



Best Practices for Working with ArcGIS Open Data

Courtney Claessens, Product Engineer
R&D Center, Washington, DC

esriurl.com/17odbp

(case sensitive)

Open data: part of the ArcGIS Platform




Simple Integrated Open

[ArcGIS Hub](#) [Community](#) [Initiatives](#) [Open Data](#) [Sign In](#)

Open Data


/ˈopen ˈdada/

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 Open Data

Total Datasets	71,105
Organizations Worldwide Sharing Open Data	4,204

Browse by Categories



- Safe
- Crime
- Disaster
- Emergency Response



- Prosperous
- Demographics
- Economy
- Education

- Data-centric view
- Open formats
- Hosted and configurable
- Included with ArcGIS subscriptions

ArcGIS Hub Community Initiatives Open Data

My Data Sign In

Overview Data API Explorer

Public Schools

2/2/2017 Spatial Dataset 122 Rows

School Ground locations. The dataset contains locations and attributes of school grounds, created as part of the DC Geographic Information System (DC GIS) for the D.C. Office of the Chief Technology Officer (OCTO) and participating D.C. government agencies. Originally created by Baker,

[More](#)

[Favorite](#) [Download Data](#) [APIs](#)

About

DCGIS Open Data: Education
 Shared By: DCGISopendata
 Data Source: maps2.dcgis.dc.gov

[View Metadata](#)
[Create Webmap](#)
[Create a Story Map](#)

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	



Not all data is created equal.

We have the challenge of introducing our data to new users with new use cases.

Ultimate goals and session outline

- Data that is performant and quick to view (service configuration)
- Data that is user friendly and easy to understand (data prep and organization in ArcGIS Online)
- Sites that are inviting and give user guidance (site design)
- Some great examples!

Dataset and service preparation



Getting data and services ready from desktop

- Humanize your attributes with attribute aliases






[Overview](#)
[Data](#)
[API Explorer](#)
[Reports](#)

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

«
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1
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»



[Overview](#)
[Data](#)
[API Explorer](#)
[Reports](#)

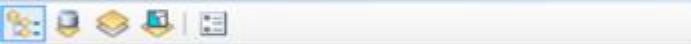
New ACS 5 Year Housing Data by Place As of 2013

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

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Table Of Contents



Layers

Common_Core_of_Data_20102011

- ☒ Common_Core_of_Data_20102011

Layer Properties

General

Source

Selection

Display

Symbology

Fields

Definition Query

Labels

Joins & Relates

Time

HTML Popup

Options

Choose which fields will be visible

☒ FID
☒ Shape
☒ OBJECTID_1
☒ OBJECTID
☒ NCES School ID
☒ seach
☒ flpst
☒ leanm
☒ leaid
☒ coname
☒ conum
☒ mstree
☒ mcity
☒ mzip
☒ lstree
☒ lcity
☒ lzip
☒ latcod

