Developing an Open Data Strategy

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Agenda

- Overview of ArcGIS Open Data
- Demonstration of ArcGIS Open Data
- Building your catalog
- Telling your story
- Data federation
- What’s Next
- Open Data in Action – Homeland Infrastructure Foundation-Level Data

Overview

ArcGIS Open Data

Historic Sharing Practices

- Physical Media and FTP Sites
  - Static snapshots over time
  - Quarterly release
  - Manual process to produce

- Data typically had terms of use
  - Used by academia & neighboring governments for analysis
  - Possibly aggregated into commercial datasets
  - Mindset was to sell data

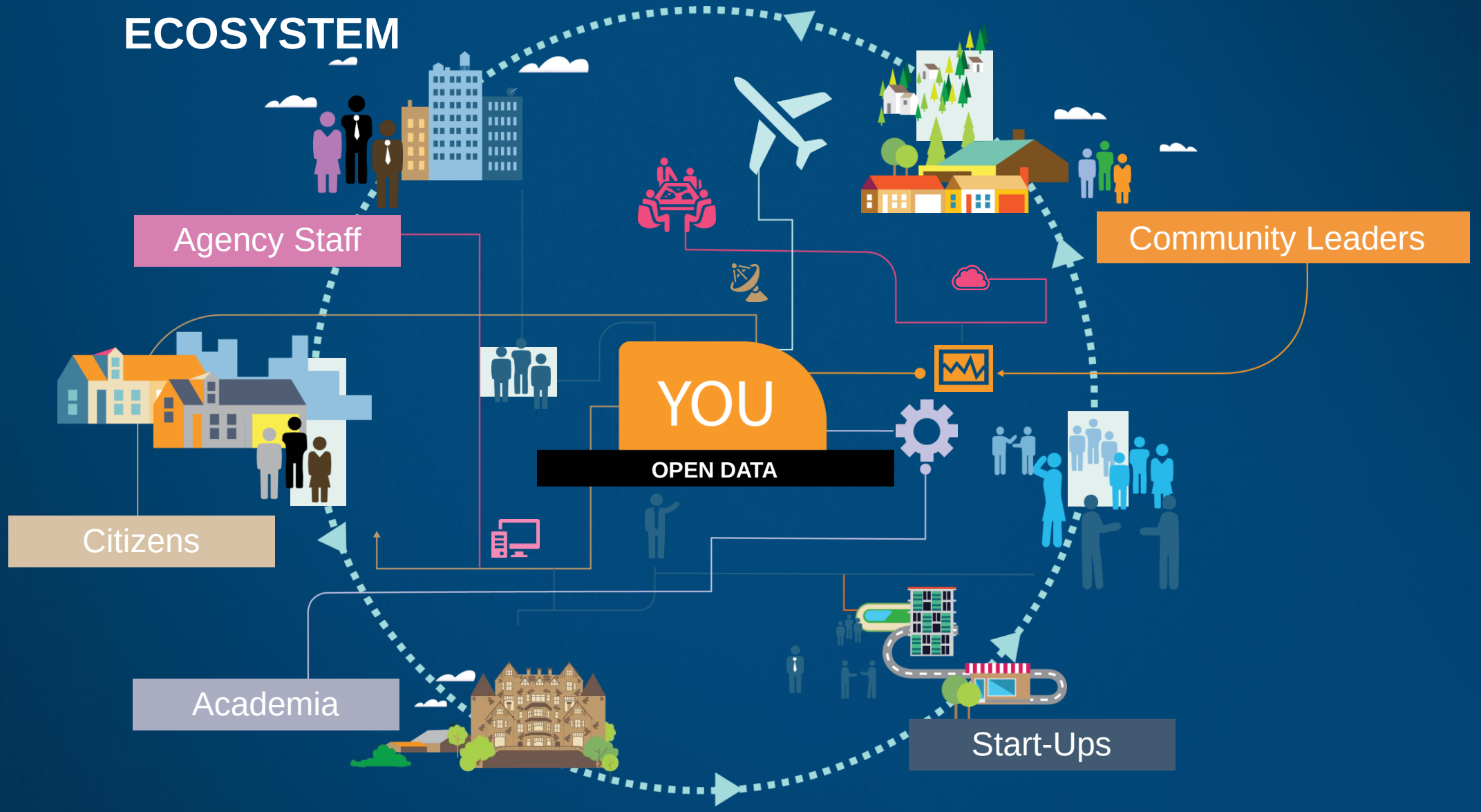
Modern Expectations of Sharing

- Open Data is now an EVERYDAY THING
  - International movement to provide transparency and enable economic development
  - Formalized process to license and share data to the public
  - Often supported by governing legislation

- Solutions connected to Enterprise Architecture
  - Leveraging Servers to share out and ingest data
  - Minimal impact on the information workers

