Big data

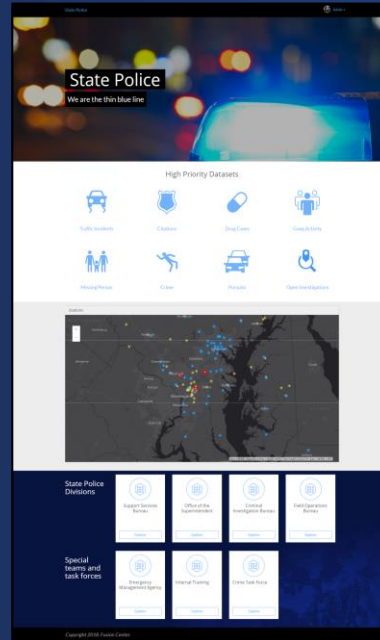
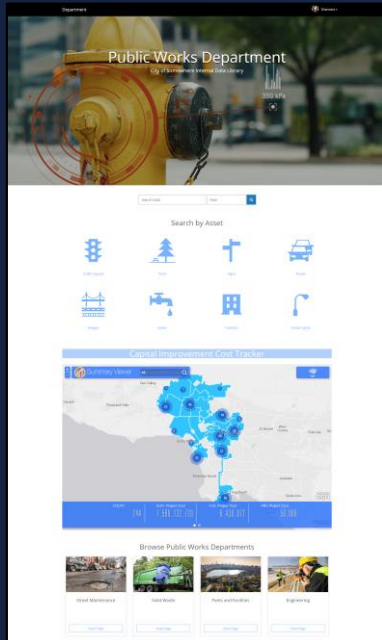
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1	02/05/2019 12:00:00 AM	2018	2	Kelly	Is
2	02/05/2019 12:00:00 AM	2018	2	Kelly	Is
3	02/04/2019 11:01:00 PM	2018	2	Gallagher	
4	02/04/2019 10:39:00 PM	2018	2	Carney	

Tabular

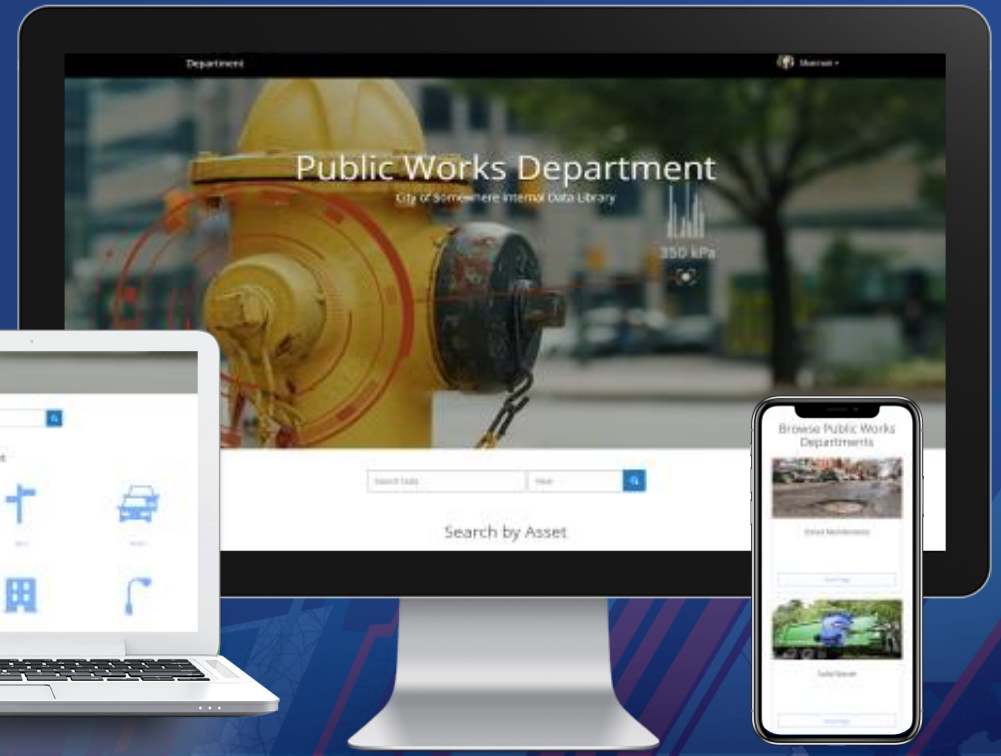
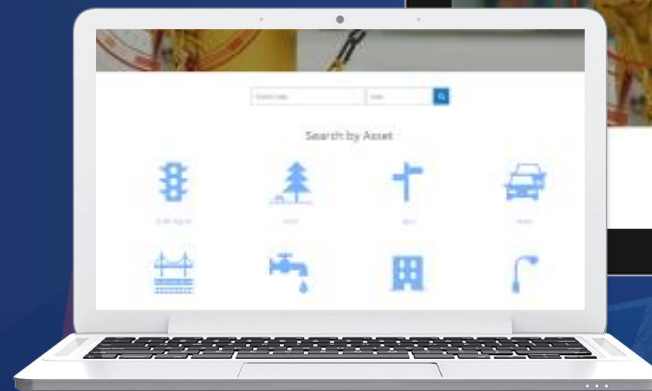
The challenge



ArcGIS Enterprise Sites



The same portal, now with the ability to tailor the user experience to meet users' needs and expectations.



Who are sites for?

- Sites are for the end users of the portal – people who do not need to use the map making and data editing capabilities of the portal in their everyday work
 - Non-GIS users within the organization
 - Decision makers
 - External users
- Sites is not intended to be used by:
 - Admins
 - Data editors
 - Publishers
 - “Internal sites” are an exception

What is the best way to use Sites?

- **Provide strategic touchpoints with portal capabilities**
 - Example: “View as web map” option in a site
- **Prioritize and organize data and content**
 - Accomplished through site design:
 - What content is shown
 - The order
 - The widgets used
- **Contextualizing content**
 - Telling bigger, interconnected stories

Features

- Drag and drop widgets
- Custom colors and branding
- Ability to create a sophisticated web experience
 - Sites with subpages
 - Customization options (HTML/CSS)
- Content security is maintained
- No extra installation or setup – just launch Sites from the app launcher



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THE
SCIENCE
OF
WHERE