

Customizing Open Data Sites

Courtney Claessens

Graham Hudgins

Esri R&D Center, Washington DC



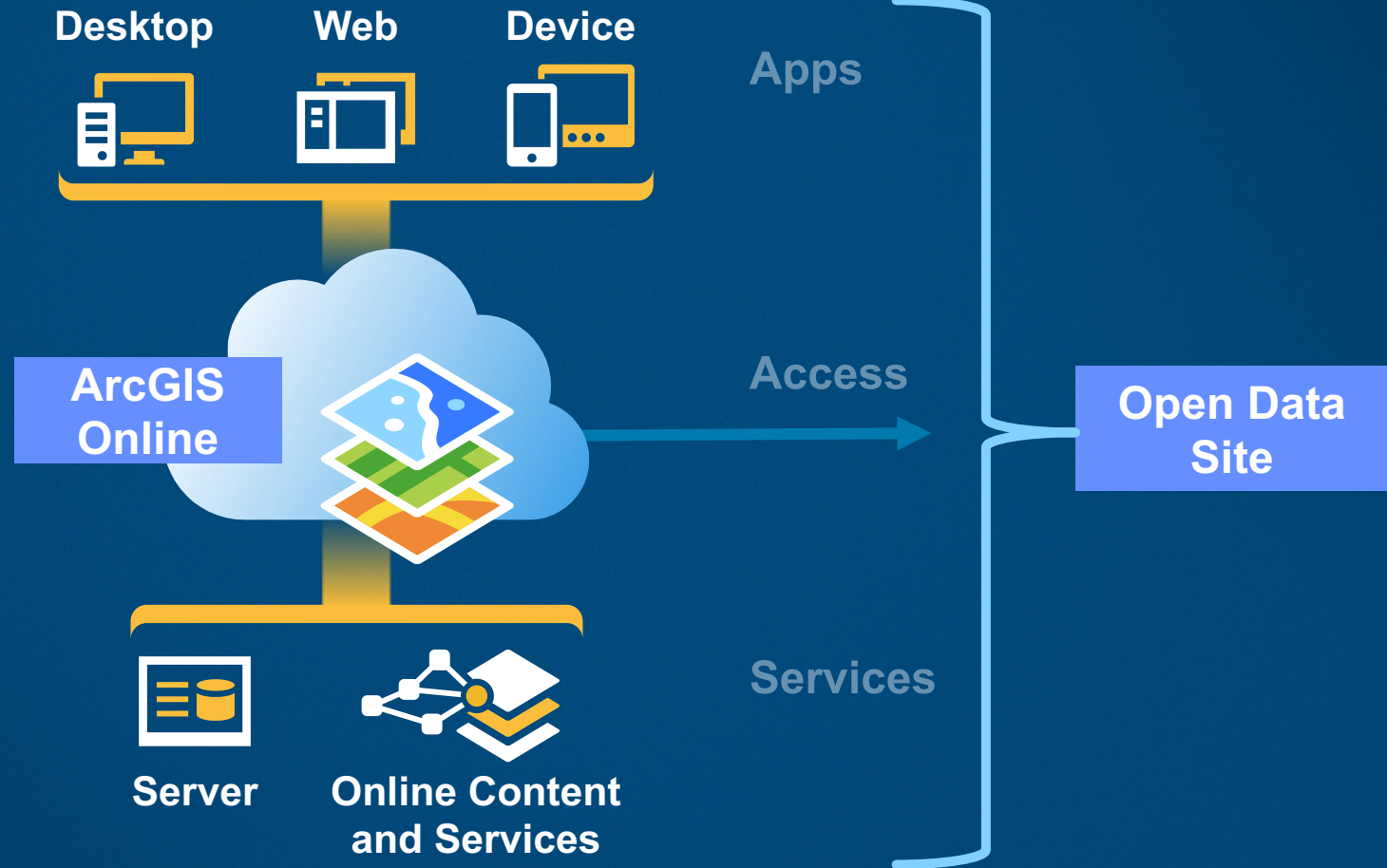
Agenda

- Quick overview of ArcGIS Open Data
- Customizing administrative access
- Customizing your site
- Customizing your data
- Wrap up

Part of the ArcGIS Platform

Providing open access to your published data

Simple
Integrated
Open



A Platform for Civic Engagement

City of Raleigh

Departments: **Arts & Services** Government **Business & Community** Projects **Public Sustainability**