An INNOVATION

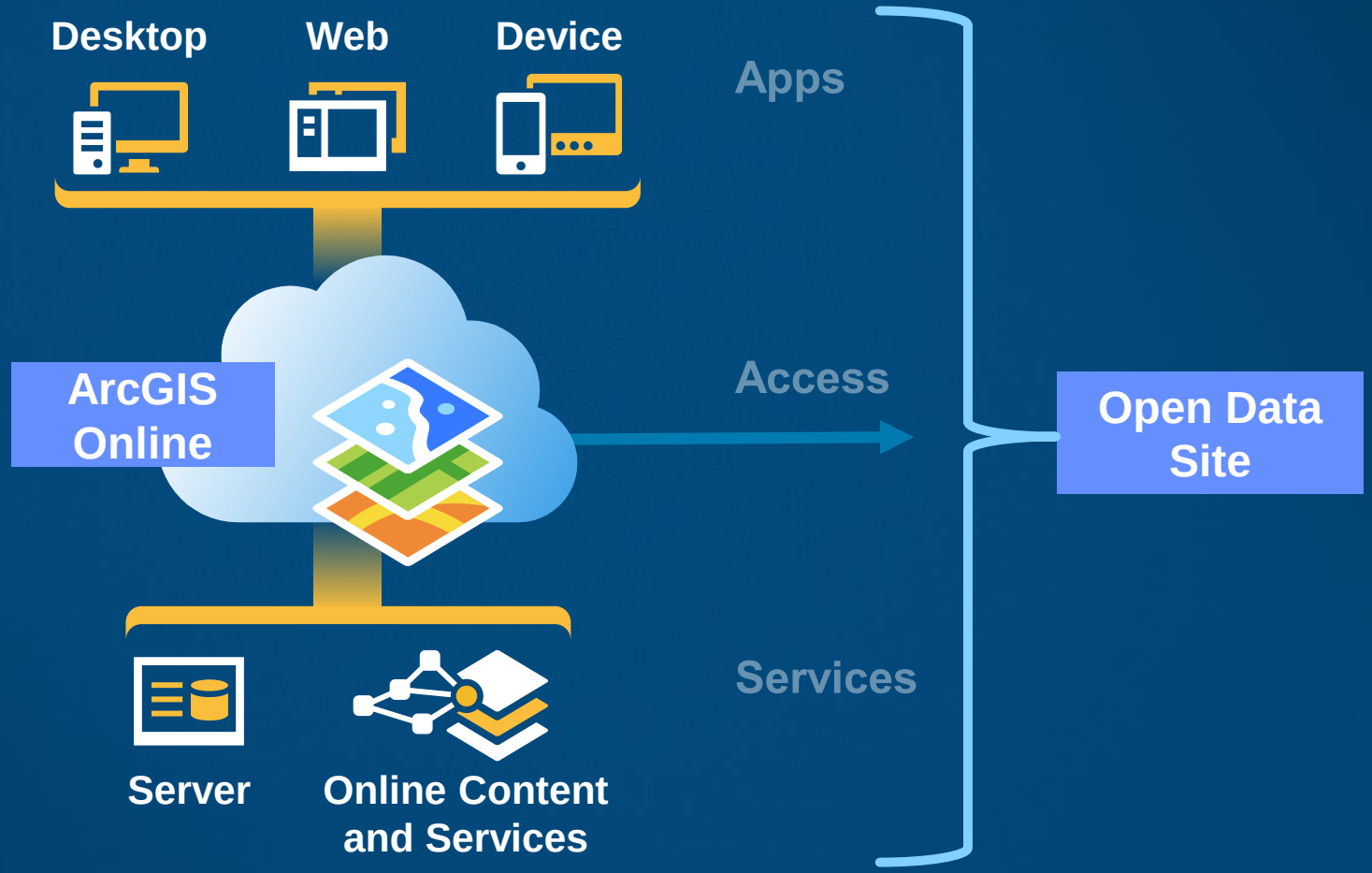
ECOSYSTEM



Part of the ArcGIS Platform

Providing open access to your published data

- Simple
- Integrated
- Open

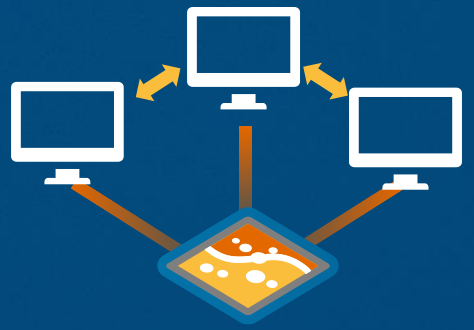


ArcGIS Open Data Principles

Accessible

Discoverable

Explorable



Collaborative

Current State of ArcGIS Open Data

- Complete Open Data solution for Operational Tables and Spatial Data
  - 7,600+ Organizations around the world
  - 70,000 Datasets shared into Open Data
  - 20,000,000+ Downloads in 2016

- 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

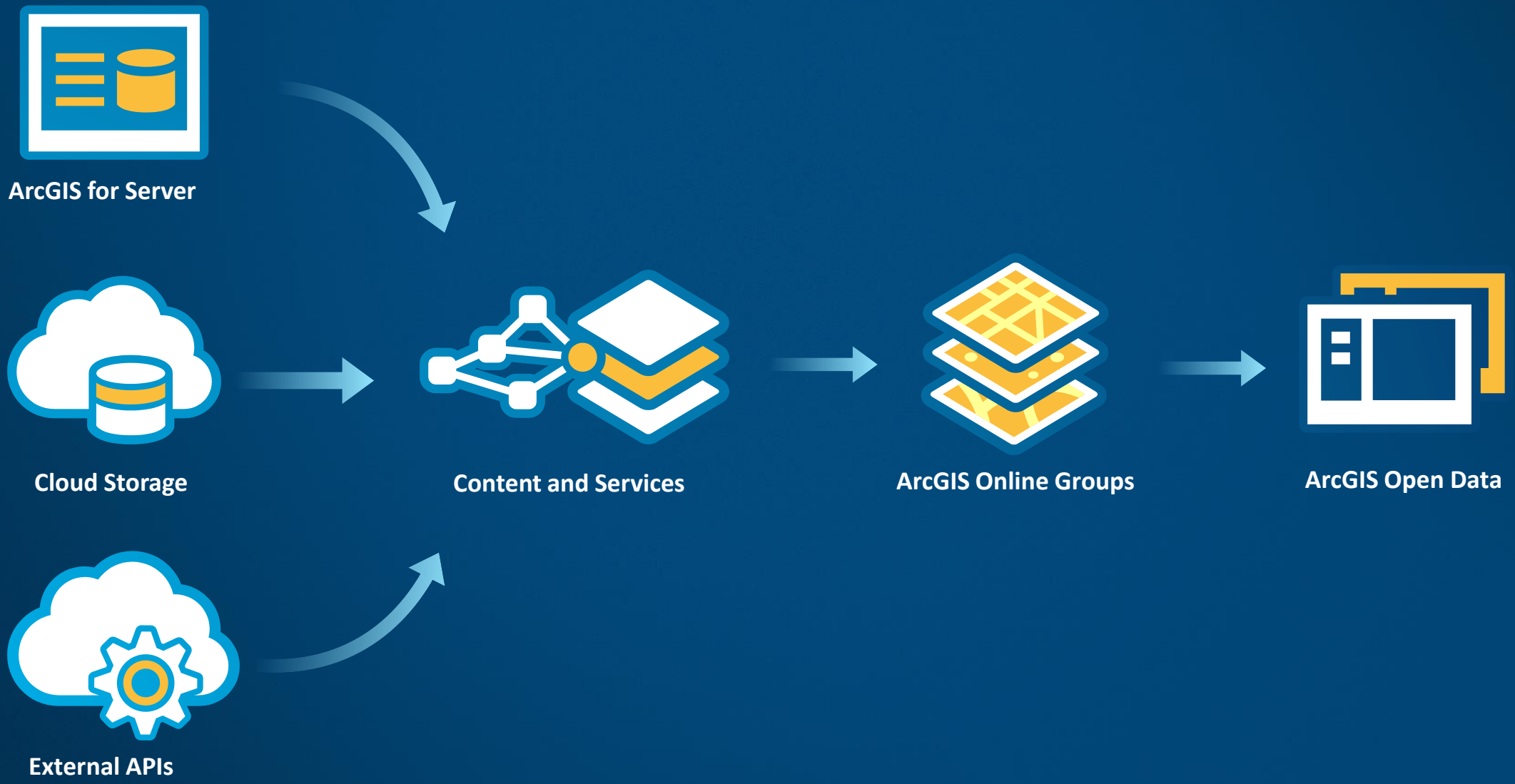
- Build a site that represents your organization to the public
  - General or focused on issues, departments, events
- Automatically convert your data regardless of source, into open file formats for download
  - Support for Operational Tables and Spatial Data
- Apply your terms of use to License the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