Appearance

Alias

NCES School ID

Highlight

No

Read-Only

No

Field Details

Data Type

Text

Length

80

Name

schno

Allow NULL Values

No

Alias

Descriptive name for the field

OK

Cancel

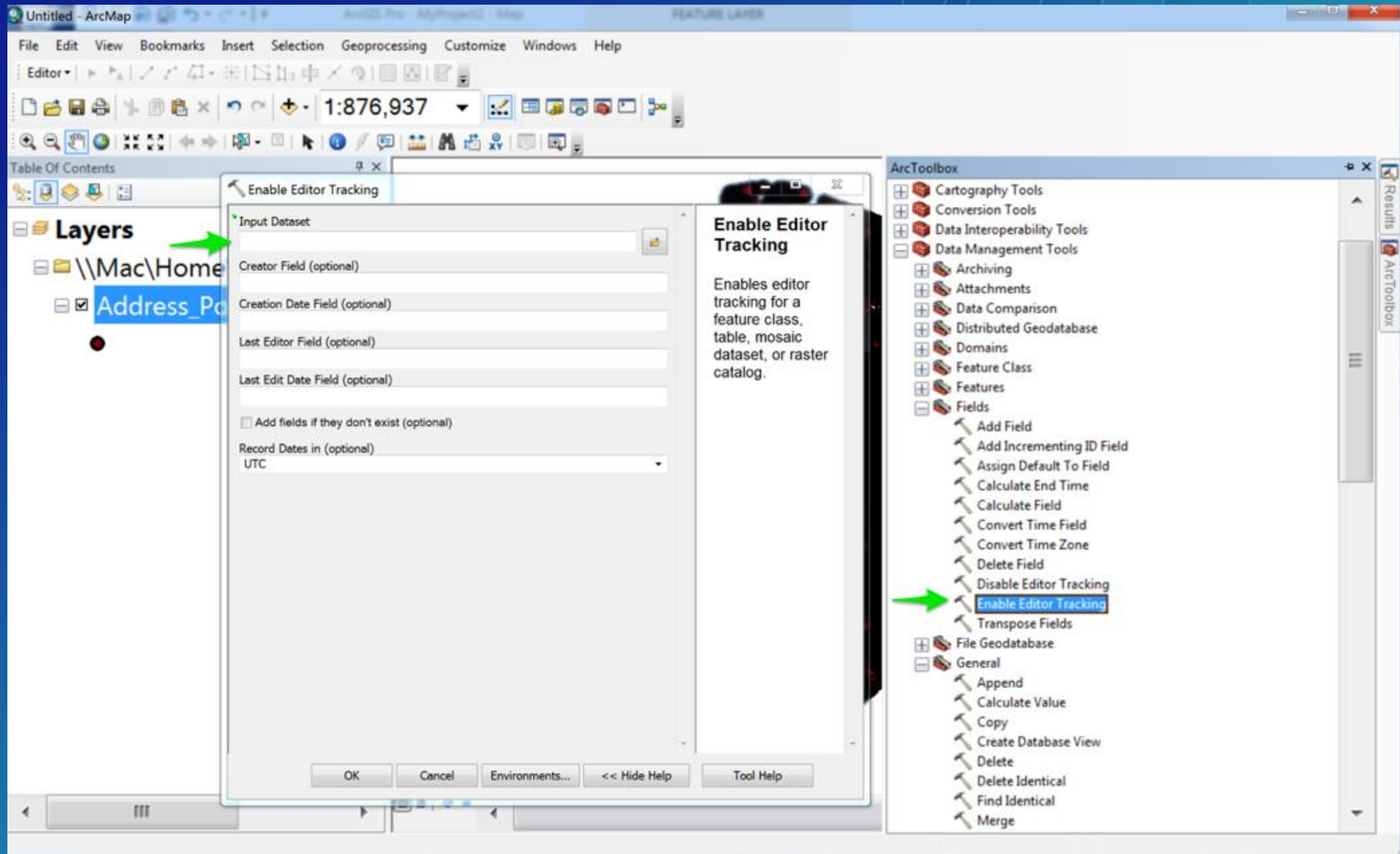
Apply



Getting data and services ready from desktop

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





Getting data and services ready from desktop

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



Getting data and services ready from desktop

- 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



Untitled - ArcMap

1:260,579,820

File Edit View Bookmarks Insert Selection

Table Of Contents

Layers

- ☒ Common_Core_of_Data_20102011

Prepare

0 Errors 0 Warnings 0 Messages

Severity	Status	Code	Description
----------	--------	------	-------------

Status: Not Analyzed

No items

Service Editor

Connection: arcgis on arcgis1022.dcdev.esri.com_6080 (admin) Service Name: Co...

Import Analyze Preview Publish

General Parameters Capabilities Mapping KML Pooling Processes Caching Item Description Sharing

Parameters

Document Location

Original Document: Untitled

Published Document: The service has not yet been published

Anti-Aliasing

Anti-Aliasing: None

Text Anti-Aliasing: Force

Properties

Maximum number of records returned by the server: 1000

Advanced...

Cluster

Choose the cluster hosting the service: default

Output Directory

Directory: D:\arcgisserver\directories\arcgisoutput

Getting data and services ready from desktop

- 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



Untitled - ArcMap

1:260,579,820

File Edit View Bookmarks Insert Selection

Table Of Contents

Layers

- Common_Core_of_Data_20102011

Prepare

0 Errors 0 Warnings 0 Messages

Severity	Status	Code	Description
Status: Not Analyzed			
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Service Editor

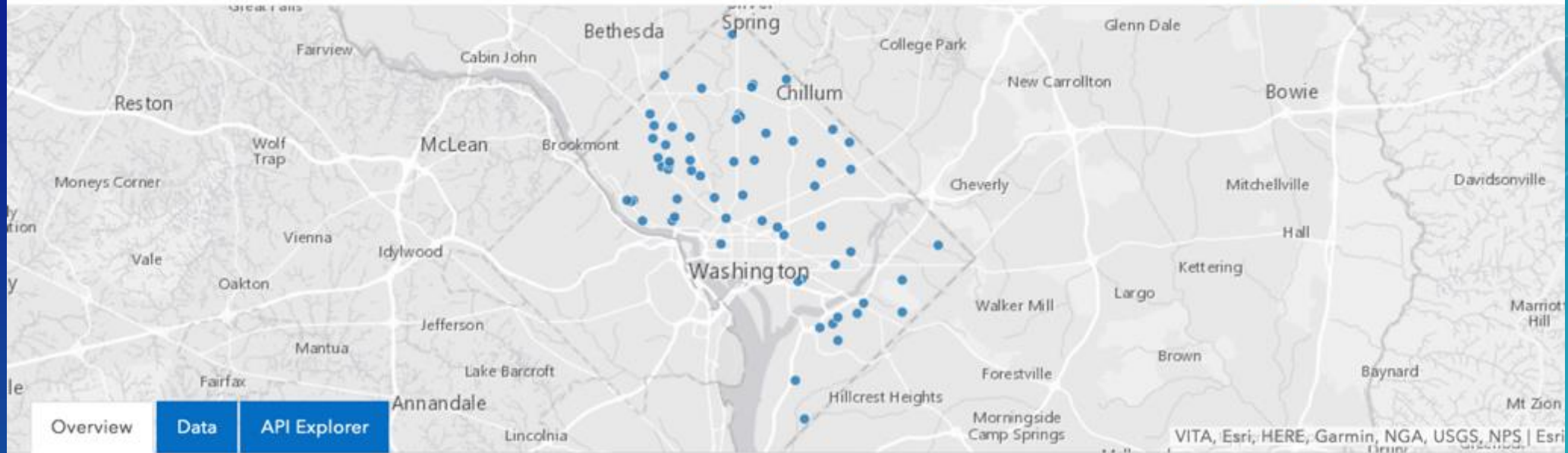
Connection: arcgis on arcgis1022.dcdev.esri.com_6080 (admin) Service Name: Co... Import Analyze Preview Publish

General Parameters Capabilities

Capabilities

Choose the capabilities you would like enabled for this service:

- ☒ Mapping (always enabled)
- ☒ WCS
- ☒ WMS
- ☐ Feature Access
- ☐ Schematics
- ☐ Mobile Data Access
- ☐ Network Analysis
- ☒ KML
- ☒ WFS



Overview

Data

API Explorer

Independent Schools



7/3/2017

Spatial Dataset

62 Rows

The dataset contains locations and attributes of Independent Schools, created as part of the DC Geographic Information System (DC GIS) for the D.C. Office of the Chief Technology Officer (OCTO) and participating D.C. government agencies.