Utility Bill, Parking Citations, Safelight Citations, Find: Jobs, Bus Routes, Parks, My Service Day, Report: Crimes Online, Mailed Garbage/Recycling Collection, Citizen Service Request, Manage: Neighborhood/FF Program Launch, Water/Sewer Service, Status & Notices: Park Status, Street Closings & Road Repairs, Bus Service Alerts, 401040 Party, Capital Boulevard Bridge Project, Hillborough St. Renewal Project, MyRaleigh Services

Popular Pages

- Pools & Aquatic Facilities
- Make a Utility Payment
- Pullen Park
- Bus Routes and Schedules
- Aquatic Facilities Fees and Rules
- Lake Johnson Park
- Lake Wheeler Park
- UDO - Zoning Remapping Programs & Classes

News

- Citizen Engagement Task Force (today)
- Neighborhood/FF Program Launch (yesterday)
- Raleigh Announces Schedule for Districtwide Community Conversation Meetings (2 days ago)
- Raleigh Announces Schedule for Districtwide Community Conversation Meetings (2 days ago)
- Alert: Section of Buck Jones Road to Partially Close Beginning Feb. 9 (2 days ago)
- Alert: Jury Duty Scam Reported in Area (3 days ago)
- Mayor's Committee for Persons with Disabilities

Events

- City Council Meeting Regular Session 1:00 pm
- City Council Meeting Evening Session 7:00 pm
- Growth and Natural Resources Committee Meeting 4:00 pm
- Community Conversation Meeting

RaleighGov on Twitter

Raleigh Parks @raleighparks
Lake Lynn Community Center is now offering Spring Flag Football! Read more about it: [ow.ly/kv30Rv6h0](#)

GoRaleigh @GoRaleighNC

City of Raleigh

Home | Arts & Services | Government | Business & Community | Projects | Public Sustainability | My Tools | Sign In | Sign Up

Strategic Plan

The Raleigh City Council marked a milestone when it adopted the strategic plan in April 2015. The Council has established a long-term vision for the city and a set of priorities that will guide the city's growth and development. This plan contains strategic objectives and strategic initiatives needed to achieve them. City employees will share resources and work efforts toward meeting and supporting these objectives.

Upcoming Events

- City Council February 07, 2017 - 12:55 PM
- City Council Evening February 07, 2017 - 08:55 PM
- City Council

Minutes

- View council minutes
- View committee minutes

Interact and Learn

Appropriate people access to information and tools to become an informed citizen. We recommend exploring the links below to help you engage more with the city and to see how you can help us make our city a better place to live and work.

- Open House: Meet and Learn about City Goals
- The Social Goals: City of Raleigh, News, Events & Blog
- Open House: Conversation in Raleigh
- Interactive Transportation Report Map

What's Next?

The Strategic Plan guides the work of the City of Raleigh as it grows and responds to the ever-changing needs of its residents. Over the next several months, City staff will develop strategies and initiatives to deliver the strategic plan objectives and initiatives and report on the City's progress.

City of Raleigh

Home | Arts & Services | Government | Business & Community | Projects | Public Sustainability | My Tools | Sign In | Sign Up

Safe, Vibrant & Healthy

This is the community's public platform for exploring and downloading open data, discovering and building apps, and engaging to solve important local issues. You can analyze and combine Open Data sets using maps, as well as develop new web and mobile applications. Let's make our great community even better, together!

Emergency Response Times

8:46 minutes
On Track

Satisfaction with Park Events

84 percent satisfied
Almost met target

Participating in Park Events

11,229 registrations
On Track

Objective 1:
Promote a positive level of real and perceived safety that reflects a thriving atmosphere in which to live, work and play.

Emergency Response Locations

Continue to support the City's goals to keep Raleigh safe through enhanced efforts to strengthen preparedness, response, recovery and mitigation. The City's all-hazards approach will continue to address natural, technological, and manmade disasters to include acts of terrorism, cyber-attacks, severe weather and energy shortages.

We will continue to maintain and update emergency response plans, prepare City employees to be effective disaster service workers, maintain and improve the City's Emergency Operations Center (EOC), and provide overall leadership to the City, residents and business community for disaster preparedness and response.

Objective 2:
Preserve and increase the supply of housing for all income groups, including those with supportive service needs.

Unfit Structures

City Code requires that unfit or unsafe structures be repaired or demolished. Properties must be kept in a safe, sanitary and structurally sound condition.