Quick demo

End user interface and admin

Building the Catalog

Leverages existing services and familiar workflows

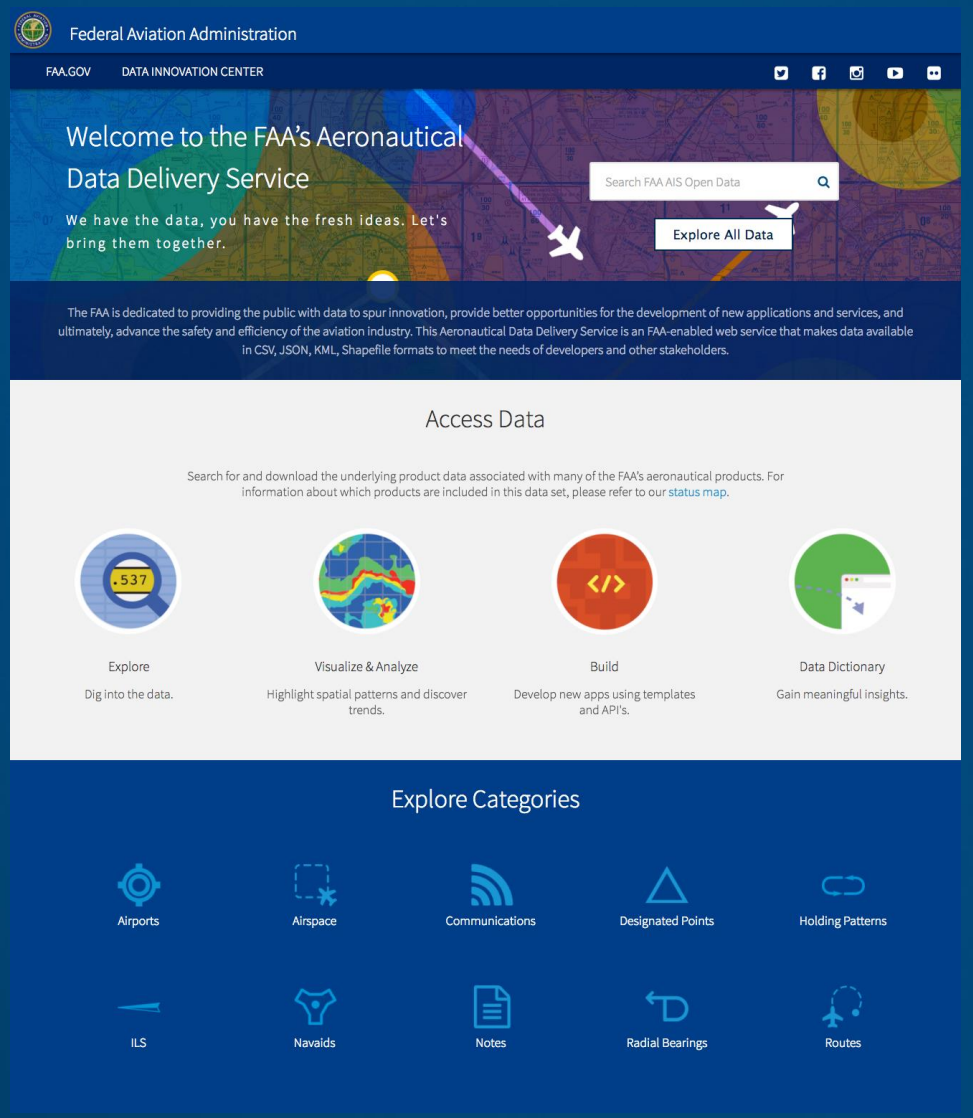


Open Data Workflows

Auto ETL and Custom Search

- *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*

Open Data Site

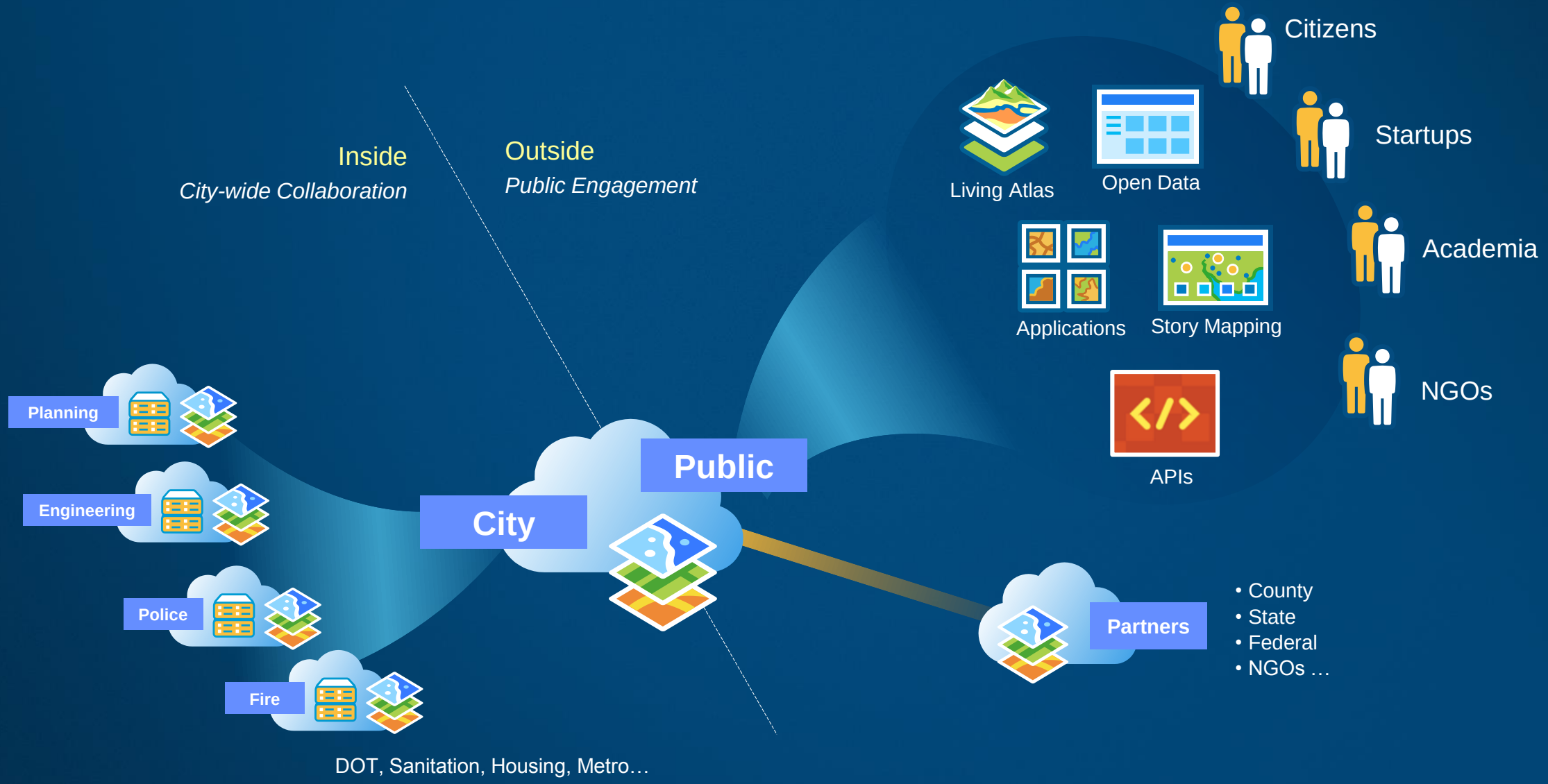


Building your community

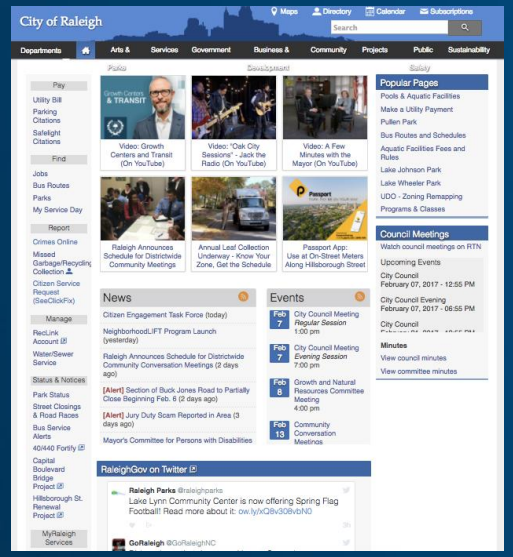