Attributes

Chart • Map Visualization

ADDRESS
TextGIS_ID
TextID
NumberNAME
TextTELEPHONE
TextWEB_URL
TextZIP
TextSHOW MORE
2 Attributes

★ Favorite ▾

Download Data ▾

APIs ▾

Full Dataset

Ab

OGC WMS

<http://maps2.dcgis.dc.gov/dcgis/s>DCG
Share
Data

GeoService

<http://maps2.dcgis.dc.gov/dcgis/r>View
Create
Create

GeoJSON

<https://opendata.arcgis.com/datas>

Getting data and services ready from desktop

- 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
- Use ArcGIS Online to host:
 - Large datasets
 - Popular datasets
 - Any data you'd like automatically translated into file geodatabase

ArcGIS Online preparation

Configuring organisation and data in Online

Organization structures

- **ArcGIS Online user roles**
 - Open Data administrator
 - These users still need to be added to the Team tab within Hub admin



SAVE

CANCEL

General

Home Page

Gallery

Map

Item Details

Groups

Utility Services

Roles

Security

Open Data

Roles ?

Role Name:

Description:

TOGGLE ALL ON

COLLAPSE ALL

SAVE ROLE

DISCARD CHANGES

General Privileges

[-] ☒ Groups

- ☒ Create, update, and delete
- ☒ Join organizational groups
- ☒ Join external groups

[-] ☐ Content

- ☒ Create, update, and delete
- ☐ Publish hosted feature layers
- ☐ Publish hosted tile layers

[-] ☒ Sharing

- ☒ Share with groups
- ☒ Share with organization
- ☒ Share with public
- ☒ Make groups visible to organization
- ☒ Make groups visible to public
- ☒ Make groups available to Open Data

[-] ☒ Premium Content

- ☒ Geocoding
- ☒ Network Analysis
- ☒ Spatial Analysis
- ☒ GeoEnrichment
- ☒ Demographics
- ☒ Elevation Analysis

[-] ☐ Features

- ☒ Edit
- ☐ Edit with full control

[-] ☒ Open Data

- ☒ Manage Open Data site(s)

ArcGIS Online groups

- **Staging groups** – good for organizations with multiple contributors
 - Use a group that is NOT open data for vetting, quality control, etc
 - Open data leader can move data from that group to the open data group and publish it
- **Thematic groups** – comes in handy when adding data and designing your site
 - Others that might want to add your data can choose from themes, rather than get everything
 - In site design, use category cards and limit search queries to specific groups
- **Include good group names, icons, descriptions**

2017 UC - Best Practices

Configuration

Capabilities

Groups Manager

Pages

Site Editor

Preview Site

Select open data groups

Choose open data groups to make accessible in your site. Changes are automatically saved.

Available open data groups

- ☐ Add Maryland GIS Data Catalog: Biota
- ☐ Add Maryland GIS Data Catalog: Boundaries
- ☐ Add Maryland GIS Data Catalog: Business Economy
- ☐ Add Maryland GIS Data Catalog: Demographics
- ☐ Add Maryland GIS Data Catalog: Education
- ☐ Add Maryland GIS Data Catalog: Elevation
- ☐ Add Maryland GIS Data Catalog: Environment



Selected open data groups

2017 UC

Registering data and editing metadata

- Register individual layers over full services
 - Gives greater and easier control of metadata
- Title, description, access and use constraints (license), tags

Filter By

Tags

Iowa Dot (332)
 Iowa Department Of Transportation (326)
 Asset (250)
 Classification (146)
 Inventory (108)
 Rams (71)
 Reference (51)
 Improvement (38)
 Area (35)
 Rest (35)

Fewer ▲

Source

Iowa Department of Transportation (341)

Content Type

spatial dataset (335)
 document (13)

< 1 - 10 of 348 results >

Relevance ⬆

I-80 PEL Resources - Wildlife Management Areas

Shared by IowaDOT_GISServices

This map shows known or potential wildlife management area resources within the I-80 Planning and Environmental Linkage (PEL) Study Area. The PEL study is being conducted by the Office of Location and Environment.

🔒 5/19/2017 📄 Spatial Dataset 📊 8 Rows



SF257 City Funding

Shared by IowaDOT_GISServices

Data depicting FY 2016 breakdown of city funding generated from Senate File 257.

🔒 6/13/2017 📄 Spatial Dataset 📊 945 Rows



I-80 PEL Study Areas

Shared by IowaDOT_GISServices

This layer identifies the study areas for the Interstate 80 Planning and Environmental Linkage (PEL) study being conducted by the Office of Location and Environment.

