

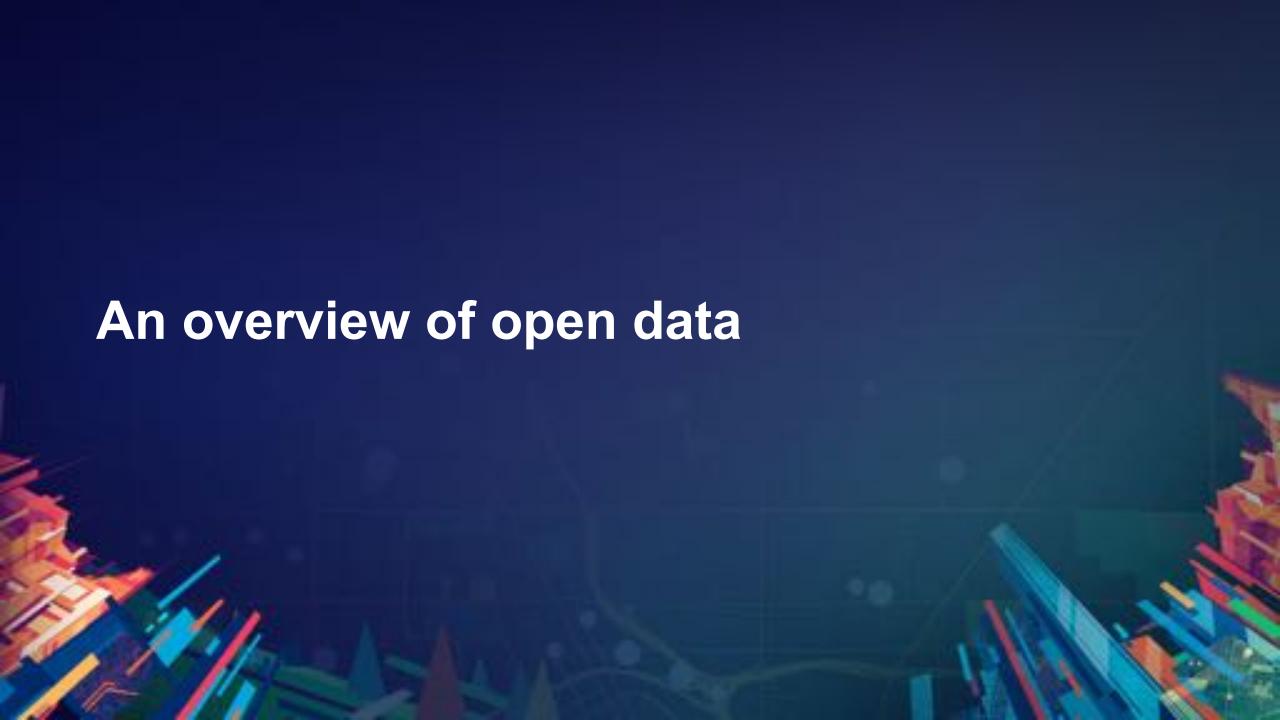
Getting started with open data and ArcGIS Hub

Graham Hudgins, esri product engineer



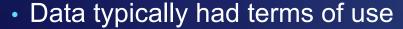
Agenda

- Overview of open data in the ArcGIS Hub
- Demonstration of open data capabilities
- Preparing your data best practices
- Building open data using the Share Open Data initiative
- Building open data from scratch
- Data federation
- Maturing your open data and demonstrating civic initiatives
- Where is esri taking open data and the ArcGIS Hub



Historically, how is data shared?

- Cloud file systems (dropbox/drive/box). physical media, FTP sites
 - Static snapshots over time
 - Quarterly release
 - Manual process to produce



- Used by academia & neighboring governments for analysis
- Possibly aggregated into commercial datasets
- Mindset was to "sell" or try to "buy" data





Where do YOU go for information









Modern Expectations of Sharing

- People expect data to be on the internet
 - International movement to provide transparency (FOIA) and enable economic development
 - Formalized process to license and share data to the public
 - Often supported by governing legislation
- Solutions connected to the system of record
 - The data should be up to date...it's 2018!
 - Minimal impact on the information workers

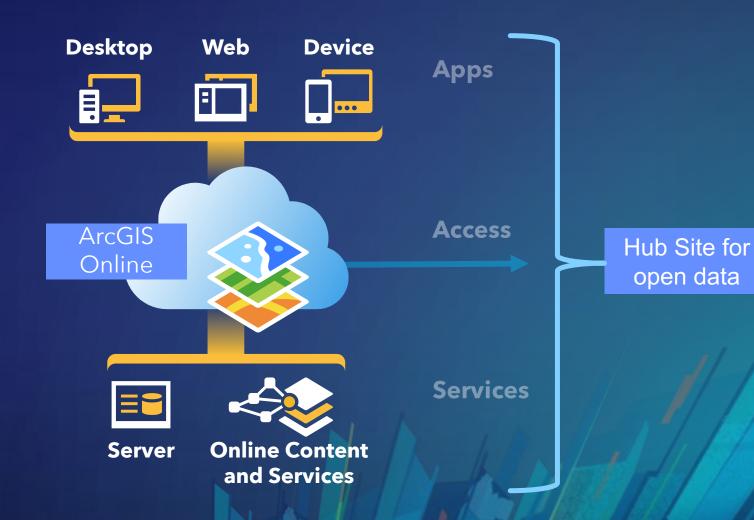


Sharing data doesn't just help the public...it helps the university too



Part of the ArcGIS Platform Providing open access to your published data

Simple Integrated Open



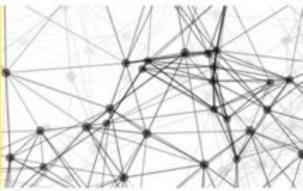
ArcGIS Hub is a complete Open Data solution

ArcGIS Hub Community Initiatives Open Data

Open Data

/öpen dade/

noun data that can be freely used, re-used and redistributed by anyone. (Open Definition)



Share Open Data in Minutes

As part of your ArcGIS Online subscription, you can share your authoritative open data. Use your existing ArcGIS Online groups to identify data to share, then quickly set up public facing websites for people to easily find and download your data in a variety of open formats. Your open datasets are connected to the source and are automatically updated.



Enable Open Data

Search Data

Find Bus Routes, Park Services, Schools

Near City, Country



Total Datasets

130,455

Organizations Worldwide Sharing Open Data

5,641

Browse by Categories







Hub Sites are built following these principles



Open data in the ArcGIS Hub

- Complete Open Data solution for Operational Tables and Spatial Data
 - 8,000+ Organizations around the world
 - 100,000+ Datasets shared into Open Data
 - 15,000,000+ Downloads in 2017
- Provide Custom Sites you control
 - Unlimited Bandwidth and API Usage
 - No restriction on the number of datasets
 - Auto-generated downloads
 - Suite of applications to provide context
 - ArcGIS sharing model



ArcGIS is a complete open data solution

- Build a site that represents your organization to the public
 - General or focused on issues, departments, events
- Automatically convert your data regardless of source, into open file formats for download
 - Support for Operational Tables and Spatial Data
- Apply your terms of use to license the datasets
- Add context to your datasets with Applications

Leverages existing services and familiar workflows

External APIs



ArcGIS Hub Search

Auto ETL and Custom Search



Site

Preview Interact Download

Search Metadata

Shapefile KML CSV GeoJSON





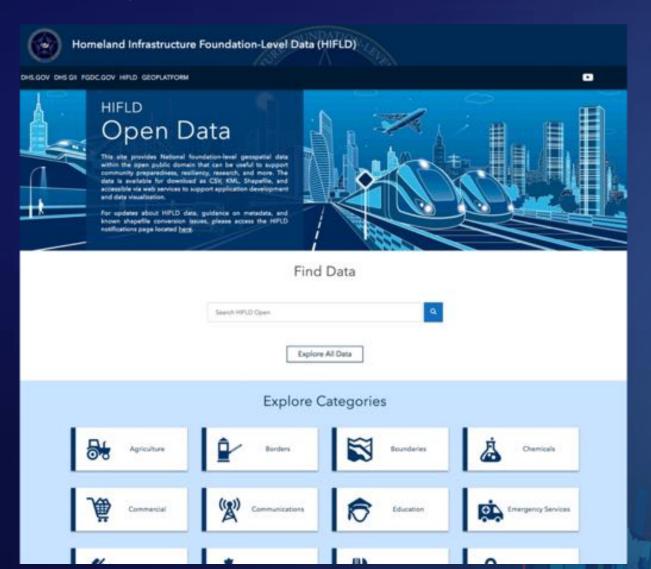


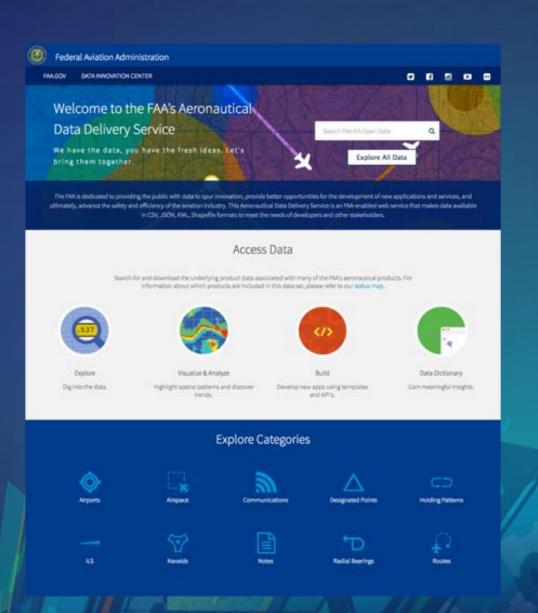


- Tax Parcels
- Sales
- Foreclosures
- Street Centerlines
- Address Points
- Points of Interest
- Building Footprints
- Subdivision Boundary