Tell your story

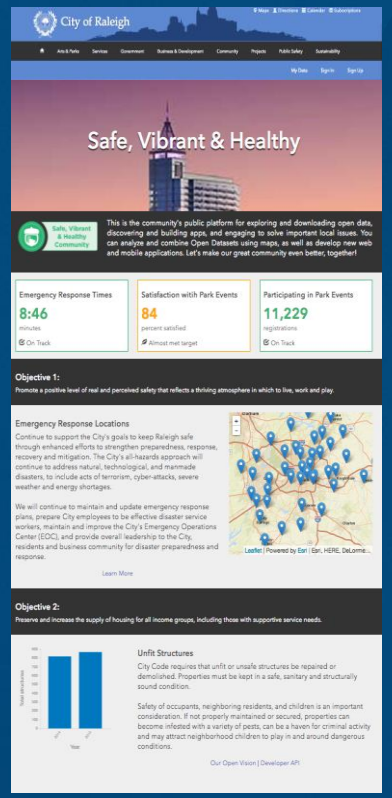
Leverage the platform

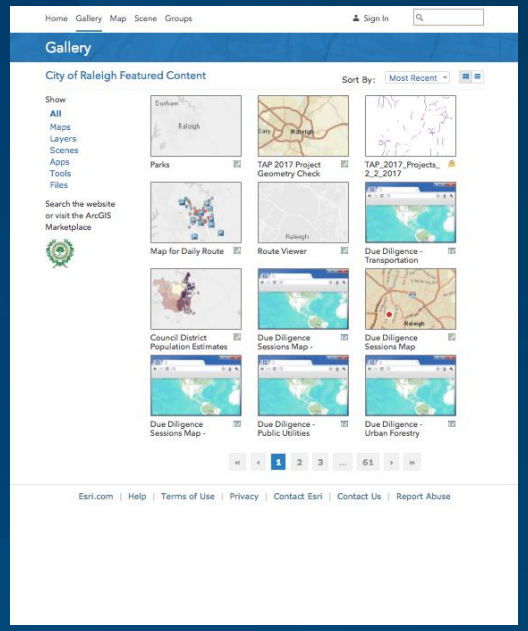
A Platform for Civic Engagement



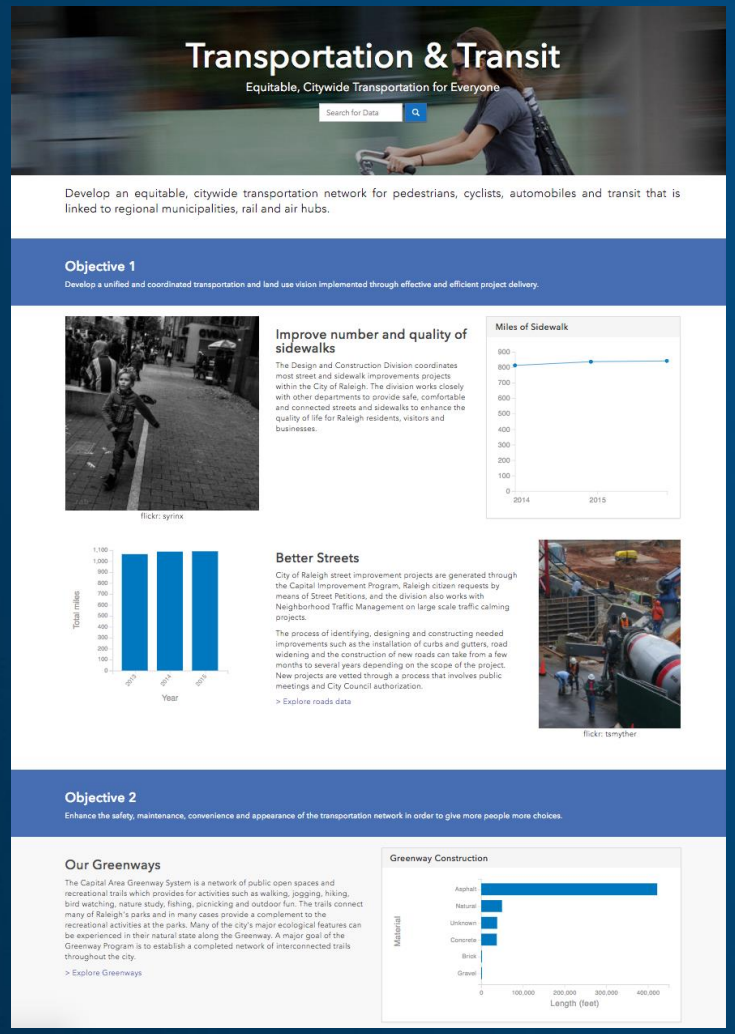
A Platform for Civic Engagement

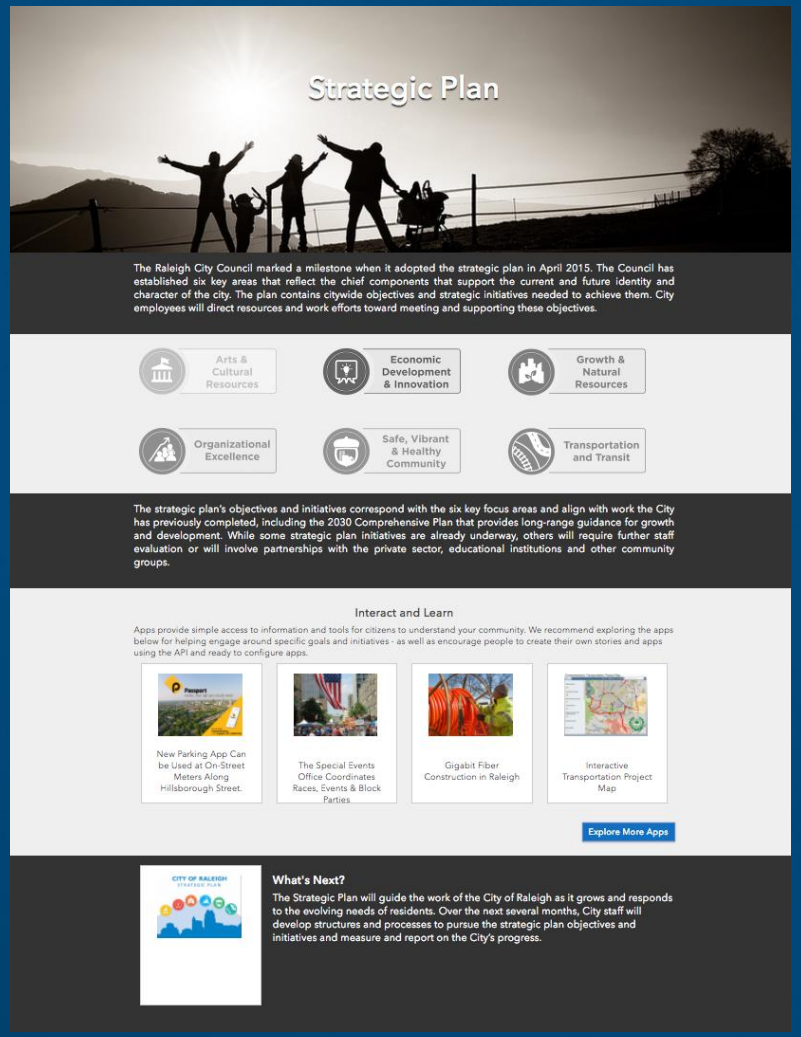


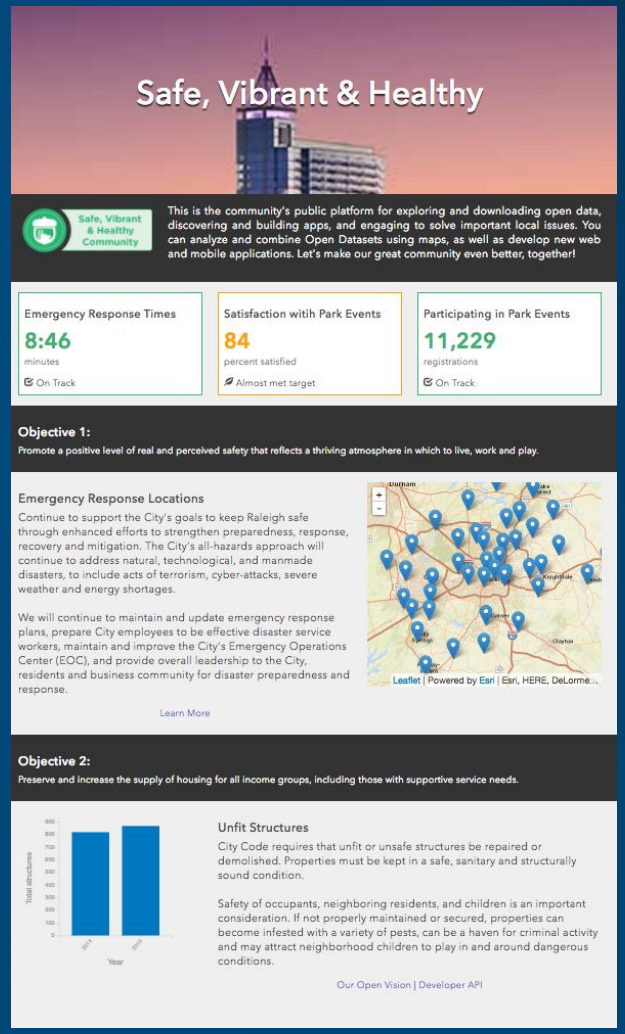




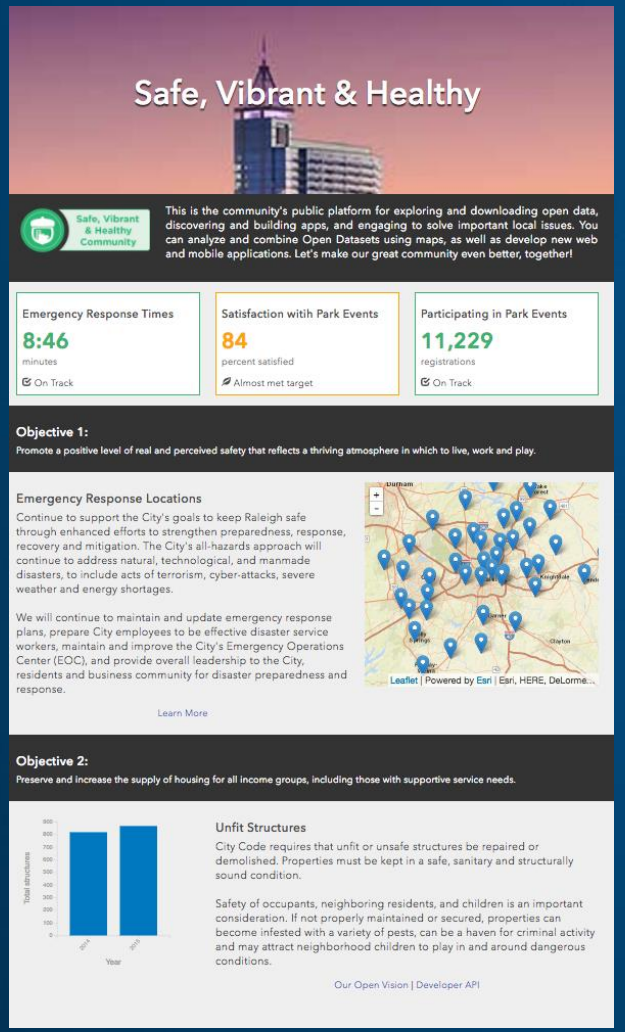
Your Data has a Story