🔒 6/13/2017 📄 Spatial Dataset 📊 4 Rows



HOUSE

Registering data and editing metadata

- Register individual layers over full services
 - Gives greater and easier control of metadata
- Title, description, access and use constraints (license), tags
- Licenses
 - Creative Commons (CC0, CC BY, CC BY-SA), Open Data Commons license
 - <https://creativecommons.org/choose/>
 - If you have a terms of use, add it in your footer

Filter By

Tags

District Of Columbia (708)

Washington Dc (704)

Dc (656)

Dc Gis (592)

Washington (475)

More ▼

Source

City of Washington, DC (919)

Content Type

spatial dataset (832)

document (49)

table (37)

web mapping application (1)

◀ 1 - 10 of 919 results ▶

Relevance ⬆

Construction Permits in 2015

Shared by DCGISopendata

The dataset contains locations and attributes of 2015 above ground permits applied for and approved by the District Department of Transportation. They are occupied constructions and events. Examples include: moving trucks, roll off debris container, moving storage container, construction staging area, mobile crane



🔒 📅 5/18/2017 📄 Spatial Dataset 📊 15,470 Rows



Occupancy Permits in 2012

Shared by DCGISopendata

The dataset contains locations and attributes of 2012 above ground permits applied for and approved by the District Department of Transportation. They are existing occupied constructions and events. Examples include: moving trucks, roll off debris container, moving storage container, construction staging area,



🔒 📅 5/18/2017 📄 Spatial Dataset 📊 50,157 Rows



Emergency Work Requests (via DDOT TOPs)

Shared by DCGISopendata

This data sets shows emergency work requests from DDOT's Transportation Online Permitting System. <https://tops.ddot.dc.gov/>



🔒 📅 5/18/2017 📄 Spatial Dataset 📊 30,808 Rows



Registering data and editing metadata

- Register individual layers over full services
 - Gives greater and easier control of metadata
- Title, description, access and use constraints (license), tags
- Licenses
 - Creative Commons (CC0, CC BY, CC BY-SA), Open Data Commons license
 - <https://creativecommons.org/choose/>
 - If you have a terms of use, add it in your footer
- Add structured metadata on ArcGIS Online
 - Accessible from dataset page and included in shapefile downloads

Getting those sweet sweet fgdb's

- For hosted services:
check “Export Data” in the Online settings
- File geodatabases are automatically created by ArcGIS Online

ACS 5 Year Housing Data by Place As of 2013

Overview Data Visualization Usage Settings

General Settings Feature Layer (hosted) Settings

General Settings

Delete Protection Delete Item

☐ Prevent this item from being accidentally deleted.

Extent Set Extent

Top: 71.34
Left: -176.71 Bottom: 17.88 Right: -65.29

Save Cancel

Feature Layer (hosted) Settings Save Cancel

Editing

☐ Enable editing.
☐ Keep track of created and updated features.
Keep track of who created and last updated features.
☐ Enable Sync (disconnected editing with synchronization).

Optimize Layer Drawing


This setting increases the drawing speed of line and polygon layers with detailed geometry (e.g., many vertices) but also uses additional storage space to do so.

Select the layers to optimize:

☐ ACS_5_Year_Housing_Data_by_Place_As_of_2013

Note: Layer optimization takes a few minutes to complete. Editing will be temporarily disabled on layers undergoing optimization.

Export Data

☒ Allow others to export to different formats. 

Save Cancel

Adding additional download types

- **Add additional resources to your datasets using distributions in metadata**
 - Add file geodatabases to your on-premises services
 - Add more metadata files
 - Add raw imagery data
 - Anything else!

New ACS 5 Year Housing Data by Place As of 2013 [Edit](#)

Overview Data Visualization Usage Settings

[Edit Thumbnail](#)

Add a brief summary about the item.

by cclaessensTNG
Last Modified: July 6, 2017

[Feature Layer](#)

[Add to Favorites](#)

[Open in Map Viewer](#)

[Open in Scene Viewer](#)

[Share](#)

[Metadata](#)

[Edit](#)

[Edit](#)

Description

5-year American Community Survey estimates of housing variables (see below) at the place level released in 2012. The TIGER/Line Files are shapefiles and related database files (.dbf) that are an extract of selected geographic and cartographic information from the U.S. Census Bureau's Master Address File / Topologically Integrated Geographic Encoding and Referencing (MAF/TIGER) Database (MTDB). The MTDB represents a seamless national file with no overlaps or gaps between parts, however, each TIGER/Line File is designed to stand alone as an independent data set, or they can be combined to cover the entire nation. The TIGER/Line Files include both incorporated places (legal entities) and census designated places or CDPs (statistical entities). An incorporated place is established to provide governmental functions for a concentration of people as opposed to a minor civil division (MCD), which generally is created to provide services or

Details

★ ★ ★ ★ ★ (0) [views: 1](#)

Source: [Feature Service](#)

Created: July 6, 2017

Size: 1 KB

Shared with: [Everyone \(public\)](#), [2017 UC](#)

[f](#) [t](#)

New ACS 5 Year Housing Data by Place As of 2013

Resource Quality **Distribution** Representation Content Fields Reference Metadata

☒ Distribution Information

Transfer Options Format Distributor

☒ Digital Transfer Options

Online Resource Units Offline Medium

☒ Online Resource 1 2

URL* <https://myfgdb.zip>

Protocol

Application Profile

Name [File Geodatabase](#)

Description

Function [Download](#)