- Purchase Card Transactions
- Use of Force Events
- Calls for Service
- Tax Districts
- Park Locations
- School Zones
- Public Buildings
- Parking Ticket Locations

Examples

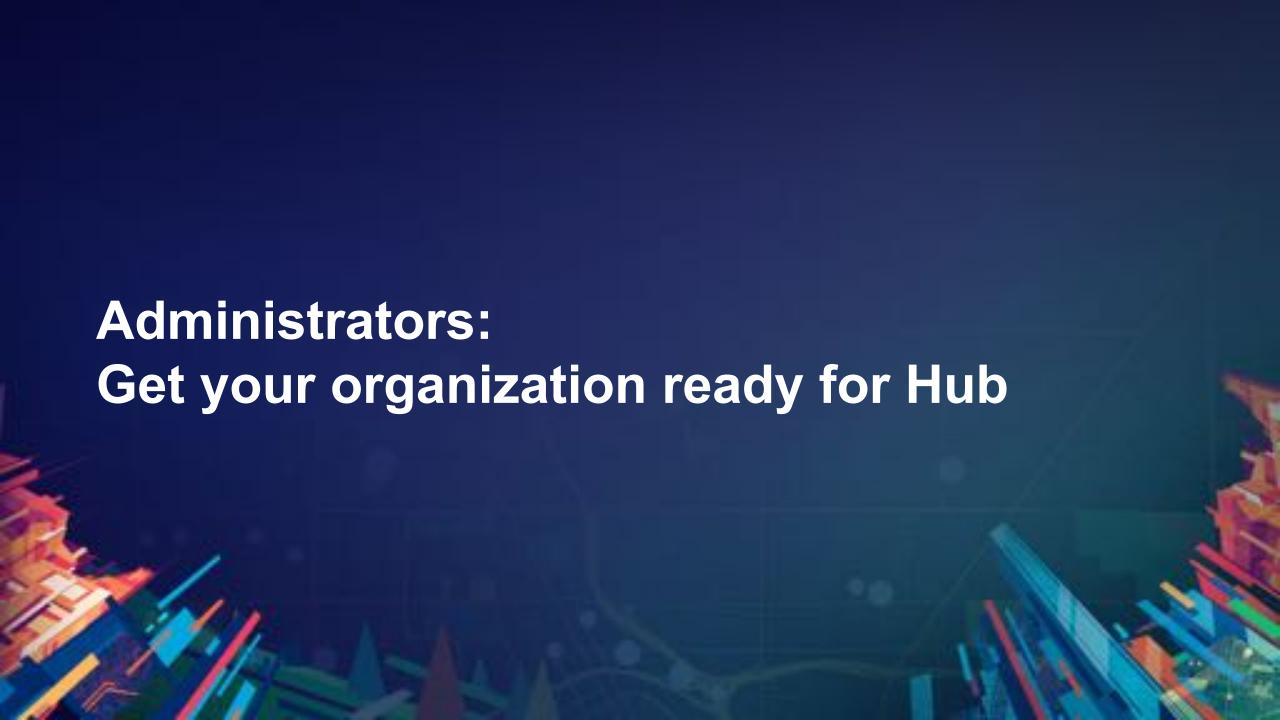






Engagement Maturity Path





Enabling Open Data – 4 things

Open Data is enabled for your Org

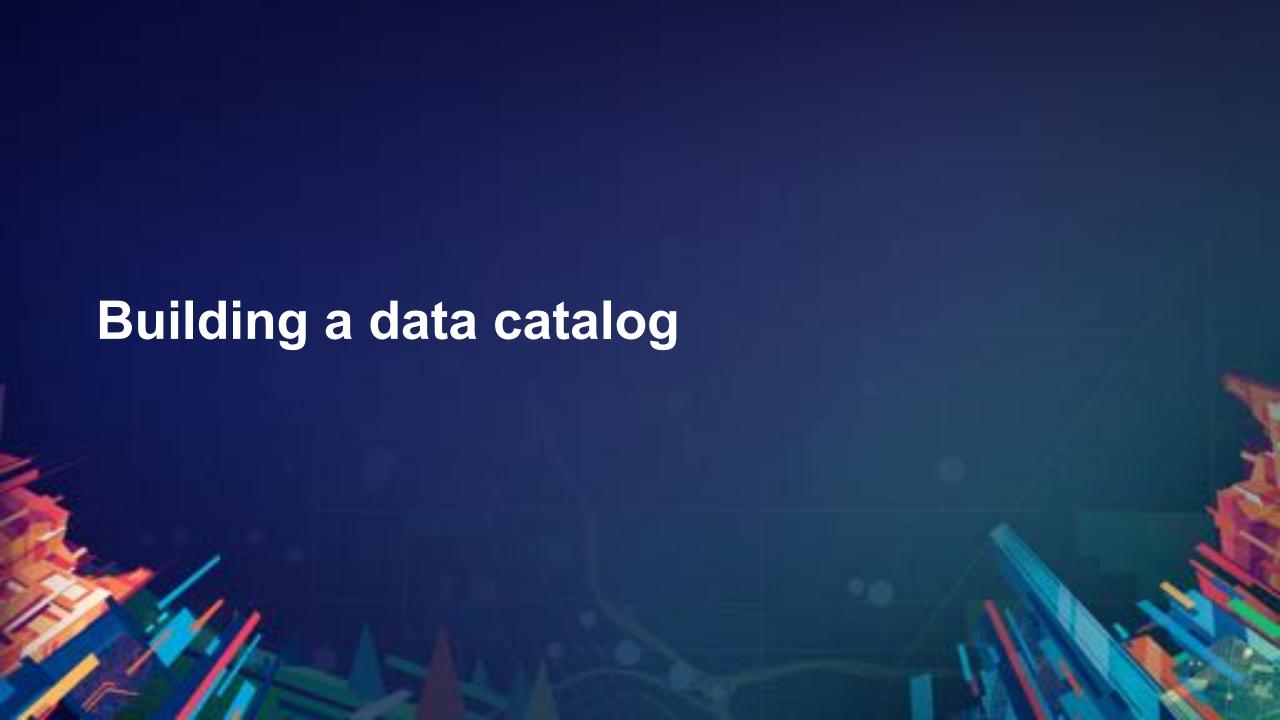
An Open Data group is created with content shared to it

A Hub Site is created that uses the Open Data Group

Non-Admin users in your org who you want to work on your site are empowered



- Enabling open data (a few options)
- Setting up user roles for non-admins



Humanize your attributes with attribute aliases





ACS 5 Year Housing Data by Place As of 2013

Showing 1 to 10 of 29,509

▼ NAME	▼ B25002EST1	▼ B25002EST2	₹ B25002ES_1
Abanda	23	23	100
Abbeville	1273	1112	87.35
Adamsville	1973	1730	87.68
Addison	463	406	87.69
Akron	278	172	61.87
Alabaster	11391	10587	92.94
Albertville	7809	7079	90.65
Alexander City	6382	5642	88.4
Alexandria	1513	1428	94.38
Aliceville	1566	1351	86.27