Safety of occupants, neighboring residents, and children is an important consideration. If not properly maintained or secured, properties can become infested with a variety of pests, can be a haven for criminal activity and may attract neighborhood children to play in and around dangerous conditions.

Our Open Vision | Developer API

City of Raleigh

Home | Arts & Services | Government | Business & Community | Projects | Public Sustainability | My Tools | Sign In | Sign Up

Transportation & Transit

Equitable, Curb-to-Curb Transportation for Everyone

Develop an equitable, curb-to-curb transportation network for pedestrians, cyclists, automobiles and transit that is linked to regional municipalities, rail and air hubs.

Objective 1:
Develop an equitable and coordinated transportation and land use that improves through efforts with shared regional partners.

Improve number and quality of sidewalks

The City will continue to improve sidewalks through enhanced efforts to strengthen preparedness, response, recovery and mitigation. The City's all-hazards approach will continue to address natural, technological, and manmade disasters to include acts of terrorism, cyber-attacks, severe weather and energy shortages.

Better Streets

City of Raleigh street improvement projects are planned through the City's Strategic Investment Program. Major street projects include: Main Street, North Hills, and the downtown area. The program of planning, designing and constructing needed improvements will include the installation of curb extensions, curb widening and the construction of new streets to meet the needs of our ever-growing city.

Objective 2:
Enhance the safety, convenience, consistency and appearance of the transportation network to better serve people from diverse backgrounds.

Our Greenways

The City of Raleigh Greenways System is a network of public trails, sidewalks and recreational trails with provisions for activities such as walking, jogging, biking, roller skating, inline skating, dog walking and wheelchair use. The Greenways System is a key component of the City's overall transportation strategy and is an important element of the City's vision for a vibrant, healthy and sustainable community.

Greenway Construction

2015

2016

2017

2018

2019

2020

2021

2022

2023

2024

2025

2026

2027

2028

2029

2030

City of Raleigh

Home | Gallery | Map | Scene | Groups | Sign In

Gallery

City of Raleigh Featured Content

Sort By: Most Recent

Search the website or visit the ArcGIS Marketplace

- Durham
- Raleigh
- TAP 2017 Project Geometry Check
- TAP 2017 Projects, 2.2.2017
- Map for Daily Route
- Route Viewer
- Due Diligence - Transportation
- Council District Population Estimates
- Due Diligence Sessions Map -
- Due Diligence Sessions Map
- Due Diligence Sessions Map
- Due Diligence - Utilities
- Due Diligence - Urban Forestry

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Your Data has a Story

Transportation & Transit

Equitable, Citywide Transportation for Everyone

Search for Data

Develop an equitable, citywide transportation network for pedestrians, cyclists, automobiles and transit that is linked to regional municipalities, rail and air hubs.

Objective 1

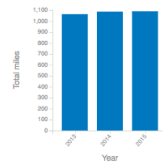
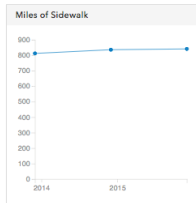
Develop a unified and coordinated transportation and land use vision implemented through effective and efficient project delivery.



Flickr: syriax

Improve number and quality of sidewalks

The Design and Construction Division coordinates most street and sidewalk improvements projects within the City of Raleigh. The division works closely with other departments to provide safe, comfortable and connected streets and sidewalks to enhance the quality of life for Raleigh residents, visitors and businesses.



Better Streets

City of Raleigh street improvement projects are generated through the Capital Improvement Program, Raleigh citizen requests by means of Street Petitions, and the division also works with Neighborhood Traffic Management on large scale traffic calming projects.

The process of identifying, designing and constructing needed improvements such as the installation of curbs and gutters, road widening and the construction of new roads can take from a few months to several years depending on the scope of the project. New projects are vetted through a process that involves public meetings and City Council authorization.

> Explore roads data



Flickr: tsmyther

Objective 2

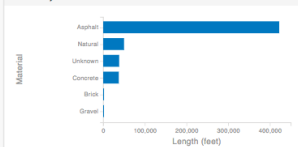
Enhance the safety, maintenance, convenience and appearance of the transportation network in order to give more people more choices.

Our Greenways

The Capital Area Greenway System is a network of public open spaces and recreational trails which provides for activities such as walking, jogging, hiking, bird watching, nature study, fishing, picnicking and outdoor fun. The trails connect many of Raleigh's parks and in many cases provide a complement to the recreational activities at the parks. Many of the city's major ecological features can be experienced in their natural state along the Greenway. A major goal of the Greenway Program is to establish a completed network of interconnected trails throughout the city.