In the metadata of the ArcGIS Online item

Find My Data Sign In

Location density of 29,509 fe

Overview **Data** API Explorer Reports

New ACS 5 Year Housing Data by Place As of 2013

No license specified 7/7/2017 Spatial Dataset 29,509 Rows

5-year American Community Survey estimates of housing variables (see below) at the place level released in 2012. The TIGER/Line Files are shapefiles and related database files (.dbf) that are an extract of selected geographic and cartographic information from the U.S. Census Bureau's Master

[More](#)

Attributes

Chart Map Visualization

1 bedroom Number	1 bedroom as a % Number	1 bedroom: Number	1 bedroom: \$1000 or more Number	1 bedroom: \$1000 or more as a % Number
---------------------	----------------------------	----------------------	-------------------------------------	--

Favorite Download Data APIs

About Full Dataset Spreadsheet
2017 UC KML
Shared By Data Source Shapefile
View Metadata Additional Resources
Create Web Map File Geodatabase

Dataset in open data

Adding other kinds of items

- Go beyond the feature service
 - Web maps
 - Web mapping applications
 - PDFs, word docs
 - External links

Document Link | gis.lethbridge.ca | ☆



Parcels West Side [↗](#) *(from Lethbridge Open Data)*

Shared by [OpenLethbridge](#)

Land parcels located in West Lethbridge. This data is intended for use in computer-aided design software applications such as AutoCAD and MicroStation. Last Updated: Jan 23,2016 Refresh Frequency: As Available

Document Link | gis.lethbridge.ca | ☆



Parcels South Side [↗](#) *(from Lethbridge Open Data)*

Shared by [OpenLethbridge](#)

Land parcels located in South Lethbridge. This data is intended for use in computer-aided design software applications such as AutoCAD and MicroStation. Last updated: Jan 23,2017 Refresh Frequency: As Available

Document Link | www.lethbridge.ca | ☆



Nature Sightings [↗](#) *(from Lethbridge Open Data)*

Shared by [OpenLethbridge](#)

The Helen Schuler Nature Centre (HSNC) has been collecting local plant and wildlife sighting data, from a 100 km radius of the City of Lethbridge since the early 1990's. Sightings are reported by HSNC staff and volunteers, as well as members of the public (citizen science) and have been verified by NC staff. New sightings can be reported to the NC by phoning 403-320-3064 or e-mailing hs...

Document Link | trr.tbe.taleo.net | ☆



Career Opportunities [↗](#) *(from Lethbridge Open Data)*

Shared by [OpenLethbridge](#)

Employment Opportunities with the City of Lethbridge Refresh Frequency : Live Feed

Adding other kinds of items

- **Go beyond the feature service**
 - Web maps
 - Web mapping applications
 - PDFs, word docs
 - External links
- **Connected content**
 - Add web maps that use your open data – they'll show up on the dataset page!














DC Public Schools

No license specified 3/7/2017 Spatial Dataset 122 Rows

Public school data provided by the District Department of Education.

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



School Distributions

The organization that shared this item did not provide a description.

JULY 3, 2017

Official Web Map: cclaessensTNG



Favorite

Download Data

APIs

About

Education Open Data

Shared By: cclaessen_uc

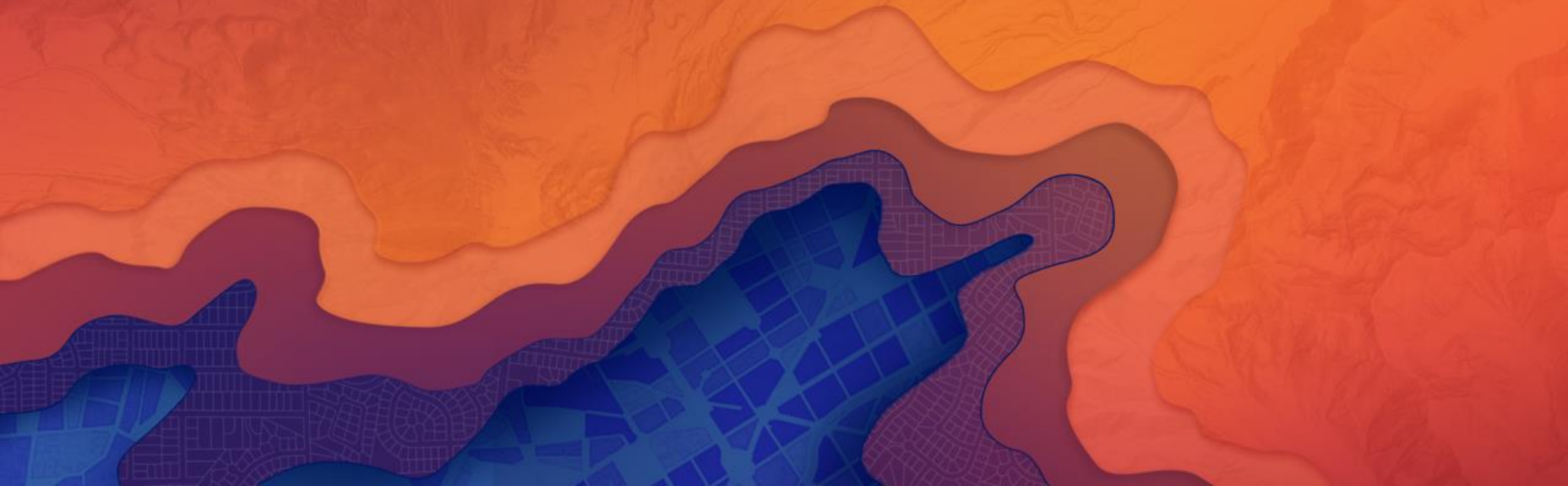
Data Source: maps2.dcgis.dc.gov

[View Metadata](#)