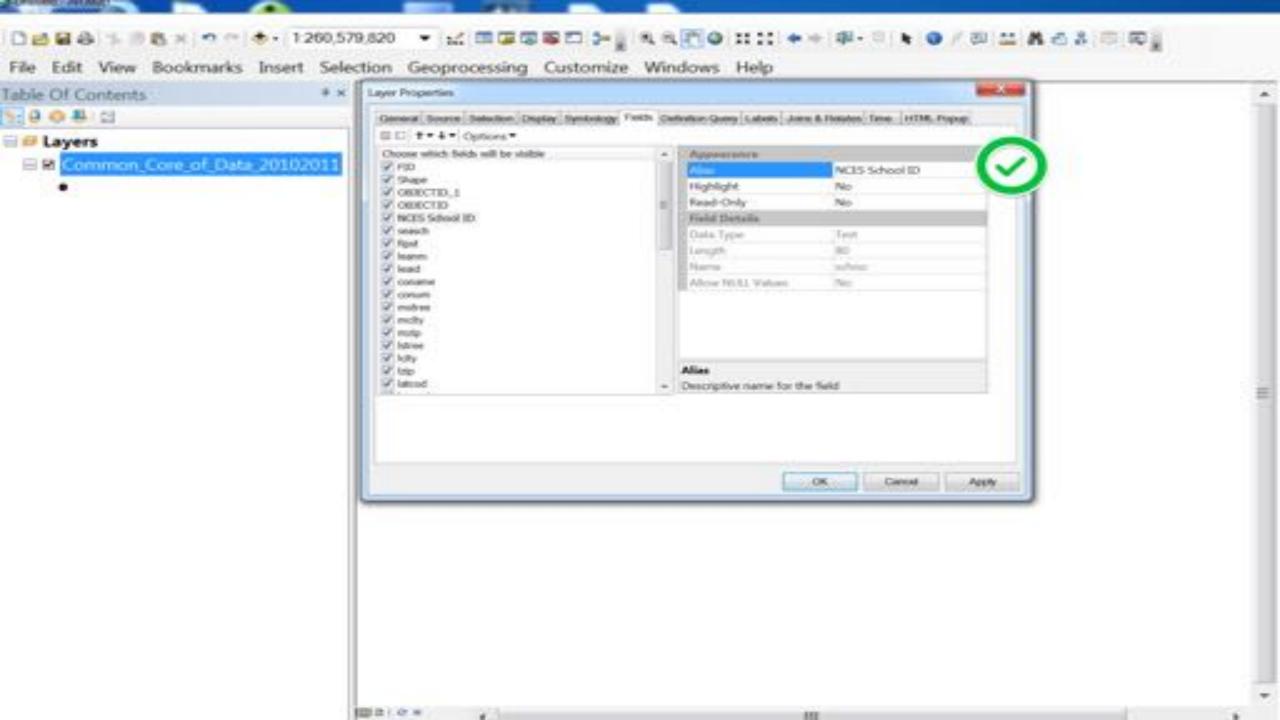


New ACS 5 Year Housing Data by Place As of 2013

Showing 1 to 10 of 29,509

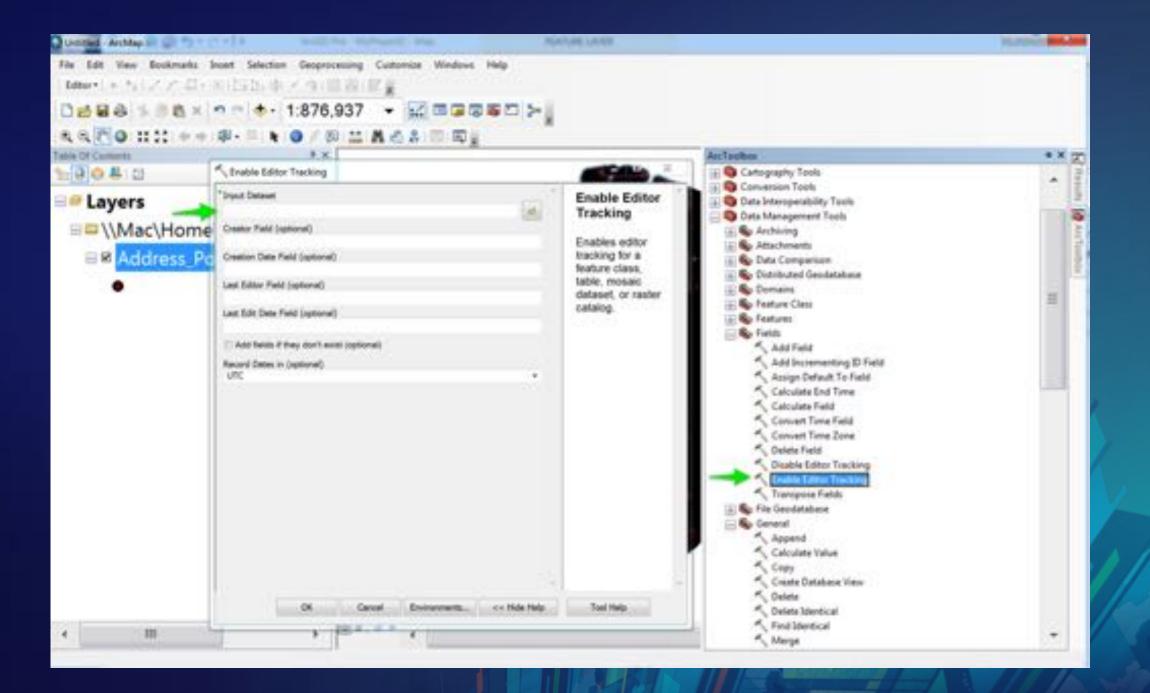
▼ Name of Place	▼ Total: Housing units	▼ Occupied housing units	▼ Occupied housing units as a %
Abanda	23	23	100
Abbeville	1273	1112	87.35
Adamsville	1973	1730	87.68
Addison	463	406	87.69
Akron	278	172	61.87
Alabaster	11391	10587	92.94
Albertville	7809	7079	90.65
Alexander City	6382	5642	88.4
Alexandria	1513	1428	94.38
Aliceville	1566	1351	86.27





- Humanize your attributes with attribute aliases
- Turn on editor tracking

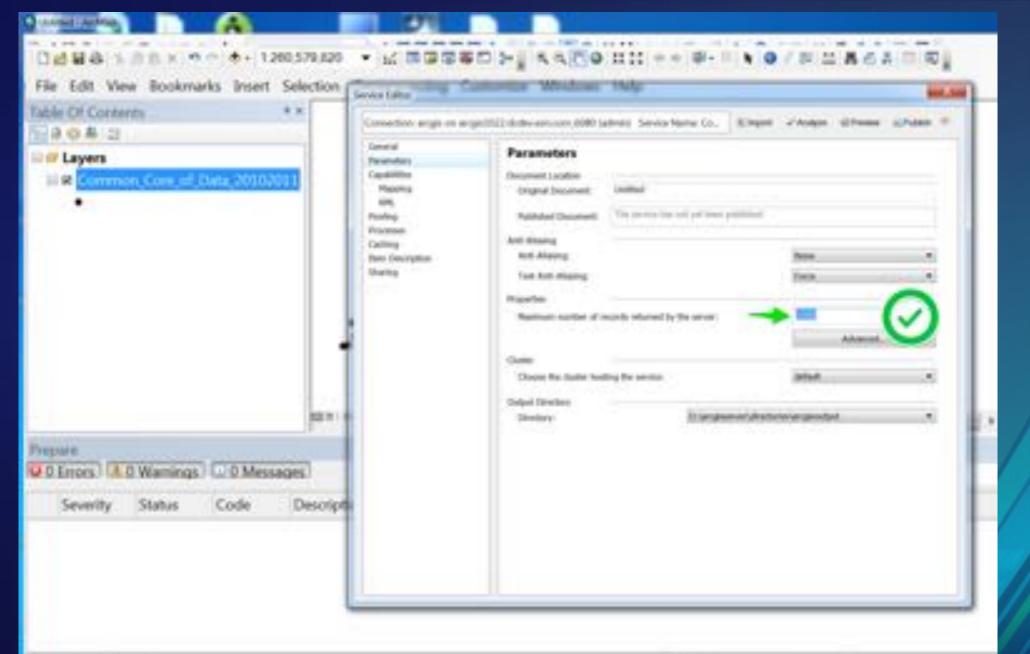




- Humanize your attributes with attribute aliases
- Turn on editor tracking
- Large data simplify and reduce the number of vertices