> Explore Greenways

Greenway Construction



Strategic Plan



The Raleigh City Council marked a milestone when it adopted the strategic plan in April 2015. The Council has established six key areas that reflect the chief components that support the current and future identity and character of the city. The plan contains citywide objectives and strategic initiatives needed to achieve them. City employees will direct resources and work efforts toward meeting and supporting these objectives.



The strategic plan's objectives and initiatives correspond with the six key focus areas and align with work the City has previously completed, including the 2030 Comprehensive Plan that provides long-range guidance for growth and development. While some strategic plan initiatives are already underway, others will require further staff evaluation or will involve partnerships with the private sector, educational institutions and other community groups.

Interact and Learn

Apps provide simple access to information and tools for citizens to understand your community. We recommend exploring the apps below for helping engage around specific goals and initiatives - as well as encourage people to create their own stories and apps using the API and ready to configure apps.

New Parking App Can be Used at On-Street Meters Along Hillborough Street.

The Special Events Office Coordinates Races, Events & Block Parties

Gigabit Fiber Construction in Raleigh

Interactive Transportation Project Map

Explore More Apps



What's Next?

The Strategic Plan will guide the work of the City of Raleigh as it grows and responds to the evolving needs of residents. Over the next several months, City staff will develop structures and processes to pursue the strategic plan objectives and initiatives and measure and report on the City's progress.

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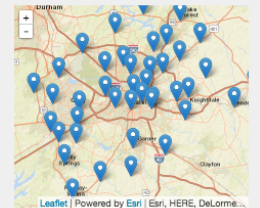
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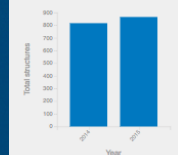


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Learn More

Objective 2:

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Our Open Vision | Developer API

Example sites



Customizing Access




ArcGIS Open Data Documentation GeoNet Courtney ▾

My Great Organization

Sites Data Team Settings

Open Data Collaboration Group

Search... Add Members

Name	Contact	Revoke Access
 Andrew Stauffer	astauffer@esri.com	
 Courtney Claessens	cclaessens@esri.com	
 Graham Hudgins	GHudgins@esri.com	<input type="button" value="🗑"/>

ArcGIS Open Data





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- Help

ArcGIS Platform

- ArcGIS Online
- ArcGIS for Developers
- ArcGIS for Professionals
- ArcGIS Marketplace

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Customizing your site

deepcustom-andrew.opendata.arcgis.com



Customizing your data



Customizing your data

- Structured metadata

Homeland Infrastructure Foundation—Level Data (HIFLD) My Activity

DHS.GOV DHS.GII FGDC.GOV HIFLD

Search for open data

Location density of 595,118 features

National Bridge Inventory (NBI) Bridges

Open In ArcGIS Share Download Dataset APIs

Details Table Charts

DESCRIPTION

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 State.

ABOUT

HIFLD Open - Transportation: Ground
By HIFLD_Admin
Updated: a day ago

Source: <https://services2.arcgis.com/1rdv1mickpAv17Wo/>
Metadata: National Bridge Inventory (NBI) Bridges
License: Access Constraint: None (Public Domain)

TAGS

Bridges | National Bridge Inventory | NBI | Transportation

DATASET ATTRIBUTES

STFIPS	Text
REGION	Text

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 State.

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

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

The screenshot displays the HIFLD website interface. At the top, there is a navigation bar with links to DHS.GOV, DHS.GII, FGDC.GOV, and HIFLD. A search bar contains an asterisk. Below the navigation is a map of the United States with a grid overlay, showing a location density of 93,117 features. A dropdown menu is open, listing download options: Full Dataset, Spreadsheet, KML, Shapefile, Filtered Dataset, Spreadsheet, KML, Shapefile, and File Geodatabase. The main content area shows the title 'FDIC Insured Banks' and a description of the dataset, which represents the Summary of Deposits (SOD) for all FDIC-insured institutions as of June 30, 2015. Below the description is a table of dataset attributes.

