



Easements and Rights-of-Way

Spatial Data Standard



Photo of BLM Right-of-Way sign on the Rowell Creek Timber Sale, BLM NW Oregon District. Photo taken by Michael Campbell, June 1, 2018.

Document Revisions

Revision	Date	Author	Description	Affected Pages
1.0	3/5/2010	Pam Keller	Establish the Easements and Rights-of-way (ROW) spatial data standard.	All
1.1	2/4/2013	Pam Keller	Revised Standard.	All
1.2	11/5/2015	Roger Mills	Added to ESMTROW_P_NM: RGT_P HOLDER, GRANTOR_P, LOCAL_ID, EXCL_TP. Added to ESMTROW_P_ARC: RGT_P HOLDER, GRANTOR_P, LOCAL_ID, EXCL_TP.	11/5/2015
1.3	11/5/2015	Roger Mills	Removed status “Active” from STATUS_P domain.	Section A.9
1.4	03/10/17	Kyler Diershaw	Updated contact information for State Data Steward, Lead GIS Specialist, State Data Administrator, State Records Administrator. Added Document Revision Table.	Section 1.1, 2.5, 2.6, 4.0, Appendix A
1.5	03/13/2017	Kyler Diershaw	Added automatic TOC	03/13/2017
1.6	5/14/2018	Micah Babinski	Updated roles and responsibilities links, added LOCAL_ID and GLOBALID	1.1, 2.5, 2.6, 4,
2.0	05/30/2018	Al Thompson	Reformat and edit	All
2.0	8/21/2018	Eric Hiebenthal	Update definitions for GRANTOR and GRANTOR_NM, GRANTOR_P, GRANTOR_P_NM.	7.18 – 21.
2.1	5/20/2019	Roger Mills	Switch the following attributes from Required to Optional in sections 4 and 7. GRANTOR_P, GRANTOR_P_NM, RGT_P HOLDER, RGT_P HOLDER_NM	Sections 4 and 7
3.0	4/12/2022	Dana Baker-Allum	Reformat document to meet Section 508 standards and match the latest data standard template. For proposed features, ESMTROW_NM, ACCESS_ESMTROW, and LOCAL_ID changed to not required. Corrected FOIA category and Security/Access/Sensitivity. Corrected Keywords Expanded Statewide Monitoring section.	All
3.0	4/25/2022	Eric Hiebenthal	Update duties of FOA and Records in Roles and Responsibilities.	Section 1.1

Navigation

This document uses hyperlinks to display additional information on topics. External links are displayed with an [underline](#).

Internal links are [blue](#) text, not underlined. After clicking on an internal link, press the Alt  + Left Arrow  keys to return to the original location from the target location.

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1 General Information

The Easements and Right of Way dataset is a spatial representation of ESMTROW. It is a portion of the total encumbrance data category that includes information about entities, rights, and restrictions relating to the use of Federal public land or to the use of non-Federal land by the Federal and public entities. An example of a use would be a right granted to a private entity for a road used by them to cross Federal interest land to access their property. Rights-of-Way (ROW) in this dataset include ROW and other land use authorizations issued by the United States under the authorities of Title V and Sec. 302(b) of the Federal Land Policy and Management Act (FLPMA) (and other ROW authorities repealed by FLPMA); Oregon and California Act of August 28, 1937; the Federal Highway Act; and the Mineral Leasing Act. Easements are partial interests in non-Federal land acquired or reserved by the United States. In general, ROWs are rights granted by the BLM, and Easements are rights granted to the BLM, but there are exceptions.

This dataset includes both linear and area entities. The ESMTROW that are linear in nature may be roads or power lines. They have associated widths that define the extent of the assigned right, creating a corridor area. The associated width can be used to buffer the linear feature to create a polygon area. Area entities include these linear buffer features as well as ESMTROW described by land status aliquot parcels.

The dataset is not intended to include all ESMTROW in the Federal interest, but only those determined to be important for common GIS spatial analysis. Only basic information about the ESMTROW is provided. Details of the complete rights and restrictions history are found in case file records, Master Title Plats (MTPs), and the Legacy Rehost 2000 (LR2000) database. The case file record is the primary source, with MTPs and LR2000 as secondary sources.

Right of Way (ROW) rights are granted by the BLM, and Easement rights are granted to the BLM, but there are exceptions.

- Dataset (Theme) Name: Easements and Rights-of-Way
- Dataset (Feature Class): ESMTROW_POLY, ESMTROW_P_POLY, ESMTROW_ARC, ESMTROW_P_ARC

1.1 Roles and Responsibilities

Table 1 Roles and Responsibilities

Roles	Responsibilities
State Data Steward	The State Data Steward responsibilities include approving data standards and business rules, developing Quality Assurance/Quality Control procedures, identifying potential Privacy issues, and managing that data as a corporate resource. The State Data Steward coordinates with field office data stewards, the State Data Administrator, Geographic Information System (GIS) coordinators, and national data stewards. The State Data Steward reviews geospatial metadata for completeness and quality.
GIS Technical Lead	The GIS Technical Lead works with data stewards to convert business needs into GIS applications and derive data requirements and participates in the development of data standards. The GIS technical lead coordinates with system administrators and GIS coordinators to manage the GIS databases. The GIS technical lead works with data editors to ensure the consistency and accordance with the established data standards of data input into the enterprise Spatial Database Engine (SDE) geodatabase. The GIS technical lead provides technical assistance and advice on GIS analysis, query, and display of the dataset.

State Data Administrator	The State Data Administrator provides information management leadership, data modeling expertise, and custodianship of the state data models. The State Data Administrator ensures compliance with defined processes for development of data standards and metadata, and process consistency and completeness. The State Data Administrator is responsible for making data standards and metadata accessible to all users. The State Data Administrator coordinates with data stewards and GIS coordinators to respond to national spatial data requests.
State FOIA/Privacy Act Team Lead	The State FOIA/Privacy Act team lead assists the state data steward to identify any privacy issues related to spatial data. The State FOIA/Privacy Act team lead also provides direction and guidance on data release, fees, and classification under the appropriate Freedom of Information Act exemption.
State Records Administrator	The state records administrator classifies data under the proper records retention schedule.

1.2 FOIA Category

These data fall under the standard Records Access Category 1B - BLM Records that may contain protected information that must be considered for segregation prior to release. See section 8 for more information on which data are available to the public.

1.3 Records Retention Schedule

The DRS/GRS/BLM Combined Records Schedule, under Schedule **20/52a1** (Electronic Records/Geographic Information Systems), lists this theme, **Rights and Restrictions**, as one of the system-centric themes that are significant for BLM's mission that must be permanently retained.

"PERMANENT. Cutoff at the end of each Fiscal Year (FY) or when significant changes and additions have been made, before and after the change. Use BLM 20/52a. Transfer to the National Archives every three years after cutoff. Under the instruction in 36 CFR 1235.44-50 or whichever guidance is in place at the time of the transfer. Submissions are full datasets and are in addition to, not replacements of, earlier submissions."

Oregon/Washington (OR/WA) Bureau of Land Management (BLM) Guidebook for Management of Geospatial Data (v1) Section 15.2 - Corporate Data Online Archives prescribes:

Vector annual archives are retained online for 12 years. Each year, data that has reached 12 years old is copied off-line to be retained until no longer needed (determined by data stewards and program leads) with format and readability maintained in a five (5) year "tech refresh" update cycle."

1.4 Security/Access/Sensitivity

The Easements and Rights-of-Way (ESMTROW) dataset does not require any additional security other than that provided by the General Support System (the hardware/software infrastructure of the OR/WA BLM).

This dataset is not sensitive and there are no restrictions on access to this data within the BLM. This dataset falls under the standard Records Access Category 1B - BLM Records that may contain protected information that must be considered for segregation prior to release. See section 8 for more information on which data are available to the public.

There are no privacy issues or concerns associated with these data themes. This dataset falls under the Privacy Act System of Records Notice LLM-32, Land and Minerals Authorization Tracking System.

1.5 Keywords

Keywords that can be used to locate this dataset include:

- BLM Thesaurus: Authorization, Management, Geospatial
- Additional keywords: Easement, Rights-of-Way, ESMT, ROW, ESMTROW, Encumbrance
- ISO Thesaurus: boundaries, transportation

1.6 Subject Function Codes

BLM Subject Function codes used to describe this dataset include:

- 1283 - Data Administration
- 2101 - Acquisition Management
- 2801 - Rights-of-Way Management
- 2812 - Over O & C and Coos Bay Revested Lands
- 9167 - Geographic Information System (GIS)

2 Dataset Overview

2.1 Usage

This dataset is used for depicting the ESMTROW on maps. All BLM planning and management actions must identify any encumbrances on the land. Existing ESMTROW are intersected with other resources to determine impact and/or feasibility of the proposed action.