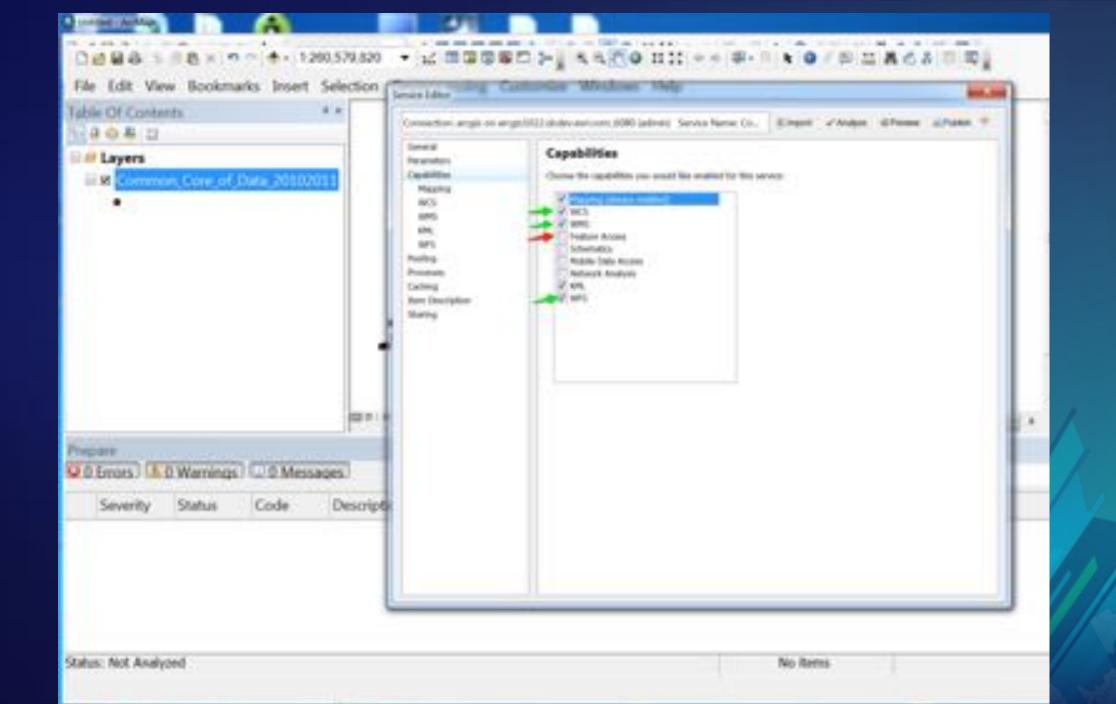


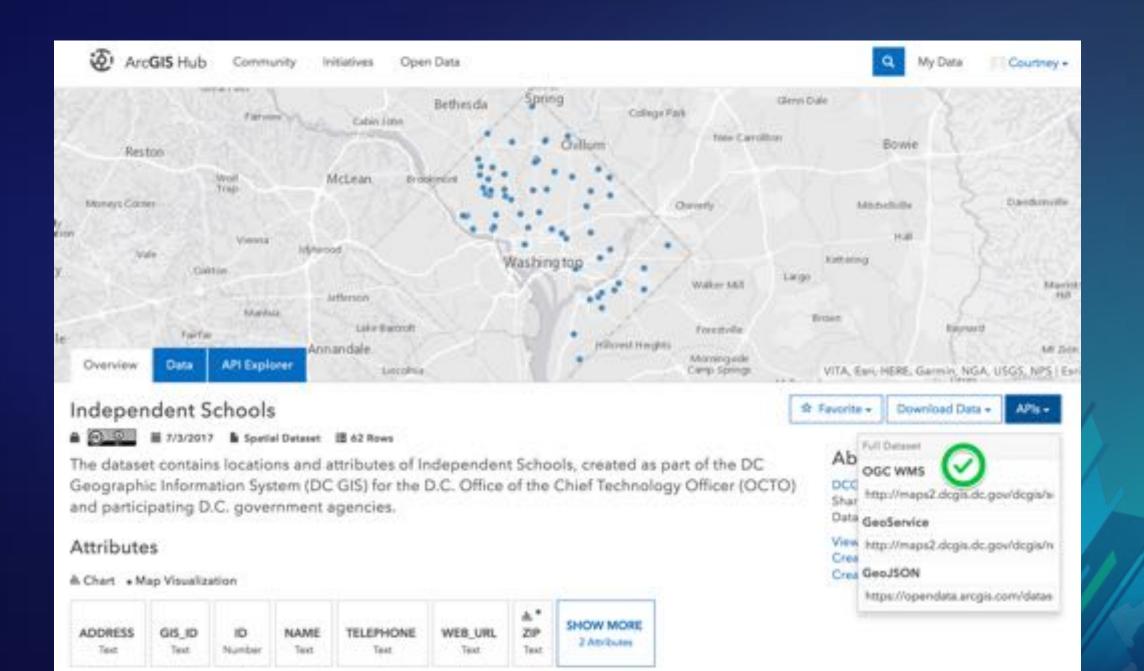
- Humanize your attributes with attribute aliases
- Turn on editor tracking
- Large data simplify and reduce the number of vertices
- Server: latest is greatest
- Service parameters
 - Don't alter the default maximum number of records returned from server



- Humanize your attributes with attribute aliases
- Turn on editor tracking
- Large data simplify and reduce the number of vertices
- Server: latest is greatest
- Service parameters
 - Don't alter the default maximum number of records returned from server
- Service capabilities
 - Enable WMS, WFS, WCS (where applicable)
 - Turn off feature access if not needed







- Humanize your attributes with attribute aliases
- Turn on editor tracking
- Large data simplify and reduce the number of vertices
- Server: latest is greatest
- Service parameters
 - Don't alter the default maximum number of records returned from server
- Service capabilities
 - Enable WMS, WFS, WCS (where applicable)
 - Turn off feature access if not needed
- Organize layers (datasets) into multiple services
 - No more than twenty to a service

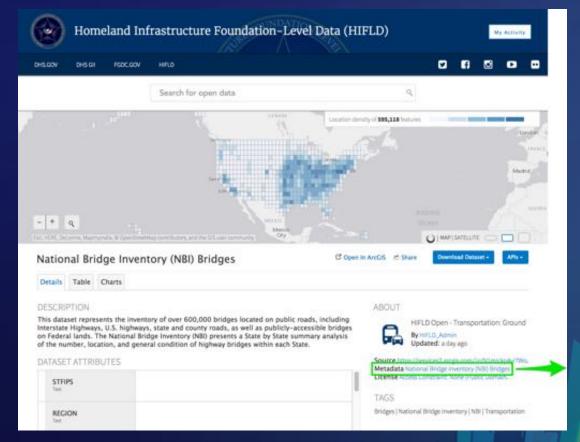


Hosted or on premises?

- Online is generally better more performant, better updates, no stress to maintain
- Use ArcGIS Online to host:
 - Large datasets
 - Popular datasets
 - Any data you'd like automatically translated into file geodatabase

Customizing your data

Structured metadata



National Bridge Inventory (NBI) Bridges

Identification Information:

Citation:

Citation Information:

Title: National Bridge Inventory (NBI) Bridges

Description:

Abstract: This dataset represents the inventory of over 600,000 bridges located on public roads, including Interstate Highways, U.S. highways, state and county roads, as well as publicly-accessible bridges on Federal lands. The National Bridge Inventory (NBI) presents a State by State summary analysis of the number, location, and general condition of highway bridges within each

Purpose: This dataset represents the inventory of over 600,000 bridges located on public roads, including Interstate Highways, U.S. highways, state and county roads, as well as publicly-accessible bridges on Federal lands.

Keywords:

Theme:

Theme Keyword Thesaurus: None

Theme Keyword: Bridges

Theme Keyword: National Bridge Inventory

Theme Keyword: NBI

Theme Keyword: Transportation

Access Constraints: Access Constraint: None (Public Domain Information)

Use Constraints: Access Constraint: None (Public Domain Information) Use Constraint: None (Public Use)

Data Set Credit: Federal Highway Administration (FHWA)

Spatial Data Organization Information:

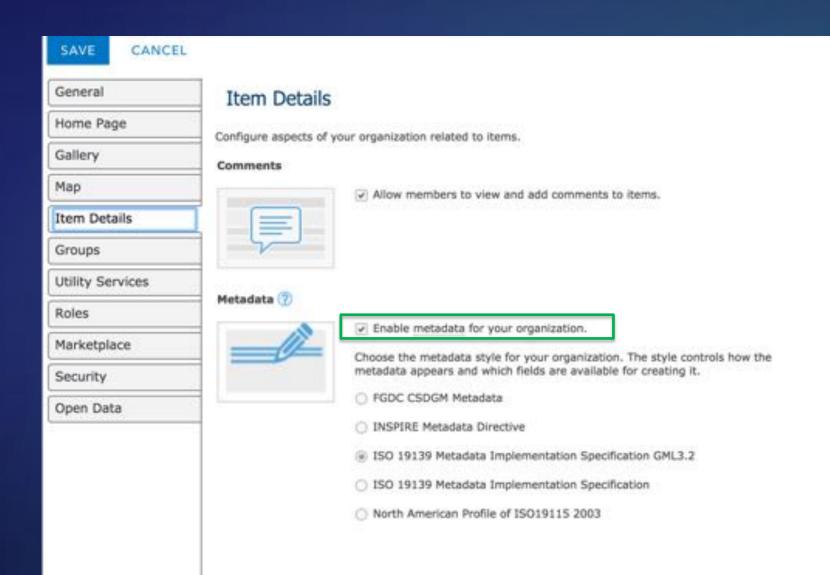
Point and Vector Object Information:

SDTS Terms Description:

Point and Vector Object Count: 607751

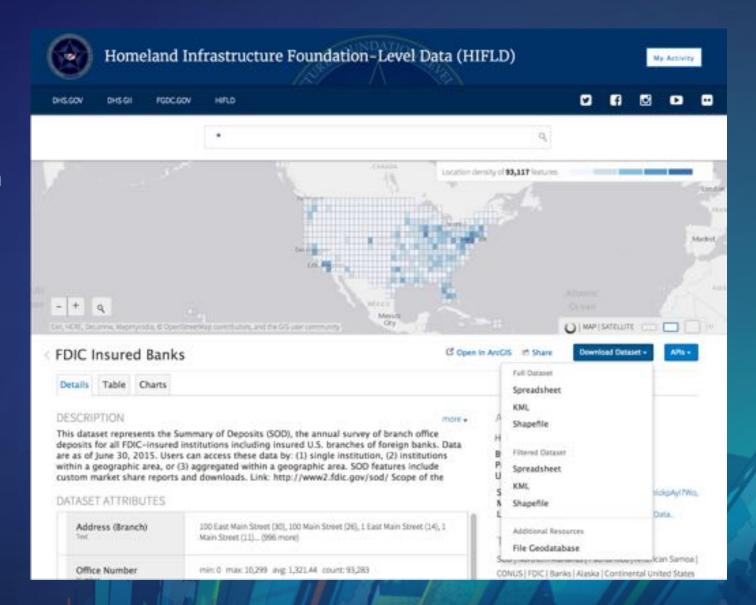
Customizing your data

Structured metadata



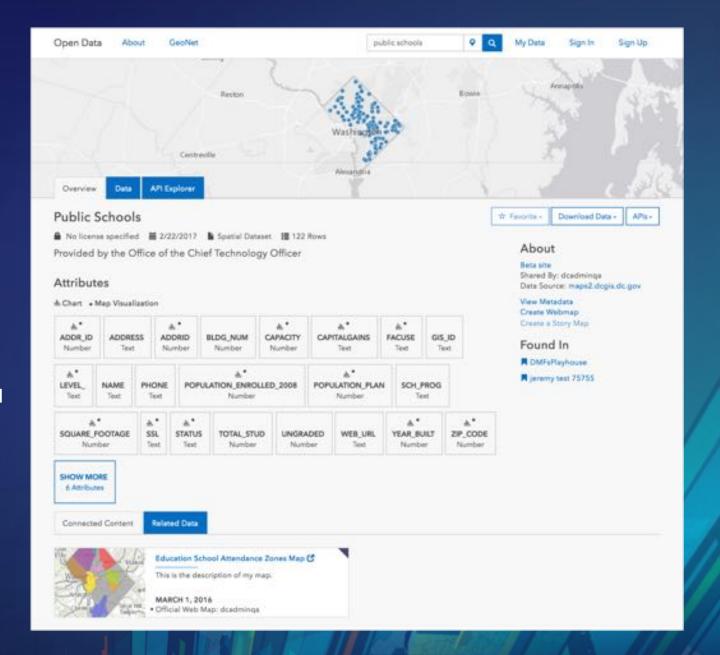
Customizing your data

- Add additional download types
 - Custom download distribution on structured metadata