FDIC Insured Banks

DESCRIPTION

This dataset represents the Summary of Deposits (SOD), the annual survey of branch office deposits for all FDIC-insured institutions including insured U.S. branches of foreign banks. Data are as of June 30, 2015. Users can access these data by: (1) single institution, (2) institutions within a geographic area, or (3) aggregated within a geographic area. SOD features include custom market share reports and downloads. Link: <http://www2.fdic.gov/sod/> Scope of the

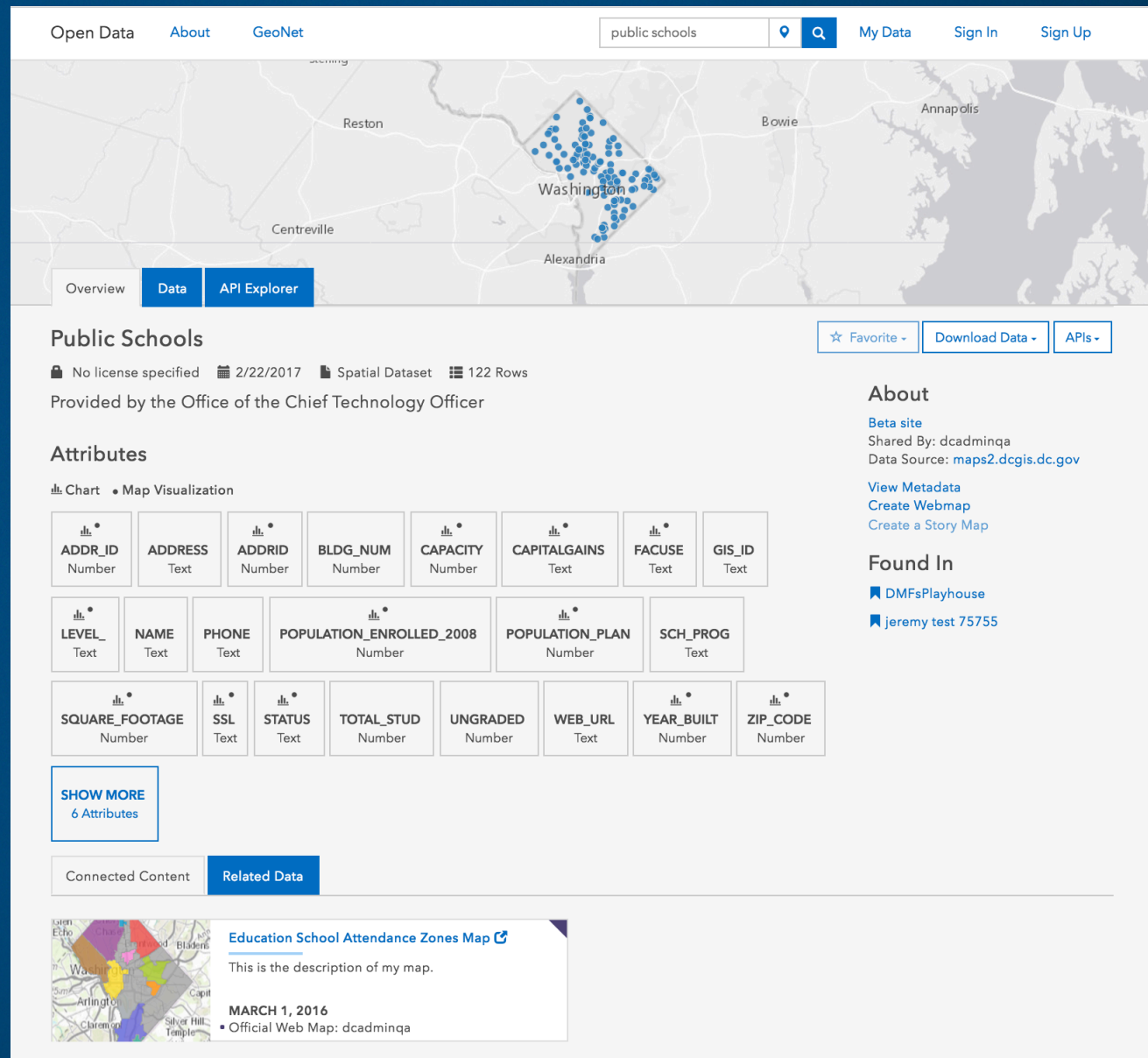
DATASET ATTRIBUTES

Address (Branch) Text	100 East Main Street (30), 100 Main Street (26), 1 East Main Street (14), 1 Main Street (11)... (996 more)
Office Number Number	min: 0 max: 10,299 avg: 1,321.44 count: 93,283