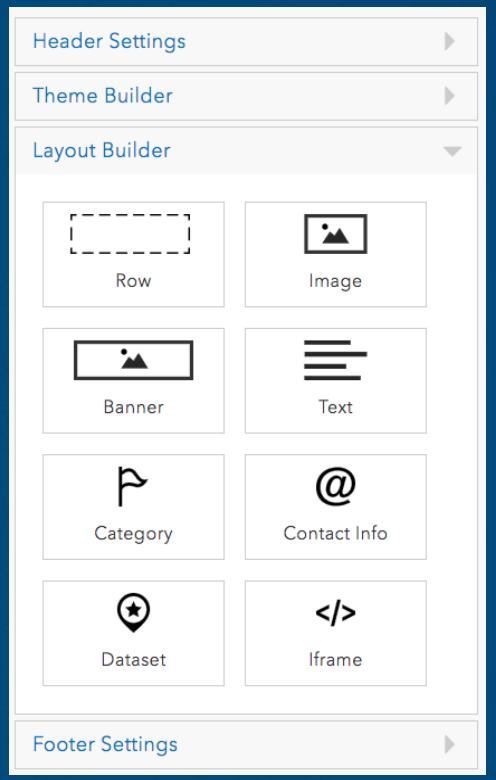


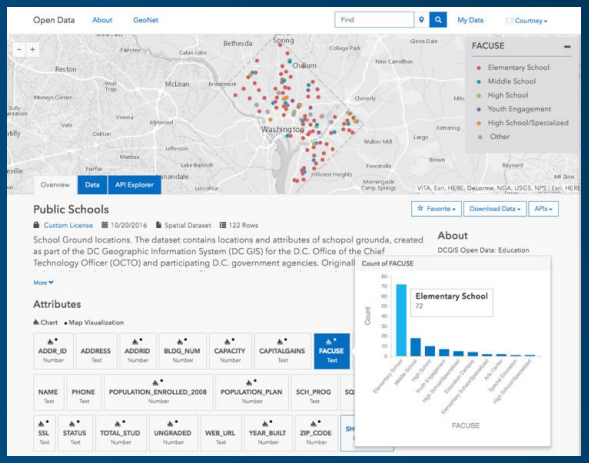


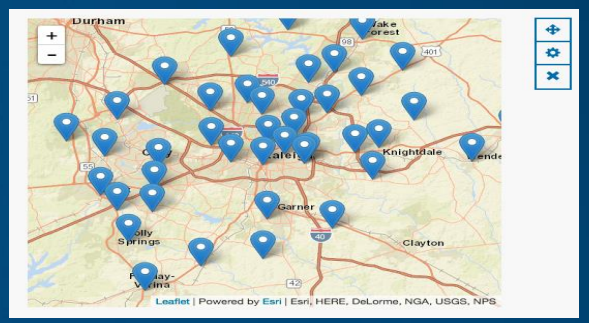


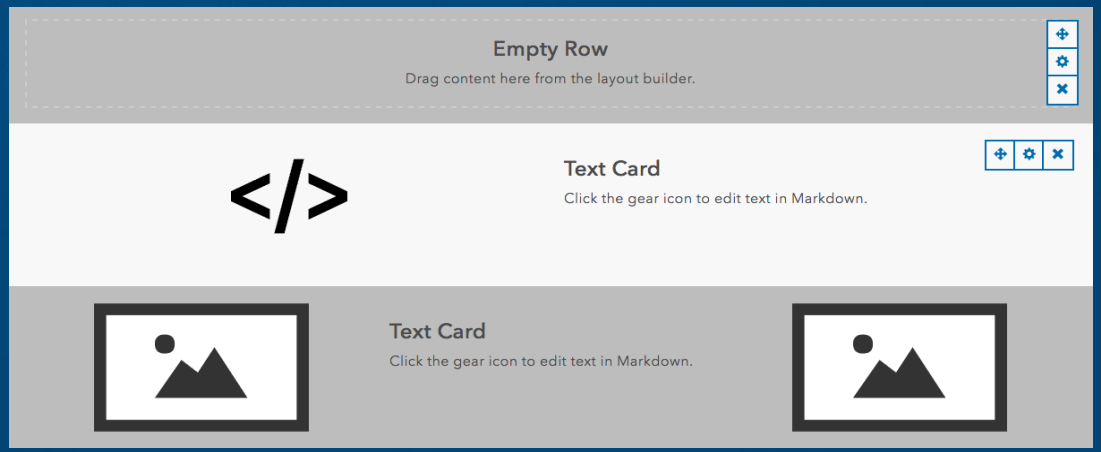
Tell Your Story with a Page





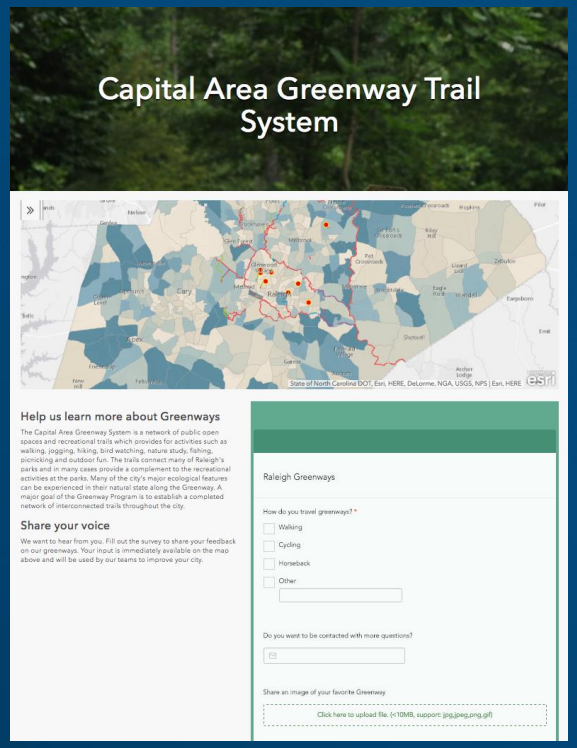


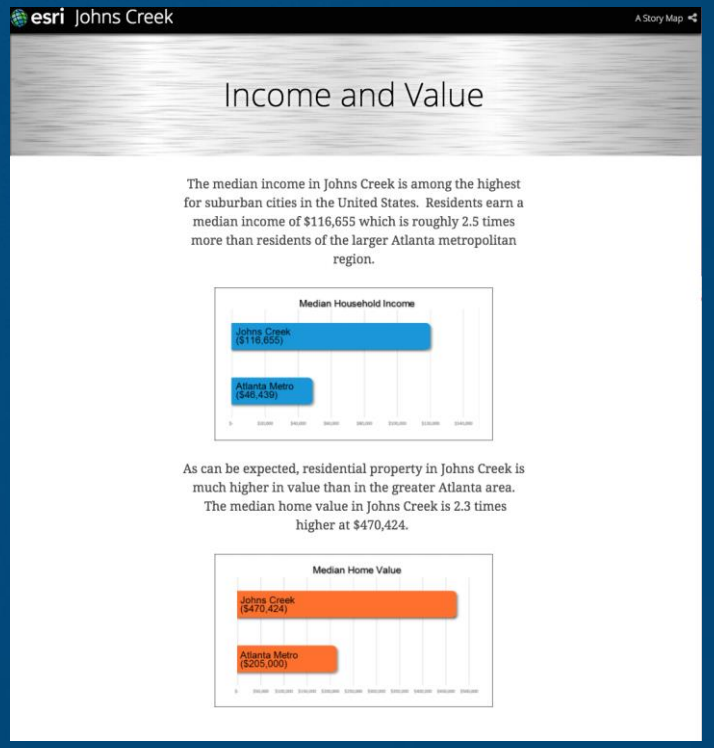




Engage Your Community

- Story Maps & Survey Apps for two way communication