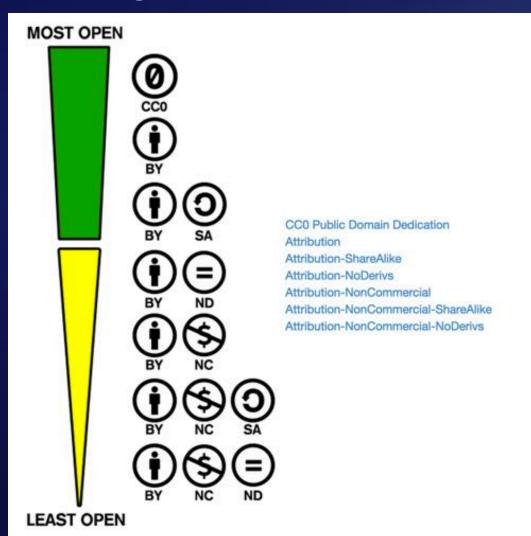


Customizing your data

- Connected content leverages webmaps and apps that use the same service
- Put webmaps using the same layers in the group you use on your site



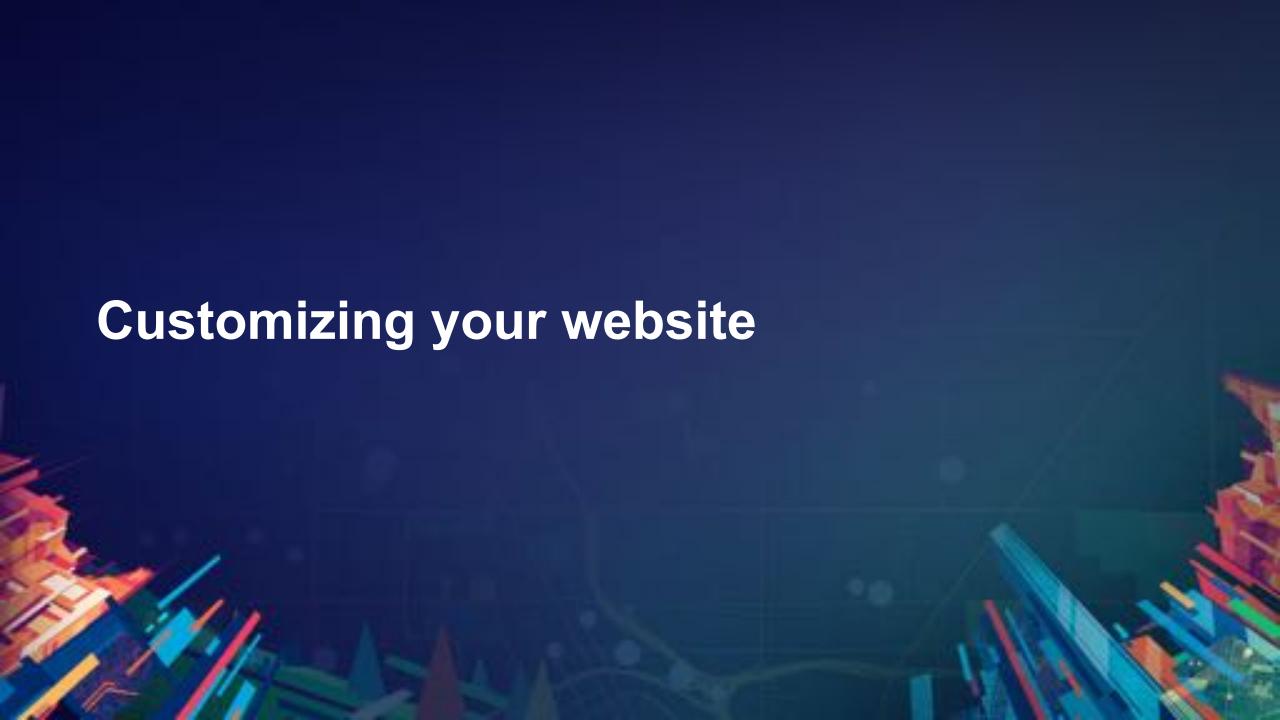
Licensing



EXTREMELY USEFUL to build trust with your community



- Making an open data group
- Bringing in relevant data
- Using the "Share Open Data" initiative



The Hub Site for your open data needs

- Pre steps:
 - Set your organization's shared theme (if you haven't already)
 - Outline your Hub's site map before you begin
- Site creation through an Initiative
 - Get access to esri's Share Open Data Initiative Hub site & page templates
- Site creation in ArcGIS Hub
 - Start with a blank site and customize

"Can you send me some HTML examples?"

(It's also in the Text card)

https://hub.arcgis.com/pages/site-customization

Demo - Customizing your website

- Cards for everything!
- Making your sites and pages
- Custom domains
- HTTPS

Community **Engagement Maturity Path** regularly partners on **Sustained** initiative engagement projects & events Collaboration team formation Ad hoc citizen involvement Citizen Frequent analysis, citizen data **One-way policy** Organizing app, and contribution communication apps, analysis, solution actions contribution **Organizing** around data around initiatives initiatives **Formalized Open Data**

Ad hoc data sharing



- Use data to tell a story and to drive action
- Problem-first thinking approach to open data
- Engaging! Involve your readers



The chasm: How do you reach the rest of your community?



Time

Open Data only empowers commercial developers, journalists, expert citizens

Departments work in silos





Launch initiatives that engage
The chasmy it low out you citizens on
reach the Pentry it vissues
community?



Time

A Platform for Civic Engagement





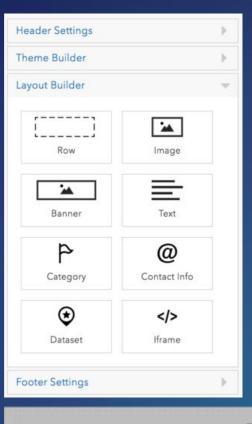


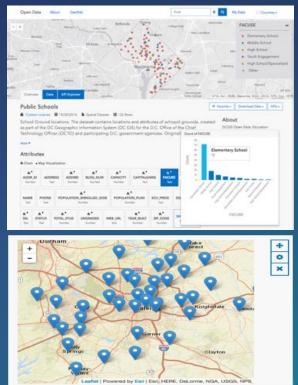


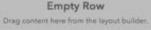


Tell Your Story with a Page









</>

Text Card

Click the gear icon to edit text in Markdown.





Text Card

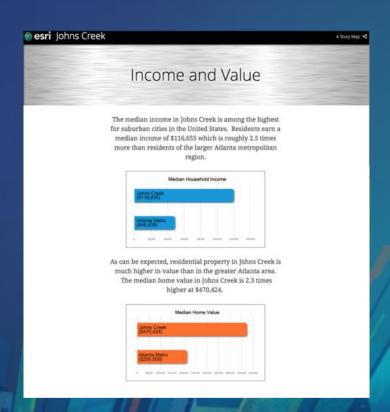
Click the gear icon to edit text in Markdown.