[Create Webmap](#)

[Create a Story Map](#)

Site configuration and design



- Add Google analytics
- Enforce HTTPS


City of X Open Data




[Configuration](#) [Capabilities](#) [Groups Manager](#) [Pages](#) [Site Editor](#) [Preview Site](#)

Basic Information

Site Name (Required) ⓘ

Browser Icon ⓘ


Google Analytics ⓘ
 

Sharing (Required)   

Domains

Site URL (Required)

Full URL: data-cityx.opendata.arcgis.com
[Manage Custom Domain](#)

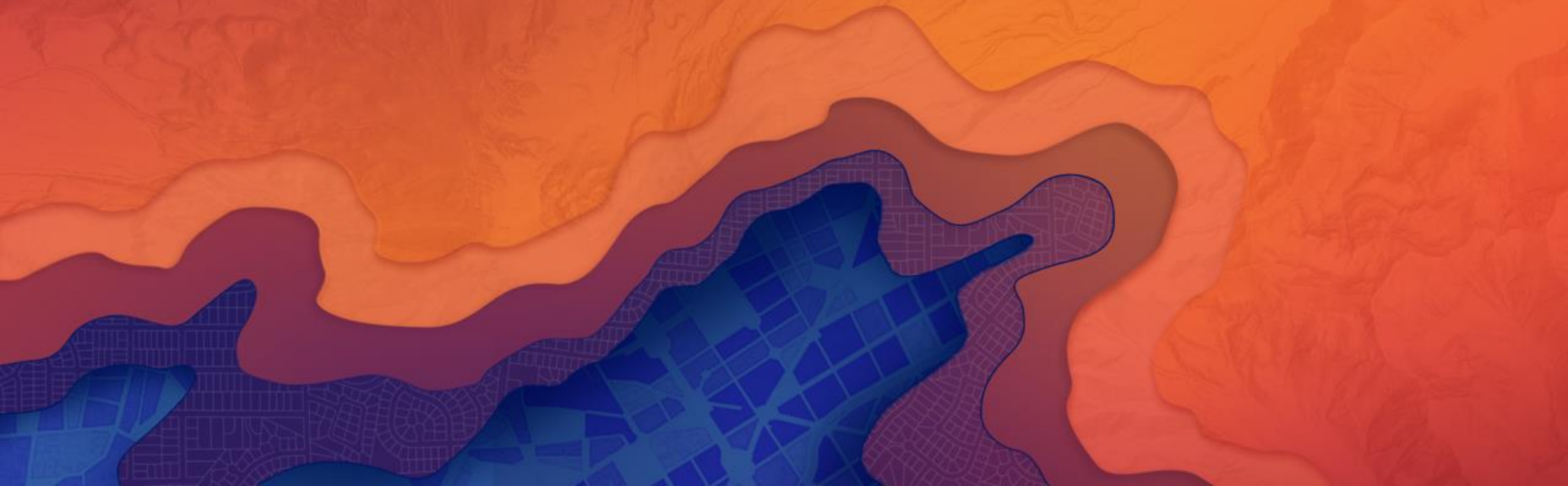
Enforce HTTPS ([Learn More About This Setting](#))
Make sure you have no broken http images or iframe links on your site.
 

deepcustom-andrew.opendata.arcgis.com

Use pages!

- Pages give you so much freedom and flexibility to further configure your site
- Page examples –
 - API instructions (<http://opendata.dc.gov/pages/using-apis>)
 - Events
 - Surveys
 - Data themes
 - Dashboard
 - App galleries
 - Literally anything else

Great examples from our peers



IOWA DOT OPEN DATA

MANAGING IOWA'S TRANSPORTATION INFRASTRUCTURE



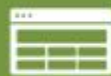
Welcome to the Iowa Department of Transportation's public platform for exploring and downloading open data. The Iowa DOT is committed to providing the traveling public, lawmakers and partners with easy to understand information that demonstrates how we are managing the state's transportation infrastructure. We are working hard to maximize the performance of our existing structures, minimize costs and improve the public's experience when traveling in Iowa. We are continuously developing new tools to help our stakeholders clearly see how we are performing.



Open Data



Featured Apps



GIS Website



Interactive Maps



Training



AGOL User Guide

Open Data DC

Connecting You with Government Data

Find District Data...



On this site, the District of Columbia government shares hundreds of datasets. DC realizes that data's greatest value comes from having it freely shared among agencies, federal and regional governments and with the public to the extent possible when considering safety, privacy and security. The District invites you to browse the data, download it as a file, analyze it with your tools, or build apps using our APIs. Everything you find here is open by default per [DC's Data Policy](#). Visit [open data](#) for help with using this site.