Customizing your data

- Connected content



Open Data About GeoNet public schools My Data Sign In Sign Up

Overview Data API Explorer

Public Schools

☆ Favorite - Download Data - APIs -

No license specified 2/22/2017 Spatial Dataset 122 Rows
Provided by the Office of the Chief Technology Officer

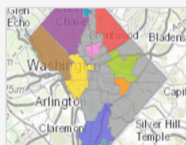
Attributes

Chart Map Visualization

ADDR_ID Number	ADDRESS Text	ADDRID Number	BLDG_NUM Number	CAPACITY Number	CAPITALGAINS Text	FACUSE Text	GIS_ID Text
LEVEL_ Text	NAME Text	PHONE Text	POPULATION_ENROLLED_2008 Number	POPULATION_PLAN Number	SCH_PROG Text		
SQUARE_FOOTAGE Number	SSL Text	STATUS Text	TOTAL_STUD Number	UNGRADED Number	WEB_URL Text	YEAR_BUILT Number	ZIP_CODE Number

[SHOW MORE](#)
6 Attributes

Connected Content Related Data



Education School Attendance Zones Map

This is the description of my map.

MARCH 1, 2016

- Official Web Map: dcdadminqa

Building Initiative Sites

Reaching more citizens by building around problems



Departments work in silos



*Open Data only empowers
commercial developers,
journalists, expert citizens*



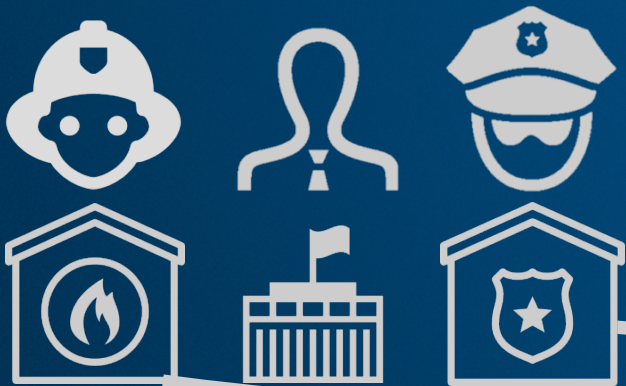
*The chasm: How do you reach
the rest of your community?*



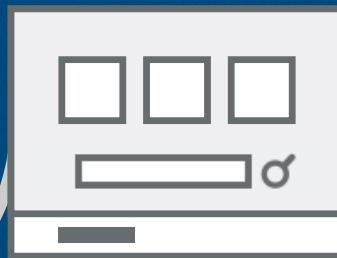
Time



Departments work in silos



Open Data only empowers commercial developers, journalists, expert citizens



Launch initiatives that engage with groups of citizens on community issues
The chasm: How do you reach the rest of your community?



Time

Starting points for Initiative sites

<http://initiative-template.dcdev.opendata.arcgis.com/>

What

Describe the current situation and what goal we want to achieve. Give a compelling reason to learn more about the topic and why they should trust that we can do something to improve it. Use conversational reader-centric language.

Current Situation

##

per day

[Explore data](#)

Target Outcome

by 20##

our goal

[Explore data](#)

Engaging Insight

##


% of population

[Explore data](#)

How


Outline the process you are taking to accomplish the goal. What policy changes are being made? How is infrastructure being improved? How are you engaging the community? How has this affected them? What technology changes are being implemented?

Policy Changes




[Council Meeting Revised Proposal \(PDF\)](#)

Updated Infrastructure



This is an example description of what was improved. [Read full document.](#)

Informed Decisions



Attend our next event to [learn more.](#)