This dataset is intended to contain ESMTROW granted or held by the BLM. Others may be included, if needed, for analysis or maps associated with BLM planning activities. The GRANTOR and RGT_HOLDER attributes provide the needed information to correctly select only BLM actions. The ESMTROW are authorized for specific uses. The AUTH_USE attribute provides this important information. A proposed easement or ROW goes through several phases. If "Initial" is the STATUS_P attribute, the proposed Easement or ROW, for most purposes, should not be included in analysis and display.

Non-BLM Easement or ROW features may be added if necessary for map display or analysis. They should be clearly identified as a non-BLM actions by making sure that something other than "BL - Bureau of Land Management" is identified in both RGT_HOLDER and GRANTOR. For proposed easements and ROW, GRANTOR_P_NM and RGT_P_HOLDER_NM must have "Private" or some other non-BLM entity name. In addition, the attribute CASEFILE should be filled with "PRIVATE" (for existing ESMTROWs, CASEFILE can be left blank for proposed features). The locational accuracy and currency of non-BLM spatial features cannot be guaranteed.

2.2 Sponsor/Affected Parties

The sponsor for this data set is the Deputy State Director for the Division of Resources, Lands, and Minerals.

An Easement or ROW is defined by and specific to the BLM. Matching interagency data across the landscape is not necessary, but correcting discrepancies between BLM and non-BLM datasets is important.

2.3 Relationship to Other Datasets, Databases, or Files

The ESMTROW are legal boundary entities. They are often related to physical entities such as roads and power lines. The Easement or ROW is described in relation to the constructed entity but is not necessarily identical. To associate facilities with the rights and restrictions attached to them, an ESMTROW indicator can be added as an attribute on the relevant constructed feature arc or point. Similarly, to associate an Easement or ROW with the road it encumbers, there is a ROAD_LINK attribute. The Ground Transportation (GTRN) GIS dataset has an attribute with the same ACCESS_RIGHTS domain as ACCESS_ESMTROW, and, where a feature on ESMTROW represents the same feature on GTRN, it is important they have the same attribute value for ACCESS_RIGHTS.

As mentioned in section 1, this dataset also has a relationship to case file records, Master Title Plats (MTPs), and the Legacy Rehost 2000 (LR2000) database.

2.4 Data Category/Architecture Link

This data theme is a portion of the Oregon Data Framework (ODF) shown in Figure 1, Oregon Data Framework (ODF) Overview on page 9. The illustration is a simplified schematic of the entire ODF showing the overall organization and entity inheritance. The ODF utilizes the concept of inheritance to define specific instances of data. The ODF divides all OR/WA resource-related data into three general categories:

- Activities
- Resources
- Boundaries

These general categories are broken into sub-categories that inherit spatial characteristics and attributes from their parent category. These sub-categories may be further broken into more specific groups until the basic data set cannot be further sub-divided. Those basic data sets inherit all characteristics of all groups/categories above them. The basic data sets are where physical data gets populated. Those groups/categories above them do not contain actual data but set parameters which all data of that type must follow.

Physical data is populated in the basic data sets. Those groups/categories above them do not contain actual data but set parameters that all data of that type must follow. See Figure 2, Data Organization Structure for a simplified schematic of the entire ODF showing the overall organization and entity inheritance. The Easements and Rights-of-Way entities are highlighted. For additional information about the ODF, contact the [State Data Administrator](#). The State Data Administrator’s contact information can be found at the following link: <https://www.blm.gov/about/data/oregon-data-management>.

In the ODF, ESMTROW is considered a Boundary and categorized as follows:

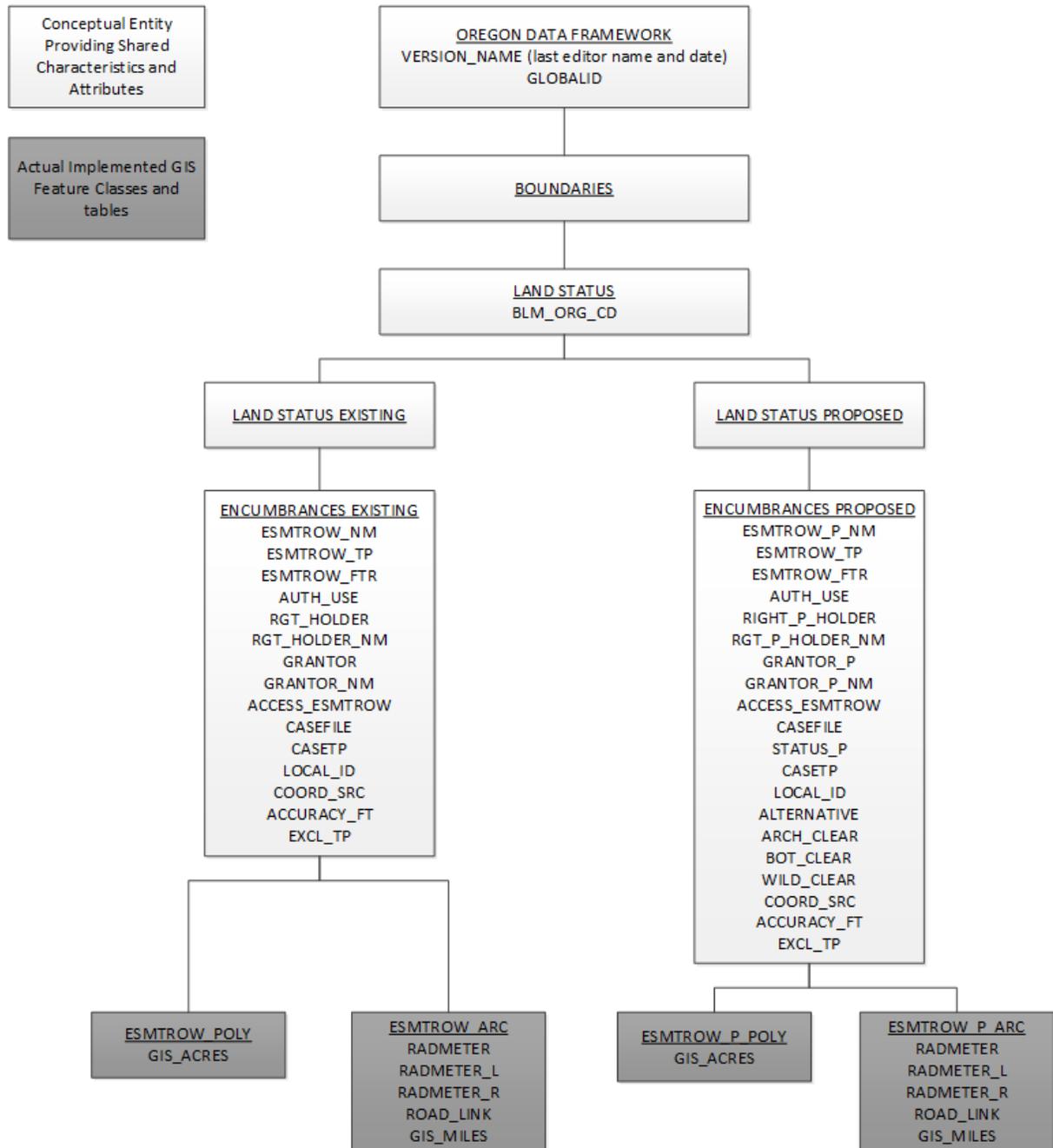


Figure 2 Data Organization Structure

2.5 Relationship to DOI Enterprise Architecture Data Resource Mode

The Department of the Interior (DOI) Enterprise Architecture contains a component called the Data Resource Model. This model addresses the concepts of data sharing, data description, and data context. This data standard provides information needed to address each of those areas. Data sharing is addressed through complete documentation and simple data structures which make sharing easier. Data description is addressed through the section on Attribute Descriptions. Data context is addressed through the data organization and structure portions of this document. In addition, the DOI Data Resource Model categorizes data by use of standardized Data Subject Areas and Information Classes. For this data set, the Data Subject Area and Information Class are:

- Data Subject Area: Geospatial
- Information Class: Location

3 Data Management Protocols

3.1 Accuracy Requirements

This dataset requires the highest possible accuracy. Accuracy is determined by availability of survey data and Geographic Coordinate Database coverage for the area. Where ESMTROW follows a road or other physical features, the coordinates are obtained from the most accurate source available (see Collection, Input and Maintenance Protocols).