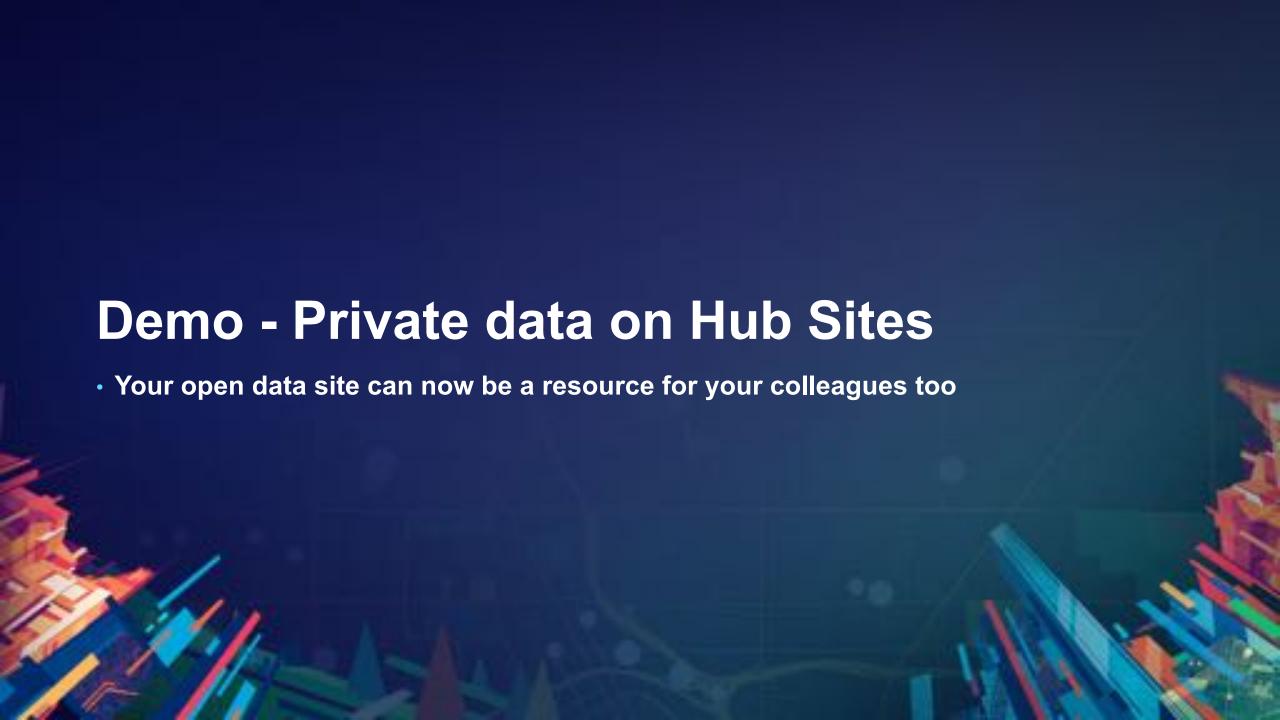


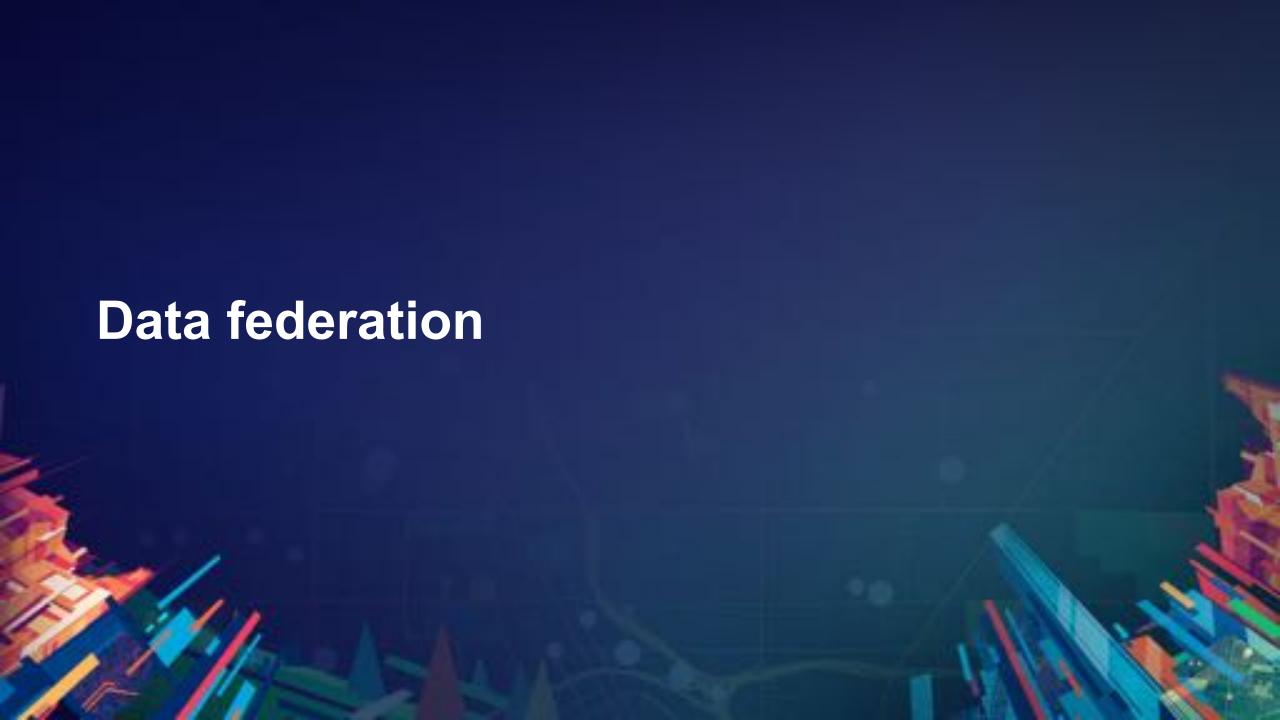
Engage Your Community

Story Maps & Survey Apps for two way communication

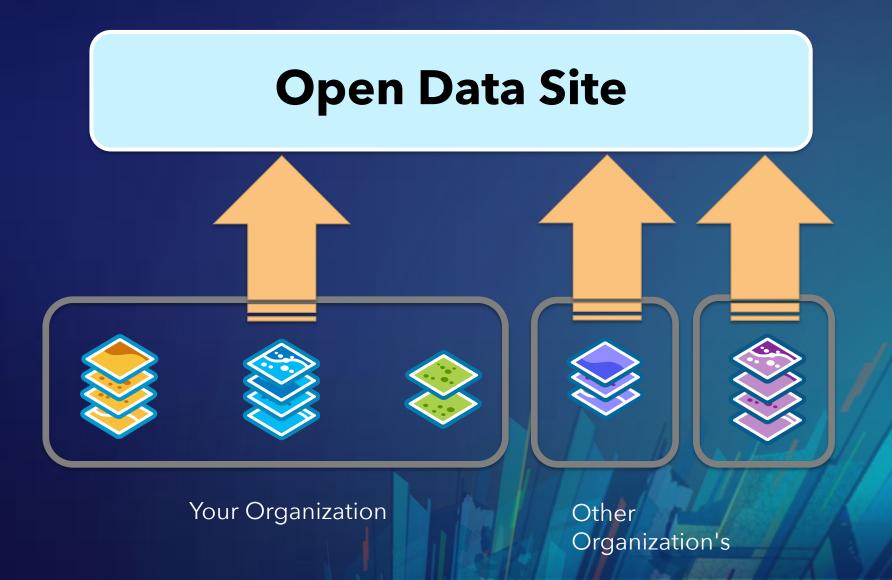


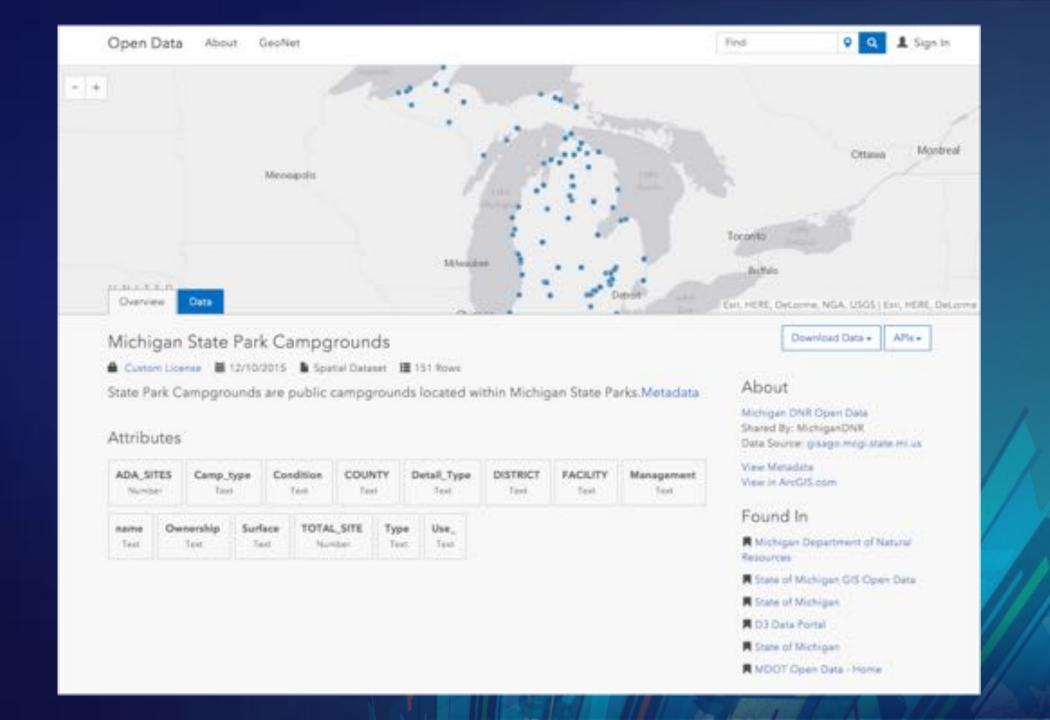






Leverages existing services and familiar workflows







The home of the U.S. Government's open data

Here you will find data, tools, and resources to conduct research, develop web and mobile applications, design data visualizations, and more.

GET STARTED

SEARCH OVER 194,832 DATASETS



Federal Student Loan Program Data



BROWSE TOPICS







Business



Climate



Consumer



Ecosystems |





Education

Energy



Finance



Health



Local Government



Manufacturing



Ocean.