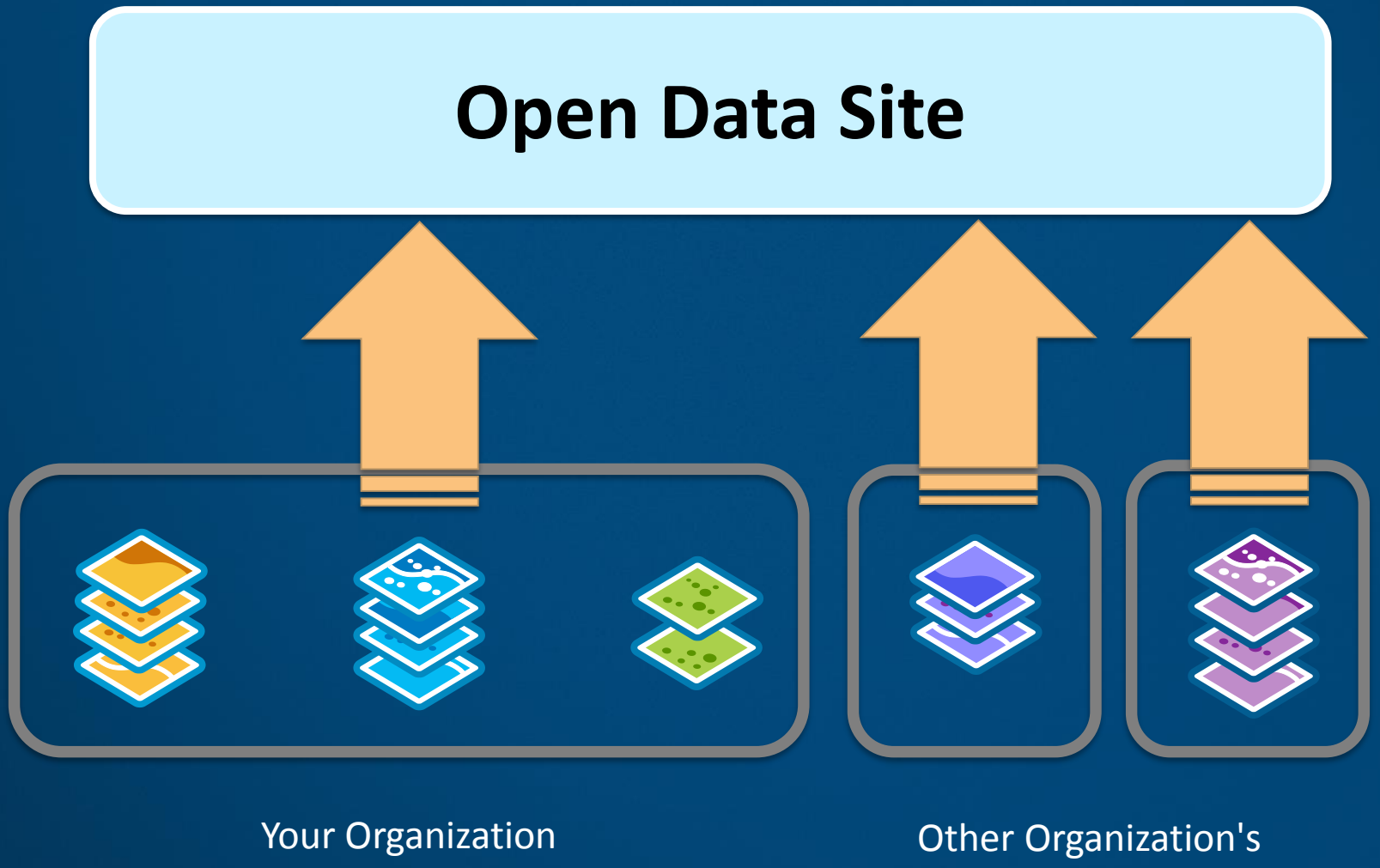


Quick demo

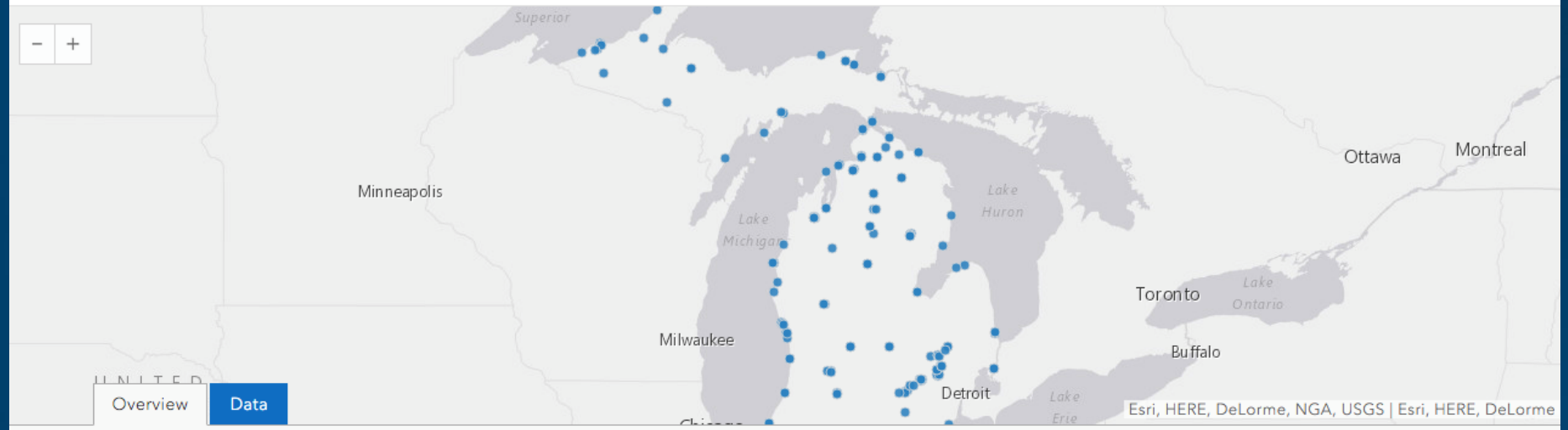
Pages

Data Federation

Leverages existing services and familiar workflows



Open Data About GeoNet Find Sign In



Michigan State Park Campgrounds

Download Data APIs

Custom License 12/10/2015 Spatial Dataset 151 Rows

State Park Campgrounds are public campgrounds located within Michigan State Parks.Metadata