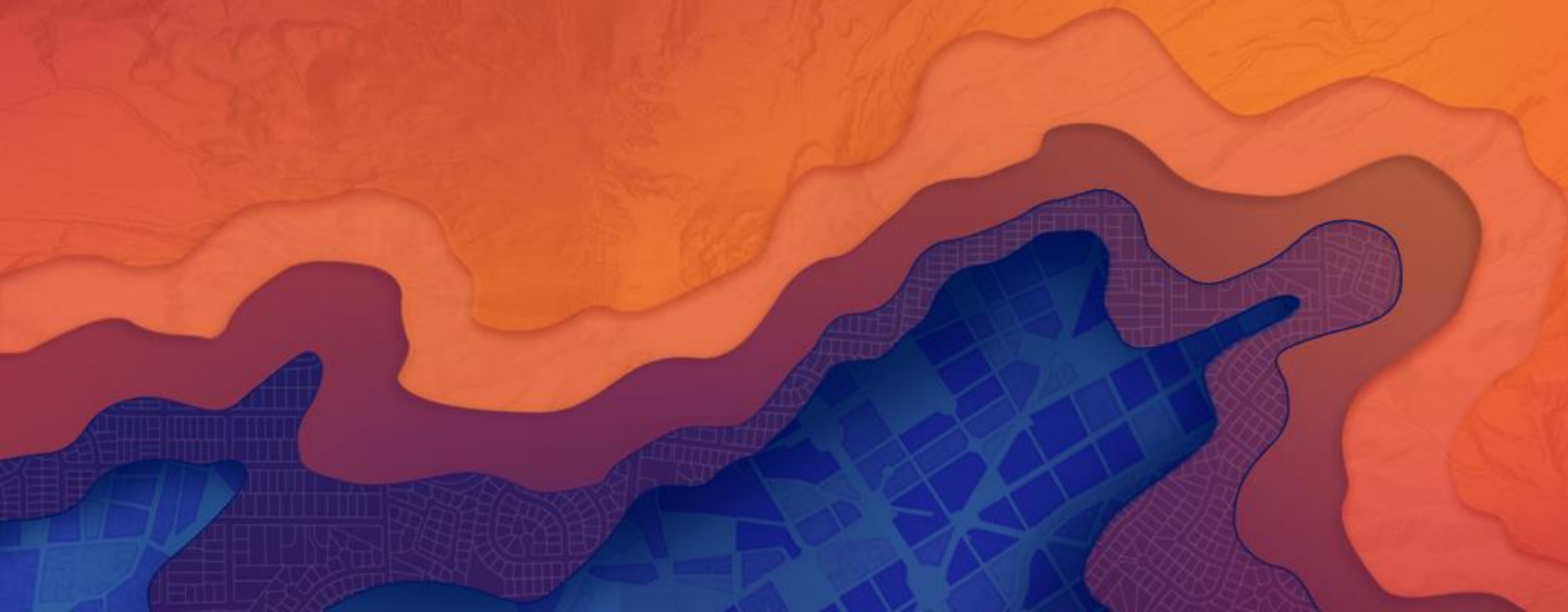


Discover Brampton's Open Data and the Tools to Visualize It.

Search for Open Data, Stories & Apps...



Digital meeting space



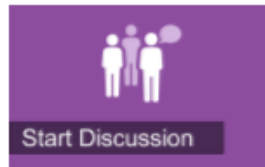
Welcome to the ArcGIS Hub space

(Formerly the ArcGIS Open Data space) ArcGIS Hub transforms how governments engage and collaborate with their communities through policy-driven initiatives, bringing open data to life and putting it to work. The ArcGIS Hub team is here to collaborate with ArcGIS Hub administrators and users in all aspects of the application – answering questions, listening to feedback, and communicating new and upcoming features.

ADMINS



Courtney Claessens



LATEST BLOG POSTS



Changes to ArcGIS Open Data

Courtney Claessens  1 week ago



Configuring charts and stats in ArcGIS Open Data pages

Courtney Claessens  3 months ago




What's New - Documentation Link Roundup

Courtney Claessens  5 months ago


ASK ARCGIS HUB

[Ask my question](#)

ANSWERED QUESTIONS

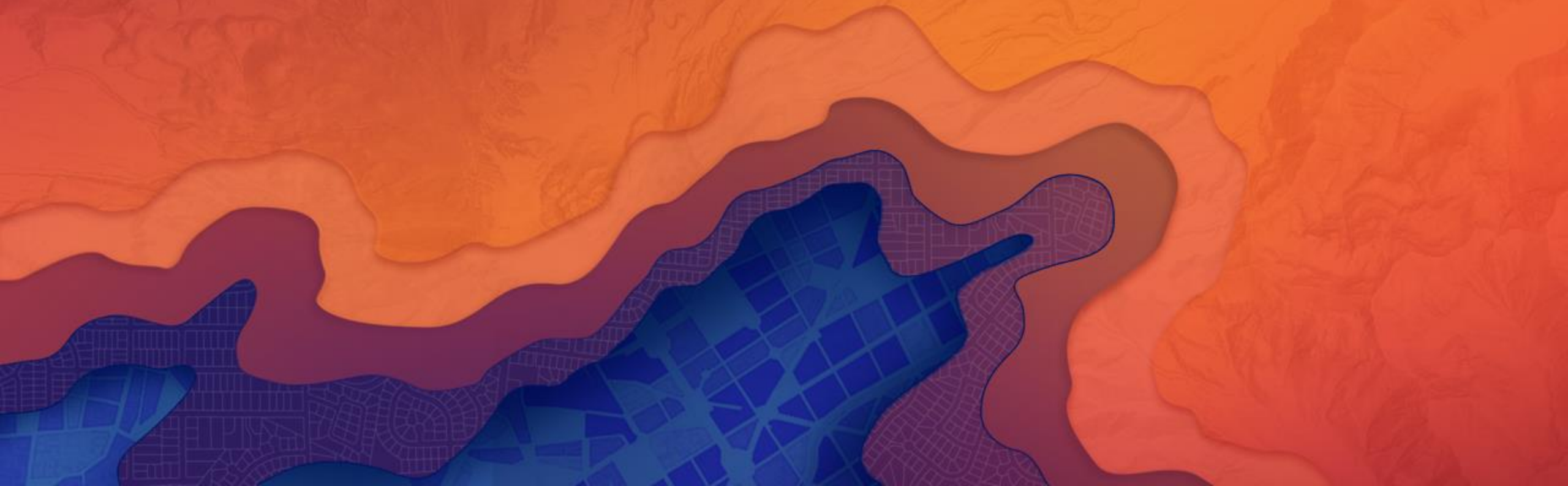
 [Update to Hub prompts ofr license to access data](#)

