DRAFT Open Geospatial Data Guidelines

October 2017

# Background

In order to promote standardized sharing of geospatial data among state and local governments, three Open Data peer exchange workgroup sessions were held during August and September 2017. From that workgroup, these guidelines were developed for creating and publishing data using Esri’s Open Data Platform.

The objective is for agencies to share data in a centralized location that is easily accessible to other agencies and the public. During the meetings, the workgroup decided that the centralized location for sharing geospatial data should be [geo.wa.gov](http://geo.wa.gov/). Geo.wa.gov is hosted by the Geospatial Program Office at OCIO and is an aggregator of data that are published and shared to that site by the individual agencies. Individual agencies determine what data should be published and shared and are responsible for the maintenance schedule and metadata development.

Here is an example of a dataset that is hosted by DNR and shared with the geo.wa.gov Open Data site. If the user goes to DNR’s site, they will find the same data that is shared with geo.wa.gov which means that citizens can access the data from different directions, yet still obtain reliable, consistent data.

* [DNR Site Referencing Eelgrass](http://data-wadnr.opendata.arcgis.com/datasets/shorezone-inventory-eelgrass)
* [Geo.wa.gov Site Referencing Eelgrass](http://geo.wa.gov/datasets/243dab3352314e0b8bccaf8194cae098_0)

This document provides some general guidelines for publishing and sharing data to geo.wa.gov. Additional details, documents, references to policies and standards, and notes from the workgroup meetings and Geospatial Portal Steering Committee meetings are available through this link: [Open Data Workgroup Notes](http://ocio.wa.gov/geographic-information-technology-git-committee/geospatial-portal-steering-committee)

Need help/ more questions? Contact [Joanne Markert](mailto:joanne.markert@ocio.wa.gov?subject=Open%20Geospatial%20Data%20Guidelines) at OCIO.

## What can be shared via geo.wa.gov?

* **Category 1 Data**
  + Need help determining this? Refer to [Geospatial Portal Meeting Notes](http://ocio.wa.gov/geographic-information-technology-git-committee/geospatial-portal-steering-committee) from October 12, 2017 which references a data categorization procedure provided by DSHS.

## Want to create and manage an Open Data site?

Although creation of an Open Data site is not required to publish and share your agency’s data to geo.wa.gov, your agency may wish to create a branded distribution site.

* The workgroup notes have detailed directions provided by DNR on how to create an Open Data site: [Open Data Workgroup Notes](http://ocio.wa.gov/geographic-information-technology-git-committee/geospatial-portal-steering-committee)
* If your agency already has an Open **Geospatial** Data site, add “Washington State Open Data” group to share with geo.wa.gov

Examples of current Washington state and local open data sites:

* + - <http://data-wadnr.opendata.arcgis.com/>
    - <http://gdl-wadshs.opendata.arcgis.com/>
    - <http://gisdata-piercecowa.opendata.arcgis.com/>

## Measuring your Site and Services

**Analytics:** Knowing who is using your site, frequency of user visits, and specifically which services are being utilized are important measures for evaluating where improvements can be made. There are many tools available; WSDOT is using Google Analytics. Here is a link to a YouTube video for additional details - [Tracking Engagement with ArcGIS Open Data](https://www.youtube.com/embed/HLEtOvxr2nc).

## Other Considerations

**Tagging:** Tagging your data allows the data to be incorporated into the correct overall category for the geo.wa.gov site. It also gives our customers the ability to search and find what they are looking for more efficiently. In order to make that happen, we need to follow some basic guidelines to create consistency.

Recommendations include:

* **Use** [**ISO Categories and Codes**](http://ocio.wa.gov/sites/default/files/public/Geospatial/iso_19115_metadata_topic_categories.pdf). These categories will be used to place your data into the correct overall “bucket” on the site and help streamline customer searches (Environment or Transportation, for example). Use more than one if appropriate, but realize they will likely show up under multiple categories when searching.
* **Identify your agency**. Customers may use agency names or abbreviations to search for a specific data source. Here is a link to [agency codes and abbreviations](http://www.ofm.wa.gov/policy/75.20.htm), but don’t stop there; use names,abbreviations, and keywords that your customers will recognize.
* **Include a geographic area**. Washington or reference a specific county (Pierce) or region (Northeast) if appropriate.