This dataset will never be complete. Over time, more and more approved ESMTROW will be added to the dataset, but it will never contain the complete record (found in the case files).

The proposed ESMTROW (ESMTROW_P_ARC and ESMTROW_P_POLY) are transitory and have varying degrees of accuracy. Accuracy is reviewed and improved if possible (e.g., if a proposed feature becomes authorized and is moved to ESMTROW_POLY or ESMTROW_ARC.)

3.2 Collection, Input, and Maintenance Protocols

Existing ESMTROW are defined and described by the case file record, and sometimes depicted on MTP. If a digital MTP with GIS features or a digital survey is available, the appropriate spatial features are selected and copied from these. If there is no digital MTP or survey source, the lines and polygons are created from the legal description, and other information in the authoritative sources (MTPs, LR2000, and the case file record). Where the feature is described by legal land line parcels or surveyed lines, a vertex is placed at every Cadastral National Spatial Data Infrastructure (CADNSDI) point and snapped to it. Where the feature is described as a road or other physical feature, and case file description says, “as built,” the coordinates are obtained from Global Positioning System (GPS), Digital Line Graphic (DLG) imagery, or other digital data with a total locational accuracy of 100 feet or better. The coordinate source used is captured in the COORD_SRC attribute. Existing linework is not replaced unless a more accurate spatial representation of the legal description is provided. It is important to note that the existing road centerline as depicted in the GIS road layer, or a collected GPS measurement may not fit within the described location in the case file record. The case file is a legal document that rules the location. The easement or ROW spatial representation must match the case file rather than the “on the ground location.” If different from the case file, and the ground location is, in fact, the correct intended location, the case file must be updated.

A new easement or ROW on an already existing road has the following typical data collection and GIS input workflow: GPS the road centerline, adjust the GIS road dataset accordingly, and prepare the case file maps with GTRN.

Polygons representing the widths of ESMTROW linear features do not need to be created since they can be created on-the-fly as needed, using the Radial Buffer Meters (RADMETER) attribute. If, however, the data steward wishes to keep the polygons created by buffering the lines on ESMTROW_ARC, the polygons can be put in ESMTROW_POLY.

Proposed ESMTROW are created from legal descriptions in the same way as described above for existing ESMTROW. If a proposed easement or ROW becomes fact (is authorized), it is copied to the corresponding existing ESMTROW feature class and deleted from the proposed feature class. At the district data steward’s discretion, when a ROW that was authorized becomes closed for whatever reason (relinquished, terminated, or expired), the feature can be moved back to the proposed feature class with STATUS_P of “Closed”. This might be done if the data steward feels the feature has potential to become a proposal again.

3.3 Update Frequency and Archival Protocols

The unit of processing for the ESMTROW group of themes is the individual easement or ROW. If there is a CADNSDI update that shifts the points of the ESMTROW lines and/or polygons, then those lines and polygons

need to be re-snapped back to the CADNSDI points. Other updates to correct or improve locational accuracy are done when discovered. Changes to this dataset are potentially very frequent. At a minimum, this dataset is to be updated on a quarterly basis (January 1, April 1, July 1, and October 1). Updates can be done at any time and do not need to be done only on these quarterly dates.

3.4 Statewide Monitoring

District realty specialists are required to check the themes for spatial and attribute accuracy within their district, keep the themes consistent and current with LR2000 and the case files, and confirm that proposed ESMTROW were moved to existing ESMTROW after approval. The state data stewards are responsible for checking consistency across districts. At least, once yearly, ESMTROW_ARC and ESMTROW_POLY will be checked by comparing to LR2000. The number of cases in LR2000 and not in ESMTROW_ARC and ESMTROW_POLY and vice versa will be used to determine completeness. Over time, the gap should narrow.

Each year, the Resource Science Data team of the BLM Division of Resources, Lands, and Minerals meets with each state data steward for every corporate geospatial theme to conduct an annual review of the data. During the annual review, geospatial staff present the state data stewards with a report detailing Quality Assurance/Quality Control (QAQC) results performed on the data. The QAQC does the following:

- Checks that all attribute values conform to the range or coded-value domains to which they are applied.
- Checks that all attributes marked as required in the data standard have values.
- Checks for duplicate features which have the same geometry and attributes.
- Checks for overlapping features if forbidden by the data standard.
- Checks for invalid geometry.
- Other checks as necessary (can be customized according to the data standard).

In addition to this report, geospatial staff conduct a qualitative needs assessment with the steward to identify any unmet needs or problems with the status of the data. At the conclusion of the review, the team records the steward's approval of the datasets reviewed. These approvals are then added to the corporate metadata.

4 Easements and Rights-of-Way Schema (simplified)

General Information: Attributes are listed in the order they appear in the geodatabase feature class. The order is an indication of the importance of the attribute for theme definition and use. There are no aliases unless specifically noted. The domains used in this data standard can be found in Appendix A. These are the domains at the time the data standard was approved. Domains can be changed without a re-issue of the data standard. Current domains are found on the internal OR/WA SharePoint data management page. Some of the domains used in this data standard are also available at the following web site: <https://www.blm.gov/about/data/oregon-data-management>.

For domains not listed at that site contact: [State Data Administrator](#).

4.1 ESMTROW_POLY Feature Class (Easements and Rights-of-Way Polygons)

For domain and default values, see [Section 7 Attribute Characteristics and Definition \(In alphabetical order\)](#) in this document.

Attribute Name	Data Type	Length	Default Value	Required	Domain
ESMTROW_NM	String	30		Yes	
ESMTROW_TP	String	10		Yes	dom_ESMTROW_TP
ESMTROW_FTR	String	20		Yes	dom_ESMTROW_FTR
AUTH_USE	String	40		Yes	dom_AUTH_USE
RGT HOLDER	String	3		Yes	dom_JURIS_CODE
RGT HOLDER_NM	String	60		No	
GRANTOR	String	3		Yes	dom_JURIS_CODE
GRANTOR_NM	String	60		No	
ACCESS_ESMTROW	String	10		Yes	dom_ACCESS_RIGHTS
CASEFILE	String	15		Yes	
BLM_ORG_CD	String	5		Yes	dom_BLM_ORG_CD
CASETP	String	6		No	
LOCAL_ID	String	12		Conditional	
COORD_SRC	String	7		No	dom_COORD_SRC
ACCURACY_FT	Short Integer			No	
EXCL_TP	String	12		No	dom_EXCL_TP
VERSION_NAME	String	50	InitialLoad	Yes *	
GIS_ACRES	Double			Yes *	
GLOBALID	GUID			Yes *	

* Values automatically generated

** Enforced during quality control, may appear in data as not required

*** Maintained through versioning tools, may appear not required in database

4.2 ESMTROW_ARC Feature Class (Easements and Rights-of-Way Arcs)

For domain and default values, see [Section 7 Attribute Characteristics and Definition \(In alphabetical order\)](#) in this document.

Attribute Name	Data Type	Length	Default Value	Required	Domain
ESMTROW_NM	String	30		Yes	
ESMTROW_TP	String	10		Yes	dom_ESMTROW_TP
ESMTROW_FTR	String	20		Yes	dom_ESMTROW_FTR
AUTH_USE	String	40		Yes	dom_AUTH_USE
RGT HOLDER	String	3		Yes	dom_JURIS_CODE
RGT HOLDER_NM	String	60		No	
GRANTOR	String	3		Yes	dom_JURIS_CODE
GRANTOR_NM	String	60		No	
ACCESS_ESMTROW	String	10		Yes	dom_ACCESS_RIGHTS
CASEFILE	String	15		Yes	
BLM_ORG_CD	String	5		Yes	dom_BLM_ORG_CD
CASETP	String	6		No	
LOCAL_ID	String	12		Conditional	
COORD_SRC	String	7		No	dom_COORD_SRC
ACCURACY_FT	Short Integer			No	
EXCL_TP	String	12		No	dom_EXCL_TP
RADMETER	Double			Yes	
RADMETER_L	Double			Conditional	
RADMETER_R	Double			Conditional	
ROAD_LINK	String	20		No	
VERSION_NAME	String	50	InitialLoad	Yes *	
GIS_MILES	Double			Yes *	
GLOBALID	GUID			Yes *	

* Values automatically generated

** Enforced during quality control, may appear in data as not required

*** Maintained through versioning tools, may appear not required in database

4.3 ESMTROW_P_POLY Feature Class (Easements and Rights-of-Way Proposed Polygons)

For domain and default values, see [Section 7 Attribute Characteristics and Definition \(In alphabetical order\)](#) in this document.

document.

