Data Flow: From Transactional to Discoverable
## Download National Datasets

Data collected and managed by Forest Service programs is available in a map service and two downloadable file formats – in a shape file and an ESRI file geodatabase. Metadata is available that describes the content, source, and currency of the data. You can filter the list by the topic categories in the menu at the left to help you find information you are interested in. You can view the feature classes in a single dataset by clicking on the name of the parent dataset at the bottom of the abstract.

- More FS map services are available in ArcGIS Online
- Topic Category Descriptions

### Search by keyword:

<table>
<thead>
<tr>
<th>Feature Classes</th>
<th>Abstract</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Activity Silviculture Timber Stand Improvement</strong></td>
<td>The SilVTSI (Silviculture Timber Stand Improvement) feature class represents activities associated with the following performance measure: Forest Vegetation Improved (Release, Weeding, and Cleaning, Precommercial Thinning, Pruning and Fertilization). The activities data set portrays the areas where activities are accomplished. [see more]</td>
</tr>
<tr>
<td><a href="170MB">ESRI geodatabase</a></td>
<td>[metadata map service](parent dataset: Activities)</td>
</tr>
<tr>
<td><a href="305MB">Shape file</a></td>
<td>Date of last refresh: May 19, 2017</td>
</tr>
</tbody>
</table>

| **Activity Silviculture Reforestation** | The SilVReforestation feature class represents activities associated with the following performance measure: Forest Vegetation Establishment (Planting, Seeding, Site Preparation for Natural Regeneration and Certification of Natural Regeneration without Site Preparation). The activities data set portrays the areas where. [see more] |
| [ESRI geodatabase](230MB) | [metadata map service](parent dataset: Activities) |
| [Shape file](421MB) | Date of last refresh: May 19, 2017 |

| **Hazardous Fuel Treatment Reduction: Line** | The Forest Service’s Natural Resource Manager (NRM) Forest Activity Tracking System (FACTS) is the agency standard for managing information about activities related to fire/tuels, silviculture, and invasive species. FACTS is an activity tracking application for all levels of the Forest Service. This layer represents activities. [see more] |
| [ESRI geodatabase](205KB) | [metadata map service](parent dataset: Activities) |
| [Shape file](125KB) | Date of last refresh: May 19, 2017 |
Pulls from EDW Featureclasses, so updated nightly (for most datasets)
National Forest System Trails Data Status

Pulls from EDW Featureclasses, so updated nightly (for most datasets)
EDW Feature classes show publication date and time in Item Description
Hazardous Fuel Treatment Reduction: Line (Feature Layer)

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Attributes

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Dates here show posting date, not currency of the Spatial Dataset
The U.S. Forest Service has configured this open data site to help our partners and the public discover geospatial data published by the Agency. Use it together with your data to create maps, apps and other information products.

**ARC GIS OPEN DATA**

*Presentation for R2 RI Virtual Meeting*

*Tuesday, May 23, 2017*
OPEN DATA – WHAT IS IT?

- **THE TERM “OPEN DATA” REPRESENTS THE IDEA THAT DATA SHOULD BE AVAILABLE TO EVERYONE, WHILE ESRI’S ARCGIS OPEN DATA IS A SOFTWARE PLATFORM THAT SUPPORTS AND ENABLES OPEN DATA CAPABILITIES. THE FOREST SERVICE HAS A NUMBER OF ONGOING EFFORTS TO SUPPORT OPEN DATA INITIATIVES AND THE IMPLEMENTATION OF ESRI’S ARCGIS OPEN DATA PLATFORM COMPLIMENTS AND BUILDS UPON THESE EXISTING EFFORTS.**

- **“OPEN DATA IS DATA THAT CAN BE FREELY USED, RE-USED AND REDISTRIBUTED BY ANYONE - SUBJECT ONLY, AT MOST, TO THE REQUIREMENT TO ATTRIBUTE AND SHAREALIKE.” – OPEN DATA HANDBOOK**
OPEN DATA – WHAT IS IT?

• **ArcGIS Open Data** is a commercial off the shelf (COTS) solution that allows the USFS to share our National level authoritative datasets with the public. These datasets have been through a governance review and subsequent programmatic approval process for public dissemination.