Attributes

ADA_SITES	Camp_type	Condition	COUNTY	Detail_Type	DISTRICT	FACILITY	Management
Number	Text	Text	Text	Text	Text	Text	Text

name	Ownership	Surface	TOTAL_SITE	Type	Use_
Text	Text	Text	Number	Text	Text

About

Michigan DNR Open Data
Shared By: MichiganDNR
Data Source: gisago.mcgi.state.mi.us

View Metadata
View in ArcGIS.com

Found In

- Michigan Department of Natural Resources
- State of Michigan GIS Open Data
- State of Michigan
- D3 Data Portal
- State of Michigan
- MDOT Open Data - Home

DATA.GOV
DATA
TOPICS
IMPACT
APPLICATIONS
DEVELOPERS
CONTACT
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
Agriculture
Business
Climate
Consumer
Ecosystems
Education
Energy
Finance
Health
Local Government
Manufacturing
Ocean
Public Safety
Science & Research

Quick demo

Federating with data.gov

What’s Next

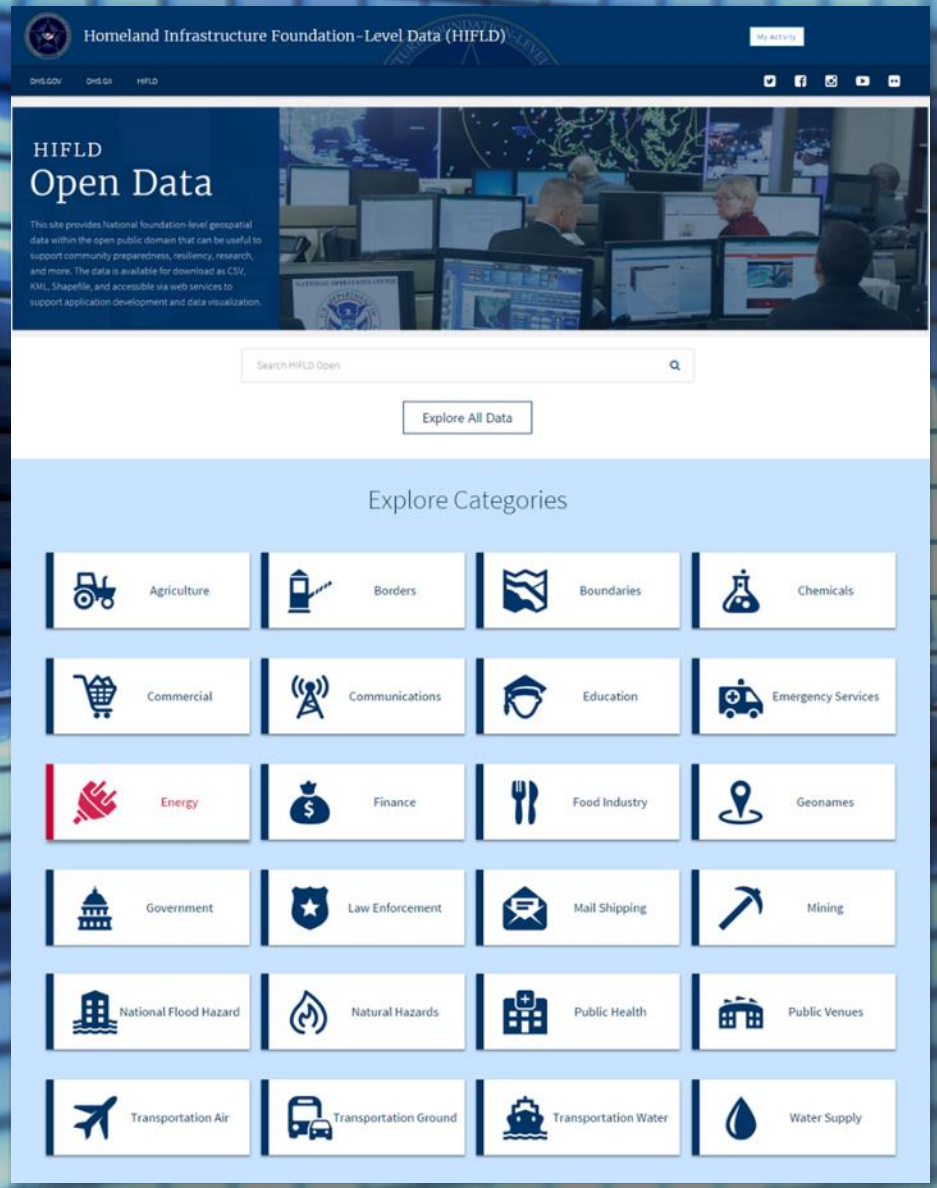
Future of Open Data

- Evolution of Sites
  - Building beyond the Home Page
    - Extension to core CMS
    - Dashboards
    - Narratives
- Civic Engagement
  - Applications built for the Public
  - Sites for departments, events, and initiatives
  - Pages built by your community
  - New ways to visualize data
- Secured Data
  - Logins required to access datasets
  - Beginning work to bring Open Data to portal
- Full HTTPS Support
  - Enforce SSL
  - Full OMB compliance

Open Data in Action

HIFLD - Travis Hardy

Homeland Infrastructure Foundation-Level Data



ARDENTMC
Managing Complexity.

Travis Hardy
Geospatial Practice Lead

About HIFLD

"The HIFLD Subcommittee is responsible for developing, promoting, and executing a coordinated strategy for acquisition or development of homeland infrastructure geospatial information for Federal agencies while creating and utilizing partnerships with State, local, tribal, territorial, and private organizations."

Our Open Evolution

Our Open Evolution

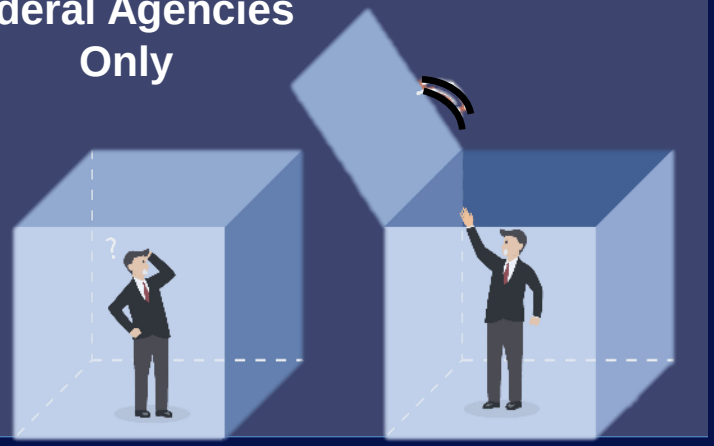
1

Closed Community

Our Open Evolution

HOMELAND INFRASTRUCTURE FOUNDATION-LEVEL DATA SUBCOMMITTEE

Federal Agencies Only



1. **Closed Community**
2. **Open & Maintain A Dialogue**

Our Open Evolution

Our Open Evolution

Federal Agencies Only

State Government

Citizens & Private Sector

Local Gov't Users

Academia

1. Closed Community
2. Open & Maintain A Dialogue
3. Break Down Barriers
4. Enable & Serve An Open Data Ecosystem
5. Maintain

Key Steps – “Making the Open Data Leap”

- Self Awareness & Culture Shift
  - “Whole of the Nation Approach”
  - In many cases much of this data exists in the open already
  - The ‘good’ to be had with this data outweighed the ‘bad’