Attribute Name	Data Type	Length	Default Value	Required	Domain
ESMTROW_P_NM	String	30		No	
ESMTROW_TP	String	10		Yes	dom_ESMTROW_TP
ESMTROW_FTR	String	20		Yes	dom_ESMTROW_FTR
AUTH_USE	String	40		Yes	dom_AUTH_USE
RIGHT_P_HOLDER	String	3		No	dom_JURIS_CODE
RGT_P_HOLDER_NM	String	60		No	
GRANTOR_P	String	3		No	dom_JURIS_CODE
GRANTOR_P_NM	String	60		No	
ACCESS_ESMTROW	String	10		No	dom_ACCESS_RIGHTS
CASEFILE	String	15		No	
BLM_ORG_CD	String	5		Yes	
STATUS_P	String	12		Yes	dom_STATUS_P
CASETP	String	6		No	
GIS_ACRES	Double			Yes *	
LOCAL_ID	String	12		No	
ALTERNATIVE	String	10		No	
ARCH_CLEAR	String	8		No	
BOT_CLEAR	String	8		No	
WILD_CLEAR	String	8		No	
COORD_SRC	String	7		No	dom_COORD_SRC
ACCURACY_FT	Short Integer			No	
EXCL_TP	String	12		No	dom_EXCL_TP
VERSION_NAME	String	50	InitialLoad	Yes *	
GLOBALID	GUID			Yes *	

* Values automatically generated

** Enforced during quality control, may appear in data as not required

*** Maintained through versioning tools, may appear not required in database

4.4 ESMTROW_P_ARC Feature Class (Easements and Rights-of-Way Proposed Arcs)

For domain and default values, see [Section 7 Attribute Characteristics and Definition \(In alphabetical order\)](#) in this document.

Attribute Name	Data Type	Length	Default Value	Required	Domain
ESMTROW_P_NM	String	30		No	
ESMTROW_TP	String	10		Yes	dom_ESMTROW_TP
ESMTROW_FTR	String	20		Yes	dom_ESMTROW_FTR
AUTH_USE	String	40		Yes	dom_AUTH_USE
RIGHT_P_HOLDER	String	3		No	dom_JURIS_CODE
RGT_P_HOLDER_NM	String	60		No	
GRANTOR_P	String	3		No	dom_JURIS_CODE
GRANTOR_P_NM	String	60		No	
ACCESS_ESMTROW	String	10		No	dom_ACCESS_RIGHTS
CASEFILE	String	15		No	
BLM_ORG_CD	String	5		Yes	dom_BLM_ORG_CD
STATUS_P	String	12		Yes	dom_STATUS_P
CASETP	String	6		No	
GIS_MILES	Double			Yes *	
LOCAL_ID	String	12		No	
RADMETER	Double			Yes	
RADMETER_L	Double			Conditional	
RADMETER_R	Double			Conditional	
ALTERNATIVE	String	10		No	
ARCH_CLEAR	String	8		No	
BOT_CLEAR	String	8		No	
WILD_CLEAR	String	8		No	
COORD_SRC	String	7		No	dom_COORD_SRC
ACCURACY_FT	Short Integer			No	
EXCL_TP	String	12		No	dom_EXCL_TP
ROAD_LINK	String	20		No	
VERSION_NAME	String	50	InitialLoad	Yes *	
GLOBALID	GUID			Yes *	

* Values automatically generated

** Enforced during quality control, may appear in data as not required

*** Maintained through versioning tools, may appear not required in database

5 Projection and Spatial Extent

All feature classes and feature datasets are in Geographic, North American Datum 83. Units are decimal degrees. Spatial extent (area of coverage) includes all lands managed by the BLM in OR/WA. See the metadata for this dataset for more precise description of the extent.

6 Spatial Entity Characteristics

- ESMTROW_POLY
 - Description: Instance of Land Status Existing group.
 - Geometry: Polygons may overlap entirely or in part.
 - Topology: No topology enforced.
 - Integration Requirements: If polylines are defined as parcels, they must have a vertex for every CADNSDI point, and be snapped to it. There is usually no coincidence between ESMTROW arcs and ESMTROW polys.
- ESMTROW_ARC
 - Description: Instance of Land Status Existing group.
 - Geometry: Arcs may overlap each other entirely or in part.
 - Topology: No topology enforced.
 - Integration Requirements: There is usually no coincidence between ESMTROW arcs and ESMTROW polygons.
- ESMTROW_P_POLY
 - Description: Instance of Land Status Proposed group.
 - Geometry: Polygons may overlap each other entirely or in part and may overlap ESMTROW_POLY features.
 - Topology: No topology enforced.
 - Integration Requirements: If polylines are defined as parcels, they must have a vertex for every CADNSDI point, and be snapped to it.
- ESMTROW_P_ARC
 - Description: Instance of Land Status Proposed group.
 - Geometry: Arcs may overlap each other entirely or in part.
 - Topology: No topology enforced.
 - Integration Requirements: There is usually no coincidence between ESMTROW proposed arcs and ESMTROW proposed polygons.

7 Attribute Characteristics and Definition (In alphabetical order)

7.1 ACCURACY_FT

Geodatabase Name	ACCURACY_FT
BLM Structured Name	Accuracy_Feet_Measure
Inheritance	Inherited from entity Existing Encumbrances
Alias Name	None
Feature Class Use/Entity Table	ESMTROW_POLY, ESMTROW_ARC, ESMTROW_P_POLY, ESMTROW_P_ARC
Definition	How close, in feet, the spatial GIS depiction is to the actual location on the ground. There are several factors to consider in GIS error: scale and accuracy of map-based sources, accuracy of GPS equipment, and the skill level of the data manipulators. A value of "0" indicates no entry was made. This is the correct value when the COORD_SRC is another GIS theme (e.g., DLG, CADNSDI) because the accuracy is determined by that theme. However, if COORD_SRC is MAP (digitized from a paper map) or GPS, a value of "0" indicates a missing value that should be filled in either with a non-zero number or "-1." A value of "-1" indicates that the accuracy is unknown, and no reliable estimate can be made.
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	Short Integer

7.2 ALTERNATIVE

Geodatabase Name	ALTERNATIVE
BLM Structured Name	Alternative_Text
Inheritance	Inherited from entity Proposed Encumbrances
Alias Name	None
Feature Class Use/Entity Table	ESMTROW_P_POLY, ESMTROW_P_ARC
Definition	Identifier for the alternative during the planning process (e.g., A, B, C, D, E). Free choice values for different plans, can be concatenated when same polygon applies to multiple alternatives (BCD, ACD, etc.)
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: "A", "1", "B3", "B3A1C"
Data Type	String (10)

7.3 ARCH_CLEAR

Geodatabase Name	ARCH_CLEAR
BLM Structured Name	Archaeological_Clearance_Date
Inheritance	Inherited from entity Proposed Encumbrances

Alias Name	None
Feature Class Use/Entity Table	ESMTROW_P_POLY, ESMTROW_P_ARC
Definition	Date the facility or site received archaeological clearance (YYYYMMDD).
Required/Optional	Optional
Domain (Valid Values)	No domain. Example: "20090812"
Data Type	String (8)

7.4 AUTH_USE

Geodatabase Name	AUTH_USE
BLM Structured Name	ESMTROW_Authorized_Use_Code
Inheritance	Inherited from entity Existing Encumbrances or Proposed Encumbrances
Alias Name	None
Feature Class Use/Entity Table	ESMTROW_POLY, ESMTROW_ARC, ESMTROW_P_POLY, ESMTROW_P_ARC
Definition	Use that is authorized or proposed for authorization by the Easement or ROW. Additional and/or related information is found in the ESMTROW_FTR and CASETP attributes. For example, if the AUTH_USE is "Crossing Access" then ESMTROW_FTR might be "ROAD", "TRAIL", or "FENCE".
Required/Optional	Required
Domain (Valid Values)	dom_AUTH_USE
Data Type	String (40)