• The goal of Forest Service Open data initiatives is to make authoritative agency data highly available and discoverable both within the agency and to our partners and the public. Existing efforts supporting Open data initiatives include:
  - Publishing authoritative agency data in the Enterprise Data Warehouse
  - Registering authoritative agency data in data.gov
  - Registering agency data in AGOL
  - Making authoritative agency data available in the FSG eO Data Clearinghouse

• All of the above data sites point towards the same authoritative agency data in the EDW and the implementation of ESRI’s ArcGIS Open Data will help us integrate and streamline the capabilities provided by these existing efforts. For example, the implementation of ArcGIS Open Data will automate our publication to data.gov and may eventually replace some of the capability provided by the FSG eO Spatial Data Clearing House.
OPEN DATA - WHAT IS IT?

- transparency
- accountability
- participation
- innovation
- economic development
- community development

open data
OPEN DATA - WHAT IS IT?

- **ArcGIS Open Data is part of the ArcGIS Platform**
- **Providing open access to your published data**
OPEN DATA – WHAT IS IT?

**ArcGIS Open Data is Accessible**
- Users can easily access the data they want
- Users can connect with the data at the source
- Users know the licensing information

**ArcGIS Open Data is Discoverable**
- Users can view all datasets on a site
- Users can search for specific datasets
- Users can see suggested related datasets

**ArcGIS Open Data is Explorable**
- Users can filter and sort data
- Users can search by location
- Users can visualize data in different smart mapping and chart options

**ArcGIS Open Data is Collaborative**
- Users can download data in multiple open formats
  - Spreadsheet (CSV)
  - KML
  - Shapefile
  - APIs: GeoJSON, GeoService, OGC WMS
- Users can share and embed datasets
- Users can add data to ArcMap or ArcGIS Online
- Data can be linked with CKAN and data.gov
OPEN DATA – WHAT IS IT?

- **The role of ArcGIS Open Data in Agency Open Data Initiatives**
- **Making Enterprise content highly available to the public**

**Diagram Description:**
- **EDW**
  - Authoritative Agency Content
  - Content governance is done by the EDW Content Governance Board.
  - The Authoritative content we share and organize in AGOL is made available in our ArcGIS Open Data Site.

- **FS GeoData Clearinghouse**

- **AGOL**
  - FS Organization

- **ArcGIS Open Data**

- **Data.gov**
  - The content we curate for ArcGIS Open Data site feeds into data.gov

- **Consumers of Agency Content**
  - Authoritative Agency content is discoverable and highly available in a variety of formats including:
    - Map Services
    - Download of national datasets
    - Data extract based on area of interest
    - Kml/shapefile/geodatabase
WHY OPEN DATA IN THE USFS?

- **2013 EXECUTIVE ORDER** -- MAKING OPEN AND MACHINE READABLE THE NEW DEFAULT FOR GOVERNMENT INFORMATION. WITHIN THE USFS, WE HAVE THE TOOLS, TECHNOLOGY & PROCESSES TO MAKE OPEN DATA HAPPEN AND AS SUCH, WE SHOULD BE MAKING OUR BEST EFFORT TO BE IN COMPLIANCE WITH THE EXECUTIVE ORDER.
  - Allows the USFS to easily share our authoritative Enterprise Data Warehouse (EDW) geospatial & non-geospatial assets with our partners & the public
  - Open data increases civic engagement by enabling government agencies, citizens, businesses, and other community organizations to share data
  - Open data assets are seamlessly integrated with the USFS Geospatial Platform & Data.gov
  - Thematic content organization facilitates more intuitive content search and discovery
  - Mission efficiency – leveraging technology to make agency data easily discoverable, consumable and useable drives operational efficiency (e.g., Self Service data calls)
  - Eliminates the duplication of data and data sharing processes, thereby reducing the amount of time and number of resources required to maintain a separate custom site and additional zipped download files
DEMONSTRATION
ADDITIONAL RESOURCES

- **USFS Open Data Site** - [https://enterprisecontent.usfs.opendata.arcgis.com/](https://enterprisecontent.usfs.opendata.arcgis.com/)
- **ArcGIS Open Data** - [http://opendata.arcgis.com/about](http://opendata.arcgis.com/about)
The U.S. Forest Service has configured this open data site to help our partners and the public discover geospatial data published by the Agency. Use it together with your data to create maps, apps and other information products.
Questions???

- Feel free to contact me with any future questions
- Robert Aiken 303-275-5200
  raiken@fs.fed.us
Interactive Visitor Map

Pulls from EDW Feature classes, so updated nightly (for most datasets)
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Trails Published at Three Possible Levels: Centerline, Basic, and Full Management