[Lars Elmkær Chwastek](#) 3 days ago

 [Is anyone else having problems with the WFS and WMS URLs created in the APIs dropdown for each dataset?](#)

[Craig Valentine](#) 1 week ago

In summary



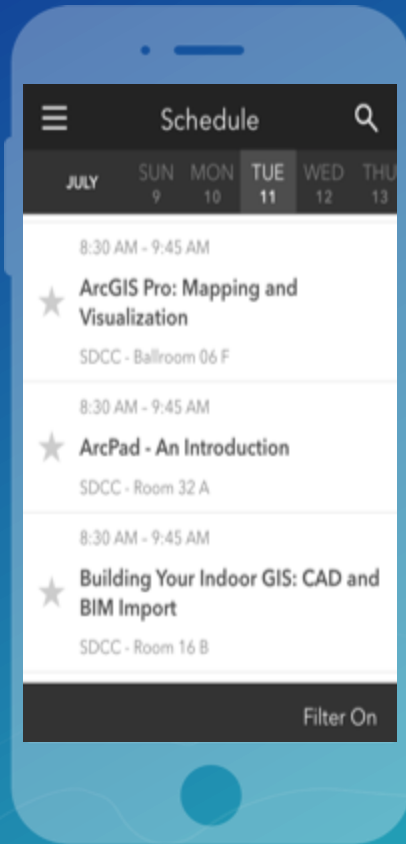
- Great sites need great data – starts locally in your desktop
- Use Online to your advantage – groups, metadata, more download types
- Licensing!
- Upgrade your site to 2.0 if you haven't already
- Talk to your peers and get inspired
- Meet on GeoNet – ask questions, share tips, tell us what you want to see

Please Take Our Survey on the **Esri Events App**!

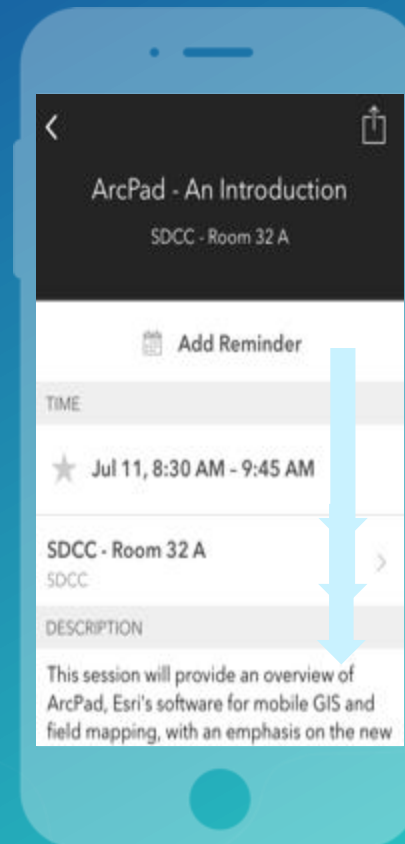
Download the Esri Events app and find your event



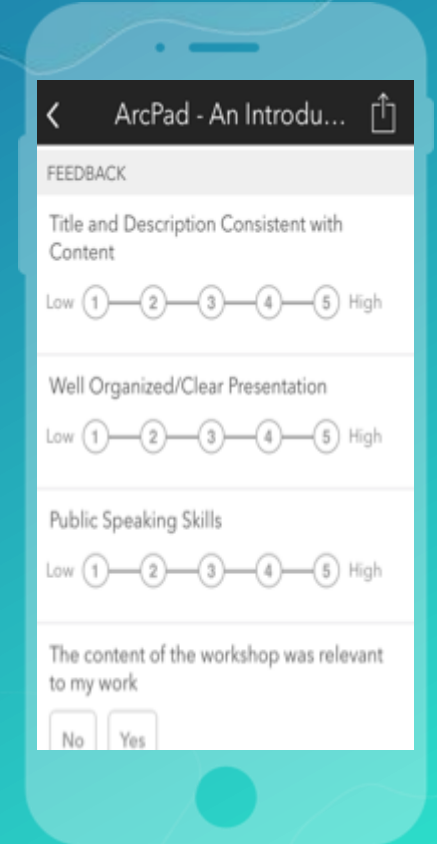
Select the session you attended



Scroll down to find the survey



Complete Answers and Select "Submit"



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(case sensitive)

Questions?

Open data booth in the Online Island

cclaessens@esri.com

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