7.5 ACCESS_ESMTROW

Geodatabase Name	ACCESS_ESMTROW
BLM Structured Name	Access_ESMTROW_Code
Inheritance	Inherited from entity Existing Encumbrances or Proposed Encumbrances
Alias Name	None
Feature Class Use/Entity Table	ESMTROW_POLY, ESMTROW_ARC, ESMTROW_P_POLY, ESMTROW_P_ARC
Definition	Public and BLM access rights associated with the Easement or ROW. Reciprocal ROW Agreements (RROW) provides access rights for the haul and management of timber and includes third party rights. Roads falling inside RROW areas have differing access rights that depend on the surface jurisdiction and relationship of surface jurisdiction crossed. The access rights might be too mixed to map out separately.
Required/Optional	Required for existing features, optional for proposed
Domain (Valid Values)	dom_ACCESS_RIGHTS
Data Type	String (10)

7.6 BLM_ORG_CD

Geodatabase Name	BLM_ORG_CD
BLM Structured Name	Administrative_Unit_Organization_Code
Inheritance	Inherited from entity Land Status
Alias Name	None
Feature Class Use/Entity Table	ESMTROW_POLY, ESMTROW_ARC, ESMTROW_P_POLY, ESMTROW_P_ARC
Definition	A combination of the BLM administrative state and field office which has administrative responsibility for the spatial entity. This includes which office covers the entity for planning purposes and which office is the lead for GIS edits. Another agency or individual may have the physical management responsibility for the on-the-ground entity. This field applies particularly when a spatial entity crosses field office or district boundaries and the administrative responsibility is assigned to one or the other rather than splitting the spatial unit. Similarly, OR/WA BLM may have administrative responsibility over some area that is physically located in Nevada, Idaho, or California and vice versa. When appropriate, the office can be identified only to the district or even the state level rather than to the field office level.
Required/Optional	Required
Domain (Valid Values)	dom_BLM_ORG_CD
Data Type	String (5)

7.7 BOT_CLEAR

Geodatabase Name	BOT_CLEAR
BLM Structured Name	Botanical_Clearance_Date
Inheritance	Inherited from entity Proposed Encumbrances
Alias Name	None
Feature Class Use/Entity Table	ESMTROW_P_POLY, ESMTROW_P_ARC
Definition	Date the facility or site received botanical clearance (YYYYMMDD).
Required/Optional	Optional
Domain (Valid Values)	No domain. Example: "20090812"
Data Type	String (8)

7.8 CASEFILE

Geodatabase Name	CASEFILE
BLM Structured Name	Casefile_Number
Inheritance	Inherited from entity Existing Encumbrances or Proposed Encumbrances
Alias Name	None
Feature Class Use/Entity Table	ESMTROW_POLY, ESMTROW_ARC, ESMTROW_P_POLY, ESMTROW_P_ARC

Definition	Case number assigned by the LR2000 database (serial number in full) when an action is begun (either by BLM action or due to receipt of an application). Include suffix (a unique identifier of cases resulting from the division of an original case into multiple, separate, and unique cases). Enter "PRIVATE" for features with no BLM action. This number must match exactly with the serial numbers in LR2000 including any spacing in the number (see the examples below).
Required/Optional	Required for existing features, optional for proposed
Domain (Valid Values)	No domain. Examples: "OROR 65814", "OROR 6818PT", "OROR 61083FD", "OROR 6173P1", "ORORE 00014635"
Data Type	String (15)

7.9 CASETP

Geodatabase Name	CASETP
BLM Structured Name	Example_Text
Inheritance	Inherited from entity Existing Encumbrances or Proposed Encumbrances
Alias Name	None
Feature Class Use/Entity Table	ESMTROW_POLY, ESMTROW_ARC, ESMTROW_P_POLY, ESMTROW_P_ARC
Definition	<p>A coded number system (defined by LR2000) that identifies a case (e.g., authorization, conveyances, withdrawals, acquisitions, etc.). The six-digit code is constructed as follows:</p> <p>First two digits "00" through "99" denotes major groups generally listed in 43 CFR (e.g., "21" =acquisitions, "22" =exchanges, "23" =withdrawals, "28" =ROW).</p> <p>Second two digits "00" through "99" denotes major parts (e.g., "2810" =ROW, Roads, "2830" =ROW, Wind, "2840" =ROW, Railroad).</p> <p>Last two digits "00" through "99" identifies a unique case type.</p> <p>Examples: "281007" – ROW-ROADS FEDERAL FAC "283003" – ROW-WIND DEV FAC</p> <p>For a complete list of Case types go to: https://reports.blm.gov/document/lr2000/120/Casetype-Codes-by-Code.</p>
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	String (6)

7.10 COORD_SRC

Geodatabase Name	COORD_SRC
BLM Structured Name	Coordinate_Source_Code
Inheritance	Inherited from entity Existing Encumbrances or Proposed Encumbrances
Alias Name	None

Feature Class Use/Entity Table	ESMTROW_POLY, ESMTROW_ARC, ESMTROW_P_POLY, ESMTROW_P_ARC
Definition	The actual source of the GIS coordinates for the line segments.
Required/Optional	Optional
Domain (Valid Values)	dom_COORD_SRC
Data Type	String (7)

7.11 ESMTROW_FTR

Geodatabase Name	ESMTROW_FTR
BLM Structured Name	ESMTROW_Feature_Code
Inheritance	Inherited from entity Existing Encumbrances or Proposed Encumbrances
Alias Name	None
Feature Class Use/Entity Table	ESMTROW_POLY, ESMTROW_ARC, ESMTROW_P_POLY, ESMTROW_P_ARC
Definition	Type of geographic or legal feature associated with an easement or ROW.
Required/Optional	Required
Domain (Valid Values)	dom_ESMTROW_FTR
Data Type	String (20)

7.12 ESMTROW_NM

Geodatabase Name	ESMTROW_NM
BLM Structured Name	ESMTROW_Name_Text
Inheritance	Inherited from entity Existing Encumbrances
Alias Name	None
Feature Class Use/Entity Table	ESMTROW_POLY, ESMTROW_ARC
Definition	Name of the project the easement or ROW is part of.
Required/Optional	Required for existing features, optional for proposed
Domain (Valid Values)	No domain. Examples: "Kiger Fence", "Ponderosa Timber Access", "Horizon Wind Access", "Steens Easement", "Public Hiking Trail", "Hodges ROW"
Data Type	String (30)

7.13 ESMTROW_P_NM

Geodatabase Name	ESMTROW_P_NM
BLM Structured Name	Proposed_ESMTROW_Name_Text
Inheritance	Inherited from entity Proposed Encumbrances

Alias Name	None
Feature Class Use/Entity Table	ESMTROW_P_POLY, ESMTROW_P_ARC
Definition	Unique identifying name for a proposed easement or ROW project.
Required/Optional	Required
Domain (Valid Values)	No domain. Examples: “Kiger Fence”, “Ponderosa Timber Access”, “Horizon Wind Access”, “Steens Easement”, “Public Hiking Trail”, “Hodges ROW”
Data Type	String (30)

7.14 ESMTROW_TP

Geodatabase Name	ESMTROW_TP
BLM Structured Name	ESMTROW_Type_Code
Inheritance	Inherited from entity Existing Encumbrances or Proposed Encumbrances
Alias Name	None
Feature Class Use/Entity Table	ESMTROW_POLY, ESMTROW_ARC, ESMTROW_P_POLY, ESMTROW_P_ARC
Definition	The access instrument that conveys rights to or from the United States.
Required/Optional	Required
Domain (Valid Values)	dom_ESMTROW_TP
Data Type	String (10)

7.15 EXCL_TP

Geodatabase Name	EXCL_TP
BLM Structured Name	Easement_Exclusive_Type_Code
Inheritance	Inherited from entity Existing Encumbrances
Alias Name	None
Feature Class Use/Entity Table	ESMTROW_POLY, ESMTROW_ARC, ESMTROW_P_POLY, ESMTROW_P_ARC
Definition	The specific type of easement. Only applies if attribute ESMTROW_TP = “Easement”. There are two types of easements: exclusive easements are generally open to the public and nonexclusive easements are generally administrative only, not open to the public or third parties. This attribute captures the language of the legal document.
Required/Optional	Optional
Domain (Valid Values)	dom_EXCL_TP
Data Type	String (12)

