Eric Abrams - Iowa Department of Transportation

Open Data Portal
Introduction

Review how Iowa Department of Transportation leverages REST services in two portals:

- Iowa DOT Open Data Map Portal (data.iowadot.gov)
- State of Iowa Open Data Portal (data.iowa.gov)

A. Preliminary Organization
B. Metadata Synchronization
C. Open Data Migration
D. Open Data Site
A. Preliminary Organization

Set up the Iowa DOT Open Data Map Portal V2

Created data categories and metadata standards:

**EXPLORE DATA CATEGORIES**

- **OPERATIONS**
  - View real-time data from our innovation fleet, ITS devices (lanes and message signals), 511 events, incident management, and more. Data in this category is updated at least once per day.

- **CRASH**
  - Explore city and county crash data, intersection crash data, and vehicle-pedestrian crash data.

- **BOUNDARY AND REFERENCE**
  - View right of way data, LRS zones, centerline boundaries, and more.

- **CLASSIFICATIONS**
  - Includes data that is broken down and displayed by specific classifications such as right of way and land uses, and data monitored inside the Roadside Asset Management System (RAMS).

**IMPROVEMENT**

View data on assets that have been identified for improvement through statewide grant programs or the 5 year program.

**INVENTORY**

Includes data for assets that are not broken down by specific classifications such as maintenance guidance.

**AVIATION**

View runways, heliports, approach and primary airport surface data, and more.

**TRANSIT**

Includes regional transit assets and mobility coordinator information.

**Required Metadata to Publish to Everyone:**

- **Title:** Appropriate title
- **Summary:** 1-2 sentence summary of content
- **Description:** Detailed description including source of data, content last updated, & change log (optional)
- **Tags:** Iowa Department of Transportation, Iowa DOT, Category Keywords

**Access Use & Constraints:**

- Click on The code icon ![Creative Commons License](https://i.creativecommons.org/l/by-sa/2.0/88x31.png) and paste the following:

  ```
  &lt;a href="http://creativecommons.org/licenses/by-sa/2.0/"&gt;&lt;img alt="Creative Commons License" src="https://i.creativecommons.org/l/by-sa/2.0/88x31.png" style="border-width:0;" /&gt;&lt;/a&gt;&lt;br /&gt;This work is licensed under a &lt;a href="http://creativecommons.org/licenses/by-sa/2.0/"&gt;Creative Commons Attribution-ShareAlike 2.0 Generic License&lt;/a&gt.;
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  &lt;br /&gt;&lt;br /&gt;&lt;/u&gt;&lt;/div&gt;&lt;br /&gt;&lt;/w&gt;Additional Terms and Conditions&lt;/w&gt;&lt;/br /&gt;&lt;br /&gt;

- **Credits:** Iowa DOT’s GIS Data Terms of Use

  ```
  &lt;a href="http://www.iowadot.gov/terms_of_use.htm#GISdata"&gt;Iowa DOT's GIS Data Terms of Use&lt;/a&gt;&lt;br /&gt;
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A. Preliminary Organization

Attended Socrata training webcasts to learn the State of Iowa Open Data process

Attended ESRI Training on Open Data and AGOL

Utilized spreadsheets to organize services and synchronize metadata between Open Data portals and REST services

 Took inventory of Iowa DOT datasets already on the Open Data portals

 Contacted SMEs to determine whether their services were appropriate for Open Data
B. Metadata Synchronization

1. Updated links and synchronized metadata for REST services already on one or both Open Data portals

2. Cataloged each REST service as it was migrated to easily compare metadata
   - Separated each layer of multi-layer services (required)
   - Categorized all services using tags
   - Ensured that all metadata standards were met
B. Metadata Synchronization

4. Searched for pre-existing icons for each service
5. Used generic category icons if good fit
   • Requested new icons if needed
C. Open Data Migration

1. ESRI Open Data can use Feature Services but State of Iowa Open Data can only use Map Services
   • AGOL services were all Feature Services, so they could only be added to Iowa Open Data as links to external data
   • Examples on next few slides...

2. Added all services to both Open Data Portals using the same titles and metadata, and the appropriate link for each

3. Created instructional materials to inform staff about how to use Open Data portals
C. Open Data Migration

Iowa DOT Open Data Portal – Five-Year Program: 2022 Highways

The Program contains the primary and interstate highway construction related investments planned for fiscal year (FY) 2022. To view the Program, visit the Iowa DOT’s Program Management website. In general, contracts awarded during a

Attributes

- Cost (SK)
- County Number
- District Number
- Fiscal Year Number
- Fiscal Year PIN
- Location Text
- Route Number

- Work Type

SHOW MORE
1 Attribute
C. Open Data Migration

State of Iowa Open Data Portal – 2022 Highways (map)
C. Open Data Migration

State of Iowa Open Data Portal – Five-Year Program (link)
C. Open Data Migration

State of Iowa Open Data Portal – Five-Year Program (All layers)

Multiple layers from a single service can be combined on the State of Iowa Open Data portal. There is not yet a way to do this on ESRI’s Open Data platform.
ESRI Open Data Portal in Detail

- Make data as open as possible
- Leverage COTS product – Open Data
- Leveraged Open Data Site for training
Demo

- [http://data.iowadot.gov/](http://data.iowadot.gov/)
- [http://training-iowadot.opendata.arcgis.com/](http://training-iowadot.opendata.arcgis.com/)
- [http://iowadot.maps.arcgis.com/home/index.html](http://iowadot.maps.arcgis.com/home/index.html)
That’s all folks

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