**Example:** [Eelgrass ShoreZone Inventory](http://geo.wa.gov/datasets/243dab3352314e0b8bccaf8194cae098_0)

* + - WADNR, WA, DNR, Washington, State, Department, Natural, Resources, Aquatics, eelgrass, ShoreZone, saltwater, coastal, shoreline, biota, BIO, 002, GIS, geospatial, open, data
* **For more information** about tagging, refer to this [blog entry](https://blogs.esri.com/esri/arcgis/2017/07/29/using-tags/) by Esri.

**Date References:** Remember to refresh the dates in the service documentation. The dates provided via the Open Data site can refresh for a variety of reasons and may not necessarily reflect actual updates to data or services.

**Branding:** Our customers will want to know that they are getting data from the correct source. To help users easily identify and distinguish data layers and services, use thumbnails that incorporate your agency logo or other identifying icon. Please check with your agency’s communications staff for approved public logos. Several agencies have different methods for generating thumbnails. If you would like to use the one developed for OCIO, you can access [the tool here](http://nwdemo3.esri.com/thumbnailgenerator/thumbnailgenerator.htm), but please use text that identifies your agency as the source.

**Access/Use Constraints/Terms of Service:** Data and services must specify access and use constraints. Examples of the types of language other agencies are using are shown below. Additional language specific to the data or agency can be included if necessary. One option for handling documents is hosting them in one location and linking to them within the service metadata. This arrangement allows the documents to be edited/ updated in a single location, but remain available to all services and data that are linked to it.

* **Example of Data Access Language:**

Washington's Public Records Disclosure Act ([RCW 42.56](http://apps.leg.wa.gov/RCW/default.aspx?cite=42.56)) was adopted by initiative of the people in 1972 to open government records to the public. Open data supports the Governor’s priorities for Efficient, Effective and Accountable Government through Transparency and Accountability. The Washington State [Department of …] […] believes in the importance of the public’s right to know about its operations and activities. […] prepares and uses this data and information as a conceptual tool for its own internal purposes. No public agency, public official, public employee, or custodian shall be liable, nor shall a cause of action exist, for any loss or damage based upon the release of a public record if the public agency, public official, public employee, or custodian acted in good faith in attempting to comply with the provisions of Washington’s Public Records Act.

* **Example of Use Constraints/ Terms of Service Language:**

[…] reserves the right to alter, suspend, re-host, or retire this service at any time and without notice. This service can be used in custom web applications and software products. Your use of this service in these types of tools forms a dependency on the service definition (available fields, layers, etc.) If you form any dependency on this service, be aware of a significant risk to your purposes. Consider mitigating your risk by extracting the source data and using it to host your own service in an environment under your control. Typically, […] staff will provide notification of changes via the Comments RSS capability in ArcGIS Online. You may subscribe to the RSS feed that publishes comments to monitor any planned and notified changes.

**Accessibility:** This is a developing topic, but one that we need to plan for and keep in mind when improving existing services. Here are a few links to get you started, but you should also contact your agency lead for accessibility guidelines.

* [Washington State’s Accessibility Policy](http://ocio.wa.gov/policy/accessibility)
* [Esri’s Section 508 (Accessibility) statement](http://www.esri.com/legal/section508)
* Popular screen reader - [JAWS](http://www.freedomscientific.com/Products/Blindness/JAWS)
* Application that helps determine colorblind safe palettes - [colorbrewer](http://colorbrewer2.org/)
* WSDOT developed a [tool](http://www.wsdot.wa.gov/mapsdata/gis/accessibilitytable/index.html) that provides a link to a screen readable version of a feature service attribute. Here is an [example](http://www.wsdot.wa.gov/mapsdata/gis/accessibilitytable/index.html?url=http%3A%2F%2Fdata.wsdot.wa.gov%2Farcgis%2Frest%2Fservices%2FShared%2FParkAndRide%2FMapServer%2F0); use with your screen reader of choice or Chrome’s built-in screen reader.