My Data ■ Graham ▾

Marketing Name

Optimistic press release title

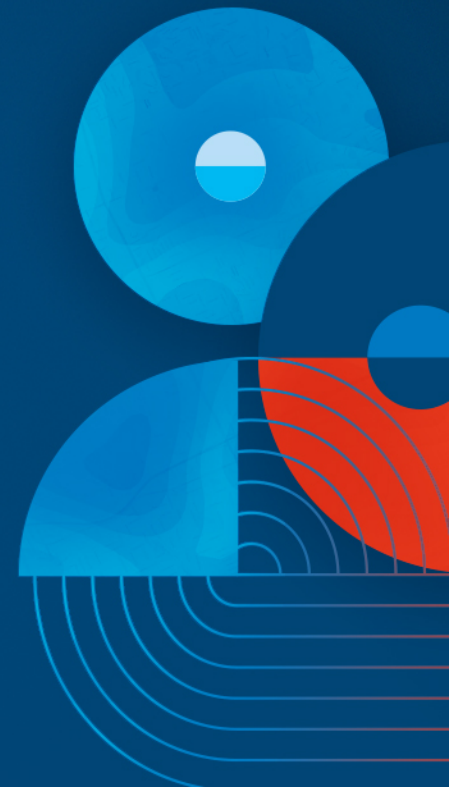
Add a banner image above

- Suggested dimensions are 1440x420px. [Unsplash](#), [Pexels](#), and [Free Images](#) have licenses that allow commercial use without attribution. If using [Flickr](#) remember to give attribution if the image is anything other than a public domain or CC0 license.
- Banner image is responsive by design. Banner resizes proportionally from top center based on screen size.
- If you need to crop an image, [Pixlr](#) is a free online photo editor. Load image. Click the first tool in the sidebar. Set Constraint settings to Output Size, use the dimensions above to set width and height. Drag mouse to set crop zone, use enter key to commit crop.

Delete this row when finished

Write a 2-3 sentence overview of your initiative. Keep it short (eg. elevator pitch). It should include a goal (or ask).

Wrapping up



What's next

- Customization-wise:
 - More cards!
 - Web map card
 - Advanced statistic card for custom UI
 - Twitter card
 - More options!
 - Add two fonts to your theme
 - More connected content types – applications
 - Some Bootstrap JS support
- Otherwise:
 - Full HTTPS support for OMB compliance
 - Secured open data
 - User generated charts and visualizations

Want to learn more?

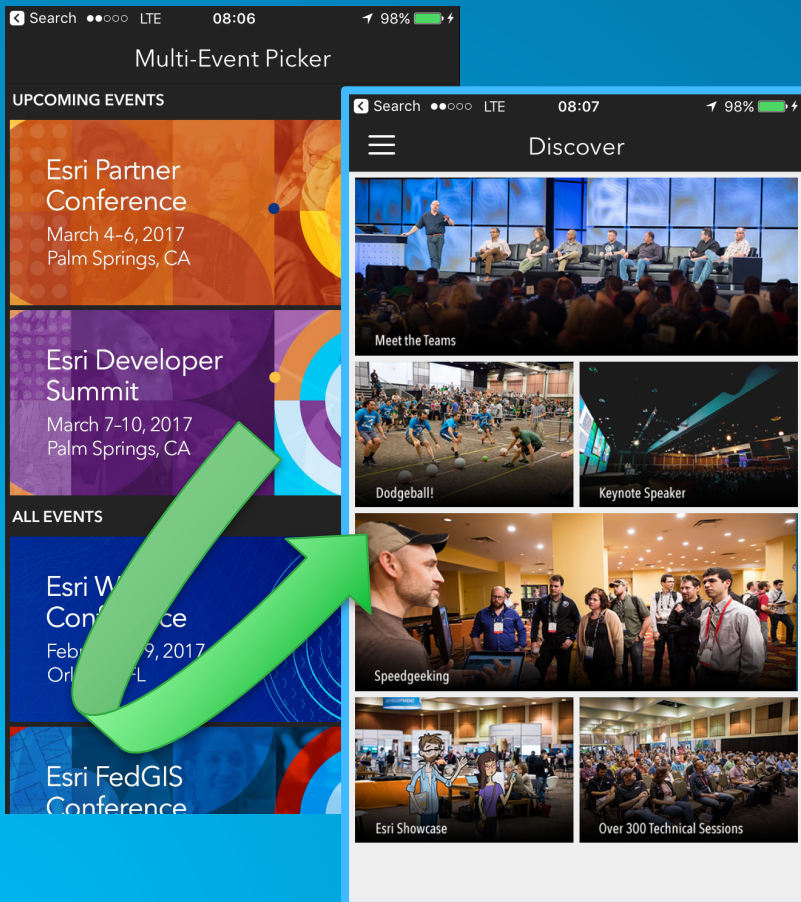
- Documentation
 - [ArcGIS Open Data docs](#)
 - [ArcGIS Online docs](#)
- Best Practices Slides
 - bit.ly/UC16-ODBP
 - Case sensitive!
- Additional Resources
 - [ArcGIS Open Data on the ArcGIS Blog](#)
 - [ArcGIS Open Data on GeoNet](#)
- Literature
 - go.esri.com/opendata

