BLM Rights-of-Way Planning Tool
Main Functionality and Content
The Rights-of-Way Planning Tool is an ESRI Web App Builder Application that provides spatial data for designated Section 368 energy corridors in 11 western states, with much of the available geospatial information relevant to corridor routing decisions. Users can zoom, pan, and query the maps to study corridor routing factors, add data, and export maps as PDF files.

Users can access the tool from the Landscape Approach Data Portal or the following URL: https://webmaps.blm.gov/program_apps/BLM_Natl_ROW_368_Public

Upon loading the tool a Splash Screen will appear.

Scroll through the Splash Screen for helpful hints and external hyperlinks regarding the data and widgets available in the tool. Click OK to close the splash screen. The information in this splash screen is also available in the About widget for quick reference.
• The main focus of the tool is the **Map Viewer**. Users can turn on and off layers in the **Table of Contents** widget and the **Map Viewer** will dynamically update. The map has preloaded layers that users can view in the **Map Viewer, Table of Contents** and **Legend Widgets**.

• The **Legend** widget allows users to view the symbology for the layers that are turned on in the **Table of Contents** widget. The legend updates dynamically as the layers are turned On and Off in the **Table of Contents** Widget.

• The **Table of Contents** widget contains all layers in the tool and allows users to turn layers on and off. In the adjacent screenshot the Section 368 Corridor Labels and the Section 368 Corridor Current Status layers are turned on by default and visible in the map viewer.
The **Table of Contents** widget is divided into 8 categories with the following headings: *Energy Designations, Rights-of-Way, Boundary, Air and Water, Ecology, Other Designated Areas, Visual Class,* and *Military Uses and Civilian Aviation*. Click on the header name to expand the layers underneath. Users can turn layers on and off by clicking the box to the left of the layer name.

Layers that appear greyed out in the **Table of Contents** list are scale dependent. The user will zoom in on the Map Viewer to activate these layers at their appropriate scale. Once activated the font will appear black.
• To Zoom In and Out use the + and – buttons or the mouse wheel. Click the Home button to zoom to the full map extent. Type an address or coordinates to zoom to a specific location.

• For map actions associated with a layer, click the ellipses to the right of the layer name. Helpful actions include: **Zoom to** which zooms the map display to the extent of the layer, **Transparency** which allows users to make a layer more or less transparent, **View in Attribute Table** which opens the attribute table for the layer, and **Show item details** which opens a new browser window to an item description page in ArcGIS Online or a REST service description page.
• Users can display additional information about a layer by viewing the pop-up information in the map viewer. Turn on the layer of interest in the **Table of Contents**. In the map viewer, click on the point, line, or polygon geometry for the layer. A pop-up box will appear with the layer name, attributes, and for layers hosted in ArcGIS online a link to the metadata. Click the BLM logo to open a PDF metadata file in a new browser.

• The **Agency Layer List** widgets are subsets of the available layers from the Table of Contents. The agency logos correspond to the source agency of the layers. The agency data is categorized into BLM, USFWS, NPS, and USFS lists. Click each logo to view the data from a specific agency.
• The **Add Data** widget allows users to add their own data to the map viewer. Users can search and add data from:
  - ArcGIS Online
  - URL (Map or Feature Services)
  - Files (Zipped Shapefile, CSV, KML)

• Once the data is added to map, it will appear in the **Table of Contents** widget under the header: **User Added Layers**. The user data layers will only remain in the map during the current session.
The **Select** widget allows users to select certain features from a layer. The select widget is especially useful for selecting features and viewing the attribute table for only those selected features. To select features open the widget and click the check box next to the layer(s) you want to select from.

Ensure no additional layers are checked by clicking the check mark graphic box and clicking **Make all layers unselectable**. This clears the pre-selected layers and allows users to select only the layer(s) of interest.

Click the **green Select button** and in the map viewer draw a box around the features you would like to select.
• The selected features will be highlighted Cyan in the map viewer and the **Select** widget will show the number of records selected in the layer.

• Click the ellipses next to the layer to view map actions. Click the **View in Attribute Table** to view the selected record in a table format.