7.16 GIS_ACRES

Geodatabase Name	GIS_ACRES
BLM Structured Name	GIS_Acres_Measure
Inheritance	Not Inherited
Alias Name	None
Feature Class Use/Entity Table	ESMTROW_POLY, ESMTROW_P_POLY
Definition	<p>GIS_ACRES is calculated when the submitted polygon is approved for incorporation into the dataset. The standard spatial reference of Geographic (NAD 1983) cannot be used for calculating acres, so the features are projected as determined by the BLM_ORG_CD of the record:</p> <p>Prineville: NAD 1983 USFS R6 Albers Coos Bay, Lakeview, Medford, NW Oregon, Roseburg: NAD 1983 UTM Zone 10N Burns, Spokane, Vale: NAD 1983 UTM Zone 11N</p>
Required/Optional	Required (automatically generated)
Domain (Valid Values)	No domain
Data Type	Double

7.17 GIS_MILES

Geodatabase Name	GIS_MILES
BLM Structured Name	GIS_Miles_Measure
Inheritance	Not Inherited
Alias Name	None
Feature Class Use/Entity Table	ESMTROW_ARC, ESMTROW_P_ARC
Definition	<p>Length of a linear feature in miles. Must be recalculated with every edit submission. The acres will be automatically calculated when the feature classes are published. The standard spatial reference of Geographic (NAD 1983) cannot be used for calculating miles, so the features are projected to one of three projections as determined by the BLM_ORG_CD of the record. These three projections all utilize linear units of meters, so the ESRI Geodatabase-controlled field SHAPE.LENGTH can be used to convert to miles with the factor based on the U.S. Survey Foot: $GIS_MILES = SHAPE.LENGTH * 0.0002471044$.</p> <p>Prineville: NAD 1983 USFS R6 Albers Coos Bay, Lakeview, Medford, NW Oregon, Roseburg: NAD 1983 UTM Zone 10N Burns, Spokane, Vale: NAD 1983 UTM Zone 11N</p>
Required/Optional	Required (automatically generated)
Domain (Valid Values)	No domain
Data Type	Double

7.18 GLOBALID

Geodatabase Name	GLOBALID
BLM Structured Name	Global_Unique_Identifier
Inheritance	Not Inherited
Alias Name	None
Feature Class Use/Entity Table	All feature classes and tables
Definition	An alpha-numeric code that serves as the universal and unique identifier for each feature within the feature class or table of a geodatabase. Software generated value. A field of type UUID (Universal Unique Identifier) in which values are automatically assigned by the geodatabase when a row is created. This field is not editable and is automatically populated when it is added for existing data.
Required/Optional	Required
Domain (Valid Values)	No domain. Example: {4747B796-44B4-4628-B069-2D496422E59F}
Data Type	GUID

7.19 GRANTOR

Geodatabase Name	GRANTOR
BLM Structured Name	Grantor_Organization_Code
Inheritance	Inherited from entity Existing Encumbrances
Alias Name	None
Feature Class Use/Entity Table	ESMTROW_POLY, ESMTROW_ARC
Definition	The organization (in general terms) that grants or administers the Easement or ROW.
Required/Optional	Required
Domain (Valid Values)	dom_JURIS_CODE
Data Type	String (3)

7.20 GRANTOR_NM

Geodatabase Name	GRANTOR_NM
BLM Structured Name	Grantor_Name
Inheritance	Inherited from entity Existing Encumbrances
Alias Name	None
Feature Class Use/Entity Table	ESMTROW_POLY, ESMTROW_ARC
Definition	Name of the organization or person that grants or administers the rights in the Easement or ROW. Multiple names can be concatenated. In the case where the names would exceed the 60-character limit, using the last name of the first customer (or the customer with the highest percentage of interest) and “, ET ALT” to indicate there is more than one customer.

Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: "MOUNT HOOD NF", "HART MOUNTAIN NAT ANTELOPE REF", "WALLOWA LAKE STATE PARK", and "DIAMOND RANCH LLC".
Data Type	String (60)

7.21 GRANTOR_P

Geodatabase Name	GRANTOR_P
BLM Structured Name	Proposed_Grantor_Organization_Code
Inheritance	Inherited from entity Proposed Encumbrances
Alias Name	None
Feature Class Use/Entity Table	ESMTROW_P_POLY, ESMTROW_P_ARC
Definition	The organization (in general terms) that will grant or administer the proposed Easement or ROW.
Required/Optional	Optional
Domain (Valid Values)	dom_JURIS_CODE
Data Type	String (3)

7.22 GRANTOR_P_NM

Geodatabase Name	GRANTOR_P_NM
BLM Structured Name	Proposed_Grantor_Name
Inheritance	Inherited from entity Proposed Encumbrances
Alias Name	None
Feature Class Use/Entity Table	ESMTROW_P_POLY, ESMTROW_P_ARC
Definition	Name of the organization or person that would grant or administer the proposed Easement or ROW. Multiple names can be concatenated. In the case where the names would exceed the 60-character limit, using the last name of the first customer (or the customer with the highest percentage of interest) and ", ET ALT" to indicate there is more than one customer.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: "MOUNT HOOD NF", "HART MOUNTAIN NAT ANTELOPE REF", "WALLOWA LAKE STATE PARK", and "DIAMOND RANCH LLC".
Data Type	String (60)

7.23 LOCAL_ID

Geodatabase Name	LOCAL_ID
BLM Structured Name	ESMTROW_Local_Identifier

Inheritance	Inherited from entity Existing Encumbrances or Proposed Encumbrances
Alias Name	None
Feature Class Use/Entity Table	ESMTROW_POLY, ESMTROW_ARC, ESMTROW_P_POLY, ESMTROW_P_ARC
Definition	A local identifier, unique by district, used by western Oregon districts. This field is called "Action Remarks" in LR2000.
Required/Optional	Required for western Oregon districts, i.e., Coos Bay, Medford, Northwest Oregon, and Roseburg, where CASETP in ("210001, 210003, 210006, 210007, 210013, 210017, 210020, 210030, 21006, 211000, 218006, 218013, 218071, 281001, 281003, 281008, 281210, 281212, 281230"). Optional for proposed features.
Domain (Valid Values)	No domain. Examples: "RE-R-460C", "RE-M-20", "RWA-R-645" where RE-R-460C and RE-M-20 are easements, and "RWA-R-645" is a Reciprocal ROW. The middle letter represents the name of the district ("R" = Roseburg, "M" = Medford, etc.).
Data Type	String (12)

7.24 RADMETER

Geodatabase Name	RADMETER
BLM Structured Name	Radial_Buffer_Meters_Measure
Inheritance	Not Inherited
Alias Name	None
Feature Class Use/Entity Table	ESMTROW_ARC, ESMTROW_P_ARC
Definition	Radial width of the Easement or ROW in meters to the nearest hundredth or tenth. Rudimentary or average widths. The derived acreages will be approximate. Detailed widths which may vary by segment are found in the case file. If unknown or too variable, "-1" (default value) is retained.
Required/Optional	Required
Domain (Valid Values)	No domain
Data Type	Double

7.25 RADMETER_L

Geodatabase Name	RADMETER_L
BLM Structured Name	Radial_Buffer_Left_Meters_Measure
Inheritance	Not Inherited
Alias Name	None
Feature Class Use/Entity Table	ESMTROW_ARC, ESMTROW_P_ARC
Definition	"Left-side" radial width of the Easement or ROW in meters to the nearest hundredth or tenth. If this attribute is filled in, then RADMETER must be set to -1, and RADMETER_R must be set to something other than -1 (0 or a

	positive number). This width and derived acreages are approximate. Detailed widths are found in the case file.
Required/Optional	Required if RADMETER_R equals a value other than -1.
Domain (Valid Values)	No domain
Data Type	Double

7.26 RADMETER_R

Geodatabase Name	RADMETER_R
BLM Structured Name	Radial_Buffer_Right_Meters_Measure
Inheritance	Not Inherited
Alias Name	None
Feature Class Use/Entity Table	ESMTROW_ARC, ESMTROW_P_ARC
Definition	“Right-side” radial width of the Easement or ROW in meters to the nearest hundredth or tenth. If this attribute is filled in, then RADMETER must be set to -1, and RADMETER_L must be set to something other than -1 (0 or a positive number). This width and derived acreages are approximate. Detailed widths are found in the case file.
Required/Optional	Required if RADMETER_L equals a value other than ‘-1’.
Domain (Valid Values)	No domain
Data Type	Double