Site: deepcustom-andrew.opendata.arcgis.com

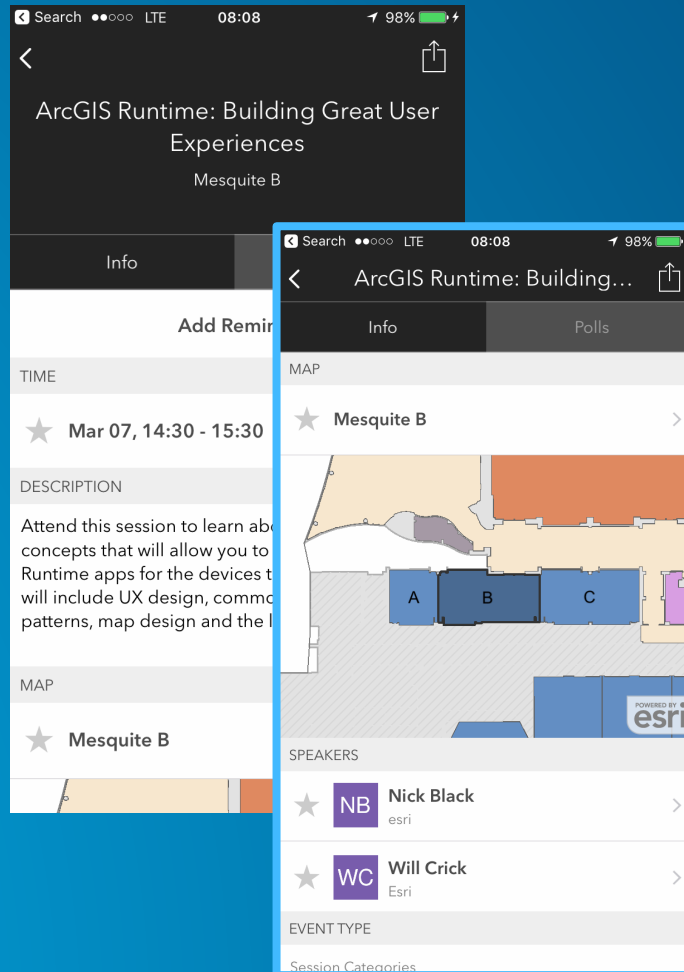
Initiative template site: initiative-template-dcdev.opendata.arcgis.com

Please Take Our Survey!

Download the Esri Events app
and go to DevSummit

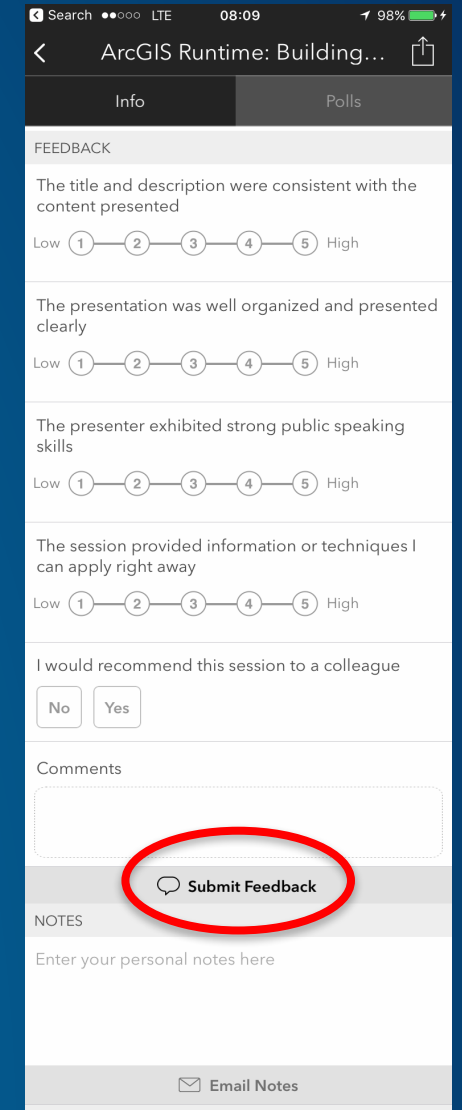


Select the session you attended



Scroll down to the
“Feedback” section

Complete Answers,
add a Comment,
and Select “Submit”





esri

THE
SCIENCE
OF
WHERE