• Click **Clear** de-select the features from the map viewer.
- The **Basemap** widget allows the user to change the basemap in the map viewer.
• The Measurement widget allows the user to measure the area of a polygon or length of a line, or find the coordinates of a point.

• Click on the Polygon or Line rule tool and choose the unit of measurement. In the map viewer a single click starts the drawing. Finish the drawing with a double click to calculate the area or distance.
• The **Draw** widget allows users to create graphics that display on the map. It can display measurements for drawn features, such as length for lines and area and perimeter for polygons.

• Click the button for the mode of drawing. Choose the Color scheme, Transparency level, Line width, and option for measurement display.

• Click in the map viewer to complete the drawing. The Clear button in the bottom of the **Draw** widget will clear all graphics previously drawn in the map viewer.
• The **Print** widget allows users to create a PDF map for download.

• Click the Layout dropdown menu to choose a template.

• Click the Format dropdown menu to choose a file format.

• Add an appropriate Map Title

• Click Print to generate the file. The file will appear as a hyperlink. Click the hyperlink to open the file in a browser and download from the browser.
• The **About** widget is a quick reference guide containing the Rights-of-Way Planning Tool purpose, Helpful Hints, and hyperlinked guidance for the widgets inside the tool.

**About**

**BLM Rights-of-Way Planning Tool**

This tool provides mapping data for designated Section 368 energy corridors in 11 western states, with much of the available geospatial information relevant to corridor routing decisions. Users can zoom, pan, and query the maps to study corridor routing factors, add data, and export maps as PDF files.

**Helpful Hints!**

Use the **Layer List** tool to turn layers on and off. Layers are grouped under subject matter headers. Click the subject label to expand the layers contained in the group.

**Widgets (i.e., tools) available and links to find more information:**

- **Legend (Visible Layers)**
- **Layers**
- **Add Data** (add data to the user's map)
- **Select**
- **Change Background**
- **Measurement and Location**
- **Save or Print**
- **Draw**
• For reference, there is a link in the Splash Screen and About widget to the Data Dictionary, containing the names, header category, format, and description for all layers available in tool.  

• The **Table of Contents** widget is divided into 8 categories with the following headings: *Energy Designations, Rights-of-Way, Boundary, Air and Water, Ecology, Other Designated Areas, Visual Class*, and *Military Uses and Civilian Aviation*. As a reminder, click the ellipses next to the layer name in the **Table of Contents** widget to *Show item details* about a layer.

• The main focus layers associated with the Energy Corridors Section 368 Review are under the heading: *Energy Designations*. The Section 368 Corridor Layers are turned on by default. These layers include the Section 368 Corridor Label, Section 368 Designated Corridor – Current, Section 368 Designated Corridor – Historic, Section 368 Corridor Milepost, and the Section 368 Corridor Centerline. Other layers under the Energy Designation group include: Transmission Lines, Solar Energy Zones, and Renewable Energy Zones.

• The **Rights-of-Way** group contains the BLM Rights-of-Way dataset categorized by Authorized, Pending, Closed, and Expired cases. Also available is the No Surface Occupancy layer and multiple proposed transmission line projects.
• The **Boundary** group contains administrative boundary layers for the BLM, NPS, USFS and DOD. The BLM Surface Management Agency layer is turned on by default and displays federal lands in one layer.

• The **Air and Water** group contains Stream and Lake layers from the National Hydrography Dataset as well as EPA Priority Areas for Air Quality.

• The **Ecology** group contains habitat and similar layers, including critical habitat for species listed under the Endangered Species Act.

• The **Other Designated Areas** group contains many layers depicting different types of protective resource designations.

• The **Visual Class** group contains the BLM Visual Resource Management and Inventory layers as well as Forest Service scenic and visual objective layers.

• The **Military Uses and Civilian Aviation** group contains military training routes, special use airspace, and airports.
If you have any questions about the tool please contact blm_wo_row_pt_help@blm.gov

• Helpful Links:
  1. Landscape Approach Data Portal
     https://landscape.blm.gov/geoportal/catalog/main/home.page
  2. West-wide Energy Corridor Information Center
     http://corridoreis.anl.gov/
  3. Rights-of-Way Planning Tool
     https://webmaps.blm.gov/program_apps/BLM_Natl_ROW_368_Public
  4. Data Dictionary