7.27 RGT HOLDER

Geodatabase Name	RGT HOLDER
BLM Structured Name	Right_Holder_Organization_Code
Inheritance	Inherited from entity Existing Encumbrances
Alias Name	None
Feature Class Use/Entity Table	ESMTROW_POLY, ESMTROW_ARC
Definition	Code for the organization (in general terms) that holds the rights granted in the Easement or ROW.
Required/Optional	Required
Domain (Valid Values)	dom_JURIS_CODE
Data Type	String (3)

7.28 RGT HOLDER_NM

Geodatabase Name	RGT HOLDER_NM
BLM Structured Name	Right_Holder_Name
Inheritance	Inherited from entity Existing Encumbrances

Alias Name	None
Feature Class Use/Entity Table	ESMTROW_POLY, ESMTROW_ARC
Definition	Name of the organization or person that holds the rights granted in the easement or ROW. Multiple names can be concatenated. In the case where the names would exceed the 60-character limit, using the last name of the first customer (or the customer with the highest percentage of interest) and “, ET AL” to indicate there is more than one customer.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: “MOUNT HOOD NF”, “HART MOUNTAIN NAT ANTELOPE REF”, “WALLOWA LAKE STATE PARK”, “DIAMOND RANCH LLC”
Data Type	String (60)

7.29 RIGHT_P HOLDER

Geodatabase Name	RIGHT_P HOLDER
BLM Structured Name	Proposed_Right_Holder_Organization_Code
Inheritance	Inherited from entity Proposed Encumbrances
Alias Name	None
Feature Class Use/Entity Table	ESMTROW_P_POLY, ESMTROW_P_ARC
Definition	Code for the organization (in general terms) that will hold the rights granted in a proposed Easement or ROW.
Required/Optional	Optional
Domain (Valid Values)	dom_JURIS_CODE
Data Type	String (3)

7.30 RGT_P HOLDER_NM

Geodatabase Name	RGT_P HOLDER_NM
BLM Structured Name	Proposed_Right_Holder_Name
Inheritance	Inherited from entity Proposed Encumbrances
Alias Name	None
Feature Class Use/Entity Table	ESMTROW_P_POLY, ESMTROW_P_ARC
Definition	Name of the person or entity applying for an Easement or ROW. Multiple names can be concatenated. In the case where the names would exceed the 60-character limit, using the last name of the first customer (or the customer with the highest percentage of interest) and “, ET ALT” to indicate there is more than one customer.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: “MOUNT HOOD NF”, “HART MOUNTAIN NAT ANTELOPE REF”, “WALLOWA LAKE STATE PARK”, “DIAMOND RANCH LLC”

Data Type	String (60)
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7.31 ROAD_LINK

Geodatabase Name	ROAD_LINK
BLM Structured Name	Road_Identifier_Code
Inheritance	Not Inherited
Alias Name	None
Feature Class Use/Entity Table	ESMTROW_ARC, ESMTROW_P_ARC
Definition	Unique identifier (e.g., FRMWK_ID, LINLOCID, and SEGASSETID) for a road segment copied from GTRN dataset. The choice of which identifier to use is at the discretion of the district office.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: "404112", "65112"
Data Type	String (20)

7.32 STATUS_P

Geodatabase Name	STATUS_P
BLM Structured Name	Facility_Proposed_Status_Code
Inheritance	Inherited from entity Proposed Encumbrances
Alias Name	None
Feature Class Use/Entity Table	ESMTROW_P_POLY, ESMTROW_P_ARC
Definition	The status of a proposed facility, structure, or application.
Required/Optional	Required
Domain (Valid Values)	dom_STATUS_P
Data Type	String (12)

7.33 VERSION_NAME

Geodatabase Name	VERSION_NAME
BLM Structured Name	Geodatabase_Version_Text
Inheritance	Inherited from entity ODF
Alias Name	None
Feature Class Use/Entity Table	ESMTROW_POLY, ESMTROW_ARC, ESMTROW_P_POLY, ESMTROW_P_ARC
Definition	Name of the corporate geodatabase version previously used to edit the record. InitialLoad = feature has not been edited in ArcSDE.

	Format: username.XXX-mmddyy-hhmmss = version name of the last edit (hours might be a single digit; leading zeros are trimmed for hours only). XXX = theme abbreviation. Only appears in the transactional (edit) version. Public version (which is also the version used internally for mapping or analysis) does not contain this attribute.
Required/Optional	Required (automatically generated)
Domain (Valid Values)	No domain
Data Type	String (50)

7.34 WILD_CLEAR

Geodatabase Name	WILD_CLEAR
BLM Structured Name	Wildlife_Clearance_Date
Inheritance	Inherited from entity Proposed Encumbrances
Alias Name	None
Feature Class Use/Entity Table	ESMTROW_P_POLY, ESMTROW_P_ARC
Definition	Date the facility or site received wildlife clearance (YYYYMMDD).
Required/Optional	Optional
Domain (Valid Values)	No domain. Example: "20090812"
Data Type	String (8)

8 Publication Views

8.1 General

Master corporate feature classes/datasets maintained in the edit database (currently ORSOEDIT) are “published” to the user database (currently ORSOVCTR) in several ways:

- Copied completely with no changes (replicated).
- Copied with no changes except to omit one or more feature classes from a feature dataset.
- Minor changes made (e.g., clip, dissolve, union with ownership) to make the data easier to use. Feature classes that have been changed are indicated by “PUB” in their name. They are created through scripts that can be automatically executed and are easily rebuilt from the master (ORSOEDIT) data whenever necessary.

8.2 Specific to This Dataset

Publication feature classes will be created for internal use where:

- The attribute VERSION_NAME is removed (for privacy reasons).

Publication feature classes will be created for publishing to the web, release to the public, where:

- Data not in proposed theme layers.
- The attribute VERSION_NAME is removed (for privacy reasons).
- The attributes RGT HOLDER_NM and GRANTOR_NM are removed (for Privacy reasons).
- Spatial features where STATUS_P = “Initial” are removed.
- Non-federal entity spatial features are removed. An entity is a non-federal entity when neither GRANTOR nor RGT HOLDER is a federal agency. In other words: remove any feature where GRANTOR in (“PV, PVI, PVN, PVU, UN”) and RGT HOLDER in (“PV, PVI, PVN, PVU, UN”).
- Spatial features are removed when the grantor is unknown and the feature falls outside of public jurisdiction as indicated by overlay with the surface jurisdiction, OWNERSHIP_POLY, layer. In other words, remove any features where GRANTOR = “UN” and a spatial selection of the feature is in (not necessarily wholly contained) an area of the OWNERSHIP_POLY layer where PROPERTY_STATUS in (“PV, PVI, PVN, PVU”).

8.3 Layer Files

Layer files are not new data requiring storage and maintenance but point to existing data. They have appropriate selection and symbolization for correct use and display of the data. They provide the guidance for data published on the web. Layer files are created by simple, documented processes, and can be deleted and recreated at any time.

9 Editing Procedures

9.1 Managing Overlap (General Guidance)

“Overlap” means there are potentially more than one feature in the same feature class that occupies the same space (“stacked” polygons). Depending on the query, acres will be double counted.

In this discussion, an area entity may consist of more than one polygon, and a line entity may consist of more than one arc. They would have multiple records in the spatial table (with identical attributes). Multi-part features are not allowed. Multi-part features are easily created inadvertently and not always easy to identify. If they are not consciously and consistently avoided, feature classes will end up with a mixture of single and multi-part features. Multi-part features can be more difficult to edit, query, and select, along with impacting overall performance.

Overlap is only allowed in the ODF in limited and controlled scenarios. In each case, the “cause” of the overlap (the attribute changes that “kick off” a new feature which may overlap an existing feature) is carefully defined and controlled. In other words, in feature classes that permit overlap for a change in spatial extent, there is always a new feature created which may overlap an existing feature, but in addition there are certain attribute(s) that will result in a new feature even if there is no spatial change. The feature classes (and the one feature dataset) that allow overlap, and the attributes that lead to a new, possibly overlapping feature, are described below.