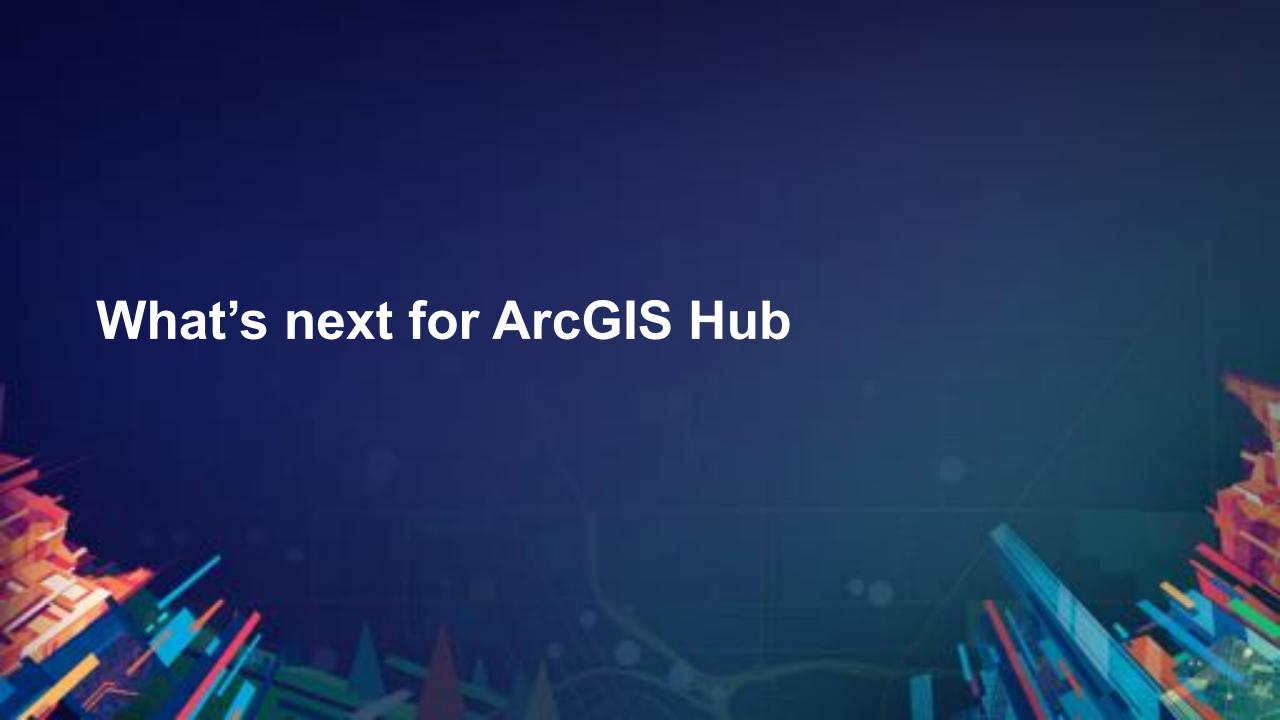


Public Safety

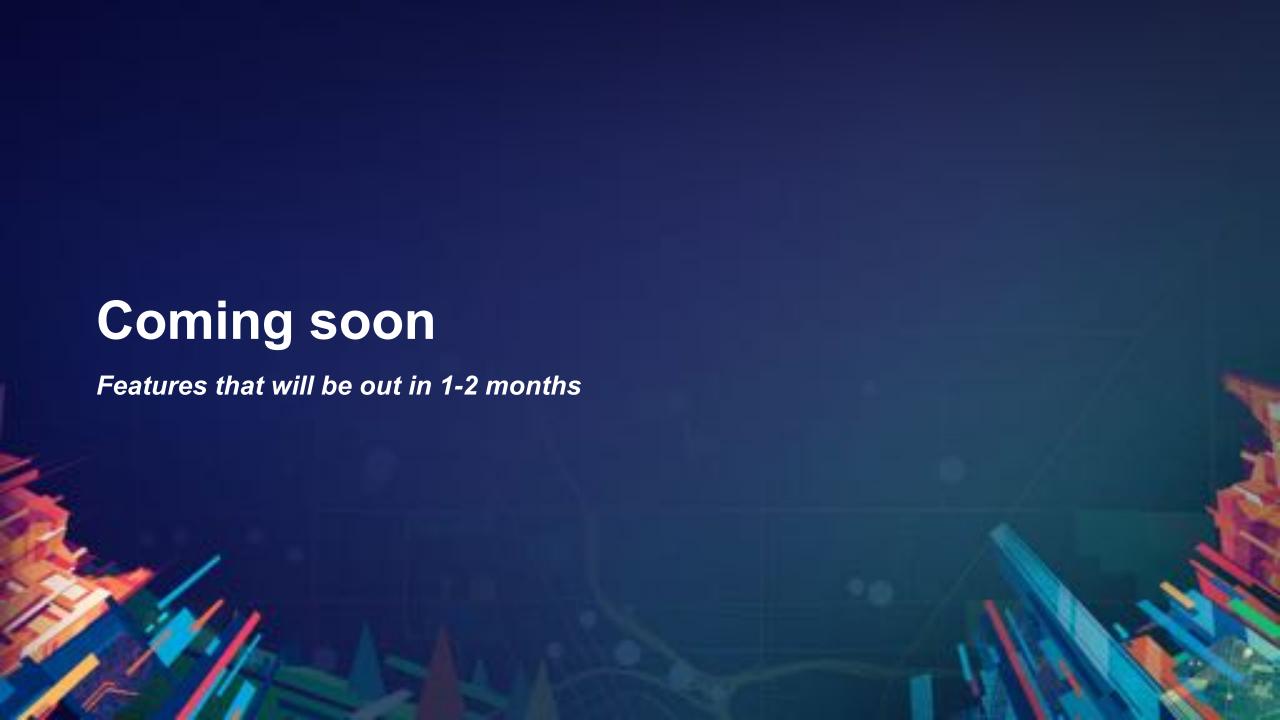


Science & Research

Demo – Federating with data.gov













E. Seturbey, July 29, 2018, 3 PM - 6

□ Trips://even.com/segal Fack 2018

1341 G St NW, Washington, DC

Car Disertions

Q: The iron Yard

AngelHack Washington D.C. Hackathon 2018

Saturday, July 28, 3:00 PM EST

Organised by Rob Wiley +2 others

Attend + Interested +



on Share ...



Follow 3t. :

Event Details

Every pine, Angel Hack adventures across the globe for our yearly Gothal Hackathon Series. Over the course of Summer 2018, we'll bit pic continents, bridging the gap between Silven Valley. initiation and entrapreneurs of over the world

This year's thereof Secretize Technology. Hackethore are built for rapid imposition, and rapid on h always printly that no matter the readblock broken rocks or bumps, we continue an and pools Renewal, together There's no boundary or limit to what we can inexts.

So join-us) Create something cool. Most great people. Win great prises, Who lineau, your founder journey may begin at The Iron Yard in Washington D.C.I

We offer our own Grand Frise AMD lease up with pressure sportune, who have their own challenges and prises you can go after. Alming for the NACX relevator instelf Only in It for some cost herdware? Good news, you can go for an many challenges eryou went!

Spinners City 1888



How would you like to get more inched?

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Deed In You See See See



achieve advantageous collaboration

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Server bit Poss Peer Burnt



9:41 AM

AngelHack Washington D.C. Hackathon 2018

Saturday, July 28, 2018, 3 PM - 6 PM EST

Organized by Bob Wiley +2 others

Attend



Interested







Every year, AngelHack adventures across

Title*

AngelHack Washington D.C. Hackathon 2018

30/75

Details

Description*

Every year, Angel Hack adventures across the globe for our yearly Global Hackathon Series. Over the course of Summer 2018, we'll hit six continents, bridging the gap between Silicon Valley innovation and entrepreneurs all over the world

This year's theme? Seamless Technology. Hackathons are built for rapid innovation, and rapid isn't.

Related Initiative*

Data-Smart City Solutions

Organizer* 0

Name	Contact Method	
Bob Wiley	shunter@esn.com	×
Mario Ortiz	212-555-1234	×
Rose Lathigra	212-555-1234	×
+ Add Organizer		

Sponsors 0

Add Sponsor

Where* Online Both The Iron Yard Address 1341 G St NW, Washington, DC 20005 Attendance Capacity Address 2 Example - Koom number