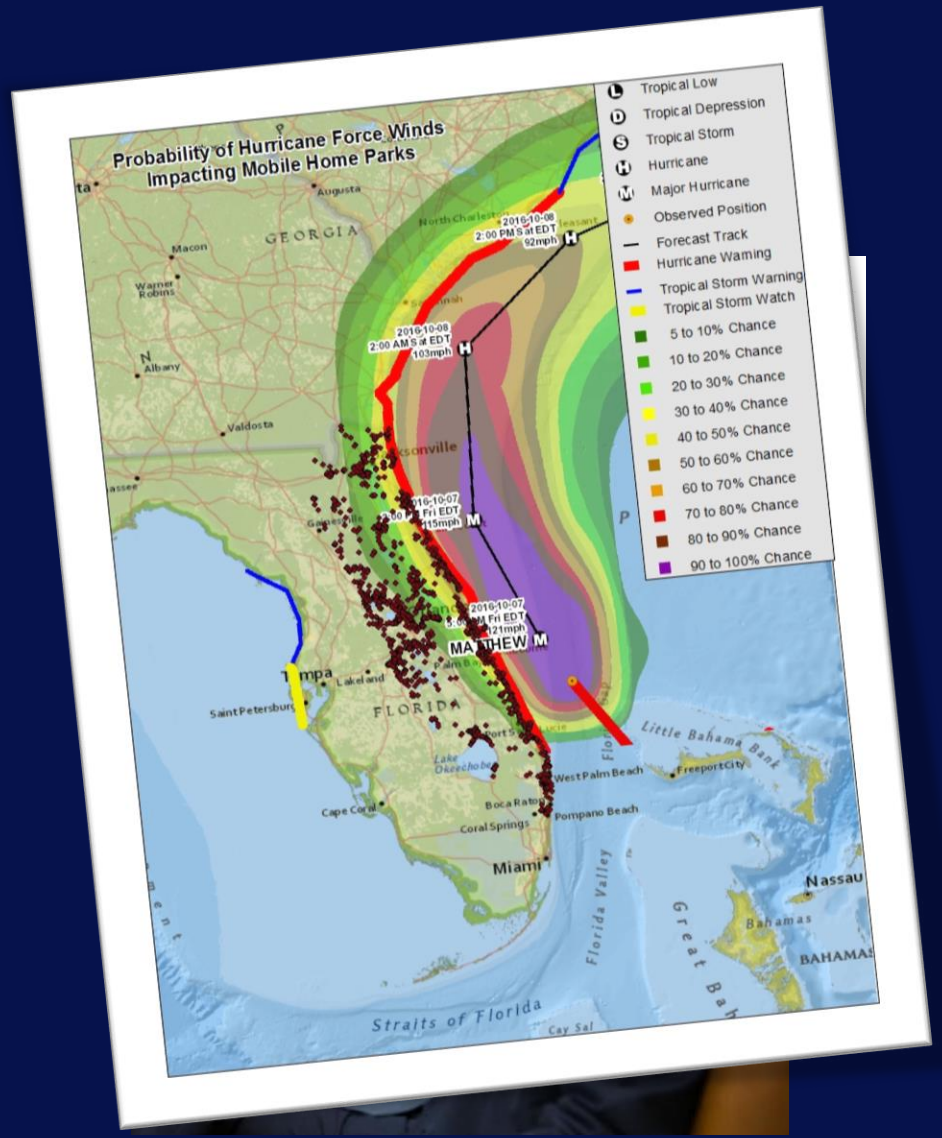
- Work the Processes Towards Our Purpose
  - Build advocacy through strong socialization and governance
  - Strong Multi-Agency Coordination (DHS, NGA, etc…)
  - Complete review of access/use constraints
  - Informing and coordinating with NGA General Counsel and other Agencies with data ownership for releasability.

- Scalable Technology to Meet ‘Unknown Demand’
  - DHS’s ArcGIS Online coupled with Open Data
  - Leverage this cloud environment without impacting DHS Mission Critical Systems

Maintaining A Balanced Approach

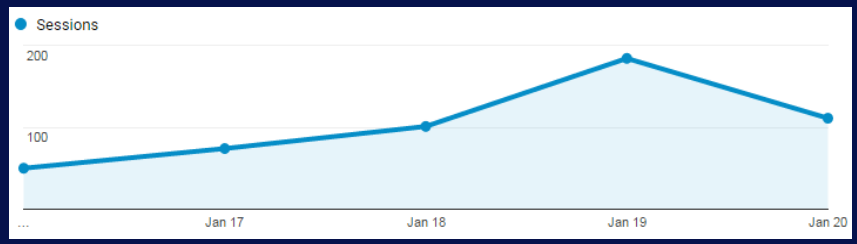
- Continue to work with our end users and subcommittee members
- ‘Open Data First’ Policy
- Ensuring FOUO restrictions are documented, understood, and re-evaluated periodically.
- Meter & Monitor HIFLD Open Usage

A Few Examples of Recent Success



Inauguration Week

1/16/17 – 1/20/17



Total Sessions: 520

Total Users: 368

Questions?

Come visit the HIFLD Booth in the DHS Pavilion in the Exhibit Hall.

Or

Contact the HIFLD Support Team at hifld@hq.dhs.gov

Thank you!

https://gii.dhs.gov/hifld/data/open

#HIFLDopen

ARDENTMC

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

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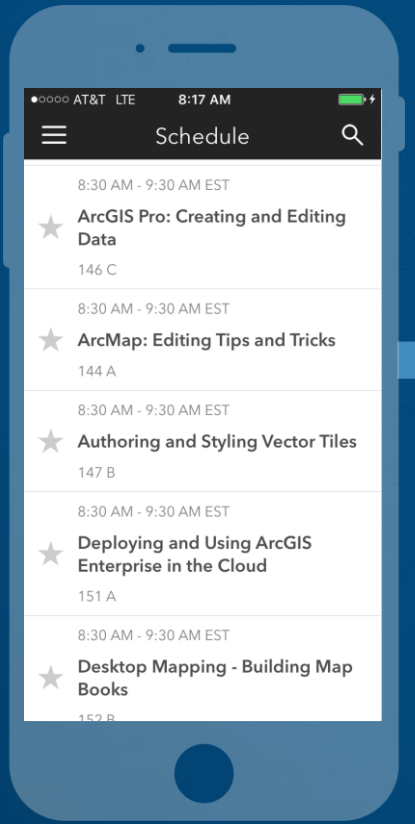
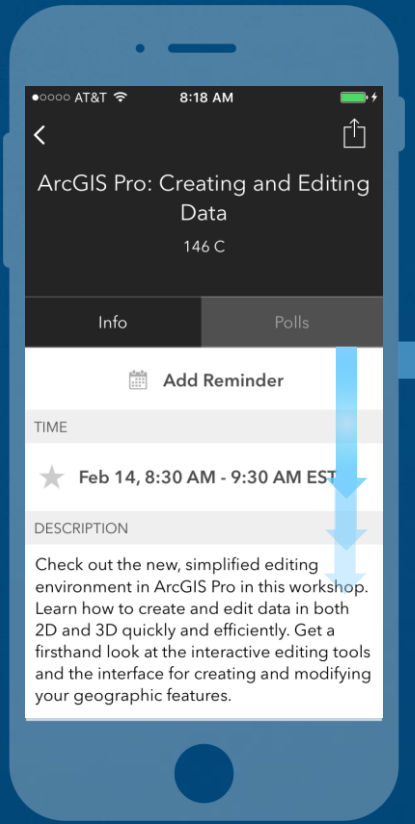
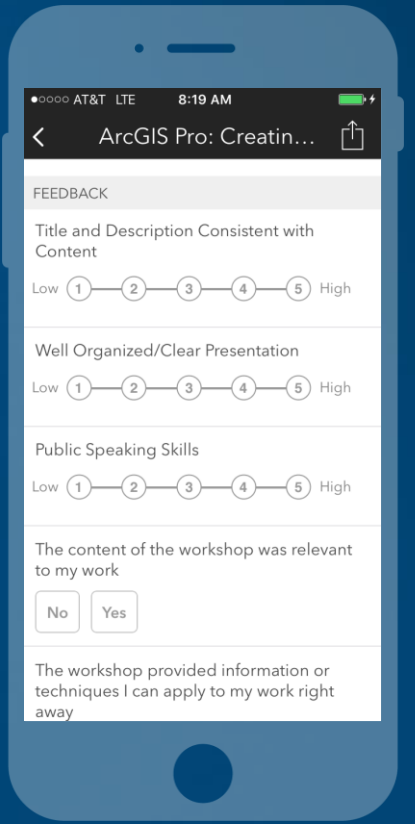
Select the session you attended



Scroll down to find the survey



Complete Answers and Select "Submit"



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THE SCIENCE OF WHERE