When*



All Day Event

Apps



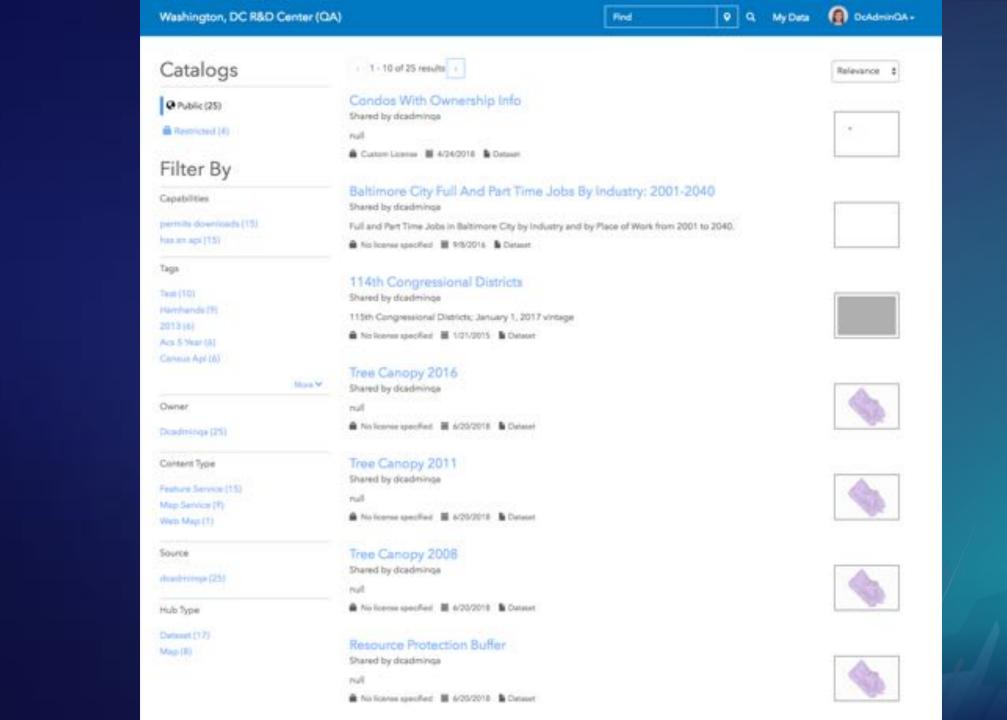


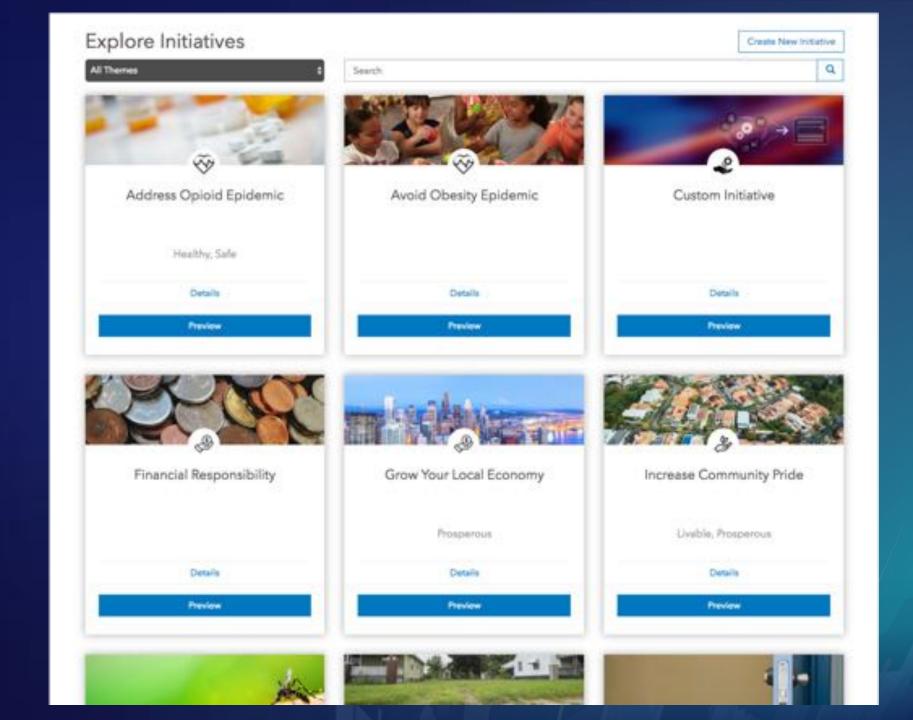


Cancel

Save Changes

Publish 🔻





Initiatives

Initiatives Manager

Gallery

Q. Search initiatives

			View By: Templates -
Title	Last Updated	Published	Actions
Address Opioid Epidemic	Jun 27, 2018	1 4 0	× •
Address Opioid Epidemic - BR	Jul 5, 2018	1 4 0	/ •
Avoid Obesity Epidemic	Dec 14, 2017	1 4 0	/
Blue Rester Training	Apr 23, 2018	1 4 0	/ 1
Custom Initiative	Mar 1, 2018	1 2 0	/ .
Financial Responsibility	Jan 23, 2018	1 4 0	/ 8
Grow your Local Economy	May 8, 2018	1 4 0	/ 8
Increase Community Pride	May 29, 2018	1 4 0	/ •
Prevent Vector-Borne Disease	May 8, 2018	1 4 0	/ 8
Reduce Homeleisness	May 8, 2018	1 4 0	/ 8







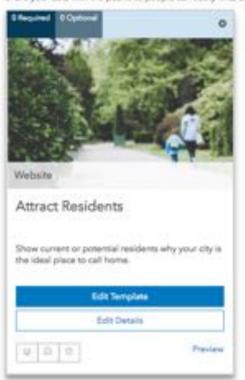
Not Published Last updated: May 29, 2018, 3:38 PM

Adopt this initiative and show current or potential residents why your city is the ideal place to Live Work and Play



Inform the Public

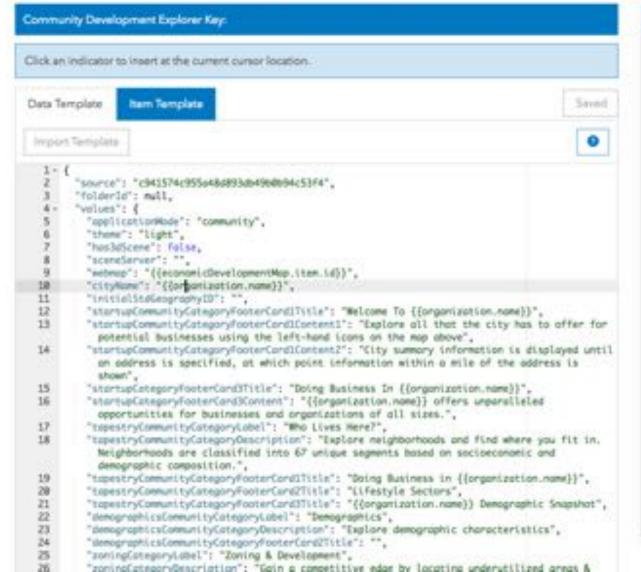
Share your data with the public so people can easily find, download and use your data in different formats.

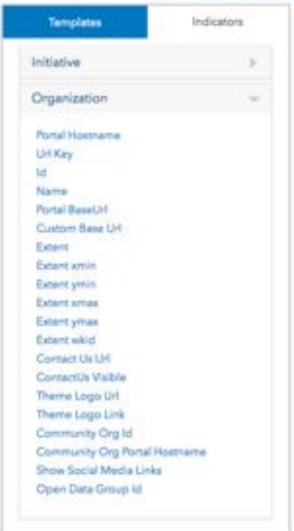






Community Development Explorer

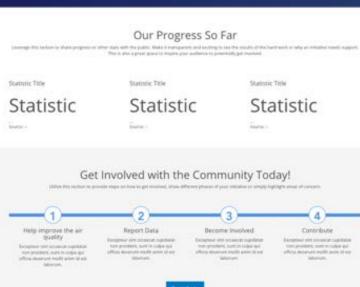






HTTPS for your custom domains





Our Focus

Leavings there undone to left your reliable story. Froulds key information to rating your malatiness with an approximate to go in a specific page or app to bear more.



Section Heading

over lower drief of areas, consectator adoptions will, said its elasmod lamper middure of labora of didino magna allipsa. Vi even ad minor seniaris, que nominal mendiados altarios laboros tido di aliquigi en as commodo comissipais. Que ause runs dolor in reprehendent in voluptaté vielt asse cilium delors au fuglet nulle



See Our City in Action

the first section to see your community visitors recepted time and connect their with reports, apps, and finite to other stee, that will give them deeper progets on the instable regarding your city.



Create Your Own

StoryMap template

Default temptate for chaoling mittance StoryMaps





Default Story Map Template Default template for preating

the thoughts summaris the collision made pour way.

Gold Standard Optional App

Gold Standard Optional

App

Use this app to suffernative the collection made your area.

List of upcoming events

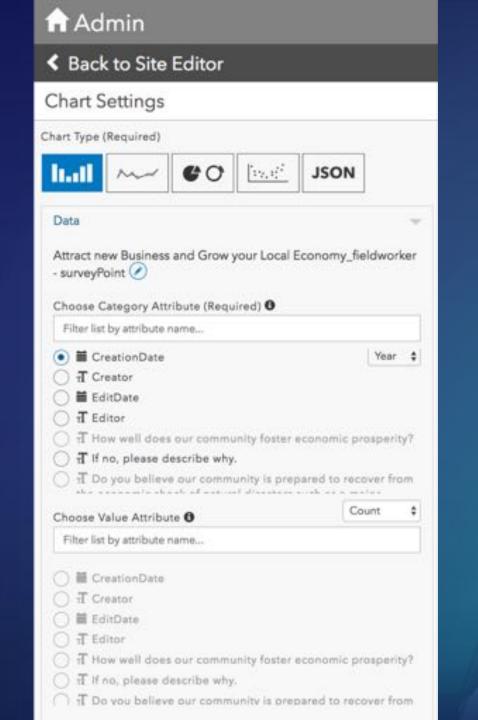


an event.

Redresday, 5.30 PM - 5.30 PM EDT JF 1461 Church Si NW, Washington, Deposit of Columbia, 2000).



Contact





Help Build Loudoun's Future

Loudour county planning initiative

Explore



Help Build Loudoun's Future

Loudour county planning initiative

Explore

ArcGIS Hub Coming Features

UC 2018

Q3 2018

Q4 2018 and Beyond

Engagement & Collaboration

- Adding community members to initiative teams.
- New charting for sites & pages
- New attractive site templates

- Easier site editing
- Initiative Activity dashboard
- Community member profiles
- Community account creation with any email address
- Improved search (semantic search)
- New Events system
- Commenting and discussions tool

- Improved initiative data management
- New crowdsourcing app
- · New 'what's around me' app.
- New, streamlined user experience
- ArcGIS Hub and ArcGIS Urban Integration

Initiative Templates

- Tackle the Opioid Epidemic 2.0
- Reduce Homelessness 2.0
- Prevent Vector Borne Disease 2.0
- Vision Zero Reduce Pedestrian Deaths 2.0
- Initiative Template Builder 1.0

- Performance Management (new)
- Maximize Infrastructure Investment (new)

- Climate / Community Resiliency
- Volunteerism
- Prepare & Respond to Extreme Weather Events
- Community Planning
- Strategic Planning
- Publishing of custom initiatives

Thank **you** for making your data accessible to your community

Questions?

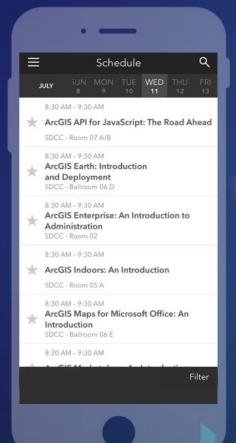
Please Take Our Survey on the Esri Events App!

Please Take Our Survey on the App

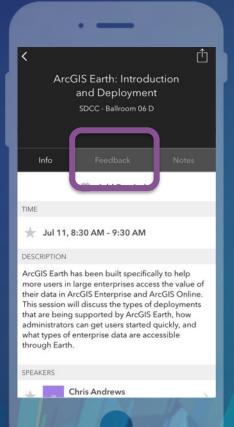
Download the Esri Events app and find your event



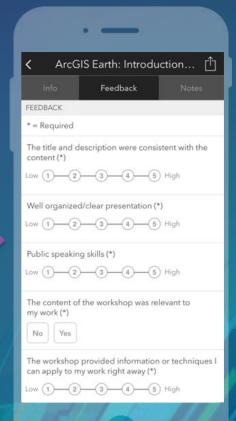
Select the session you attended



Scroll down to find the feedback section



Complete answers and select "Submit"



See Us Here

WORKSHOP	LOCATION	TIME FRAME
• Title	• Where	· 12:00 – 1:00