9.1.1 Overlapping Polygons where polygons are a stand-alone feature class.

- No topology rules.
- Species Occurrence Group: These are distinct sites defined by species and time. A different species creates a new polygon which may overlap another site in whole or part. A change in time (new visit date) will create a new polygon if it is desired that the old spatial extent and date is retained (as historic). Additionally, for wildlife, a different season/type of use (e.g., winter range vs. spring breeding) will create new polygon that may overlap others. Examples: WEEDS_POLY, GB_FLORA_SITE.
- Survey Group: Within each feature class a new survey is created only for a new date. This group might also include proposed surveys in separate feature classes. Examples: GB_SURVEY, Archeological Survey (CULT_SURV).
- Treatment Activity Group: Within each feature class (BURN, HARV, MECH, CHEM, BIO, REVEG, PROT), an overlapping treatment area is created only for a new date, and sometimes for a different method (if it is not possible to SPLIT the treatment area by method and it is important to capture more than one method applied to the same area on the same day). This group also includes proposed treatments which could overlap existing treatments and have additional overlap created by different treatment alternatives
- Recreation Site Polygons (RECSITE_POLY): An overlapping site polygon is created only for different name, type, or development level.
- Land Status Encumbrances Group: A new, possibly overlapping polygon is created for a new casefile number even if it is the same area. Examples: easement/ROW areas (ESMTROW_POLY) and land acquisitions/disposals (ACQ_DSP_POLY).

9.1.2 Overlapping Arcs where arcs are a stand-alone feature class.

- No topology rules.
- Examples: easement/ROW lines (ESMTROW_ARC) a new, possibly overlapping arc is created for a new casefile number; structures (STRCT_ARC) a new, possibly overlapping arc is created for a different name, type, RIPS number or construction date.

9.2 Editing Quality Control

Duplicate features. Checking for undesired duplicates is critical. Polygons or arcs that are 100% duplicate are easily found by searching for identical attributes along with identical Shape_Area and/or Shape_Length. Searching for partially overlapping arcs or polygons is harder, and each case must be inspected to determine if the overlap is desired or not.

To avoid overlapping polygons on the same area, polygons from different input themes are incorporated with the Union spatial overlay tool, not copied.

Union rather than Intersect is used to prevent unintended data loss.

Gap and overlap slivers. These can be hard to find if there are no topology rules. A temporary map topology can be created to find overlap slivers. Gap slivers can be found by constructing polygons from all arcs and checking polygons with very small area.

Buffer and dissolve considerations. Where polygons are created with the buffer tool, the correct option must be selected. The default option is “None,” which means overlap will be retained. Sometimes the overlap should be dissolved, and the option changed to “All.” Lines resulting from buffer have vertices too close together, especially around the end curves. They should be generalized to thin the vertices. If the dissolve tool is used on polygons or arcs, the “Create multipart features” should be unchecked.

GPS considerations. GPS linework is often messy and should always be checked and cleaned up as necessary. Often vertices need to be thinned (generalize) especially at line ends. Multi-part polygons are sometimes inadvertently created when GPS files with vertices too close together or crossing lines or spikes are brought into ArcGIS. Tiny, unwanted polygons are created but are “hidden” because they are in a multi-part.

Be careful when merging lines. Multi-part lines will be created if there are tiny unintentional (unknown) gaps, and it can be difficult to find these unless the multi-parts are exploded.

Null geometry. Check any features that have 0 or very small Shape_Area or Shape_Length. If a feature has 0 geometry and you can't zoom to it, it is probably an inadvertently created “Null” feature and should be deleted. Very small features may also be unintended, resulting from messy line work.

Check tolerances. In general, set Cluster Tolerance as small as possible. This is 0.000000009 Degree (0.000007 degree is approximately 1 meter).

Snapping considerations. Where line segments with different COORD_SRC meet, the most accurate or important (in terms of legal boundary representation) are kept unaltered, and other lines snapped to them. In general, the hierarchy of importance is PLSS (CADNSDI points/lines) first, with DLG or SOURCE next, then DEM, and MAP last. When snapping to the data indicated in COORD_SRC (as opposed to duplicating with copy/paste), be sure there are the same number of vertices in the target, and source theme arcs. When the DEF_FEATURE is “SUBDIVISION,” snap the line segment to PLSS points, and make sure there are the same number of vertices in the line as PLSS points.

Check that all date fields contain valid dates in YYYYMMDD, YYYYMM or YYYY format. If an attribute has a domain, check for invalid values. The values must be exact.

Check for capitalization and spacing differences in attribute values that should be the same. Check for leading or trailing blanks what will make a different value even if it looks identical.

9.3 Snapping Guidelines

Where line segments with different COORD_SRC meet, the most accurate or important in terms of legal boundary representation are kept unaltered, and other lines snapped to them. In general, the hierarchy of importance is “CADNSDI” points and lines first, with “DLG” or “SOURCE” next, then “DEM”, and “MAP” last.

When snapping to the data indicated in COORD_SRC (as opposed to duplicating with copy or paste), be sure there are the same number of vertices in the target, and source theme arcs.

When the DEF_FEATURE is “SUBDIVISION”, snap the line segment to CADNSDI points, and make sure there are the same number of vertices in the line as there are CADNSDI points.

On themes with ACCURACY_FT, but no value in COORD_SRC or DEF_FEATURE, the line with better ACCURACY_FT is kept unaltered.

9.4 Theme Specific Guidance

There is much in the data standard that addresses editing and provides guidance especially in the Data Management Protocols (Section 3).

10 Abbreviations and Acronyms

Does not include abbreviations/acronyms used as codes for data attributes or domain values.

Table 2 Abbreviations/Acronyms Used

Abbreviations	Descriptions
ARC	GIS line feature
BLM	Bureau of Land Management, U.S. Department of the Interior
CADNSDI	Cadastral National Spatial Data Infrastructure
DEM	Digital Elevation Model
DLG	Digital Line Graphs
FOIA	Freedom of Information Act
GIS	Geographic Information System
GNIS	Geographic Names Information System
GPS	Global Positioning System
GTRN	Ground Transportation GIS dataset
IDP	Interdisciplinary
LR2000	Legacy Rehost 2000 Database
MTP	Master Title Plat
NAD	North American Datum
NARA	National Archives and Records Administration
NEPA	National Environmental Policy Act
ODF	Oregon Data Framework
OR/WA	Oregon/Washington BLM Administrative State
POLY	GIS polygon feature
PUB	Publication
RMP	Resource Management Plan
ROW	Rights-of-Way
USFS	United States Forest Service, U.S. Department of Agriculture
USGS	United States Geological Survey, U.S. Department of the Interior
SDE	Spatial Database Engine
SMA	Special Management Area
WEB	Worldwide Web (internet)

A Domains (Valid Values)

These are the domains at the time the data standard was approved. Domains can be changed without a re-issue of the data standard. Current domains are found on the internal OR/WA SharePoint data management page. Some of the domains used in this data standard are also available at the following web site:

<http://www.blm.gov/or/datamanagement/index.php>

For domains not listed at that site contact: contact the [State Data Administrator](#).

A.1 dom_ACCESS_RIGHTS

Access Rights Code. Access rights associated with an easement, right of way or transportation route.

Code	Description
PUBLIC	PUBLIC – Public access (including BLM) is secured
ADMIN	ADMIN – BLM Administrative rights; no public access is secured
MIXED	MIXED – Access rights are too intermixed within an area to map
NONE	NONE – No public or BLM access is allowed
UNKNOWN	UNKNOWN – Unknown
NA	NA – Not applicable

A.2 dom_AUTH_USE

Authorized Use Text. Use that is authorized by an Easement or Right of Way.

Code	Description
Communication Facility	Communication Facility - Development of a communication facility
Crossing Access	Crossing Access - Crossing the land with a vehicle or fence is authorized (may include construction and/or timber)
Crossing Access with Exceptions	Crossing Access with Exceptions - Crossing the land is authorized with one or more exceptions, for example timber.
Federal Aid to Highways Mineral Sites	Federal Aid to Highways Mineral Sites - Development of a mineral materials site (e.g., for road paving material) as granted under the Federal Aid Highway Act of 1956.
Forest Products Management and Removal	Forest Products Management and Removal - Access to forest lands for management and transport of forest products
Power Transportation	Power Transportation - Movement of power across an area (e.g., transmission line, gas pipeline)
Solar Development	Solar Development - Development of an area/site for solar power generation
Water Testing	Water Testing - Testing for water flow or quantity
Water Transportation	Water Transportation - Transportation of water across an area (e.g., pipeline)
Windpower Development	Windpower Development - Development of a wind power generation area/site
Windpower Testing	Windpower Testing - Testing of an area/site for potential wind power generation

A.3 dom_BLM_ORG_CD

Administrative Unit Organization Code. Standard BLM organization codes generated from the national list. This is a subset of OR/WA administrative offices and those in other states that border.

This is a lengthy domain used by multiple datasets. For the full list of values go to:

https://gis.blm.gov/ORDownload/Domains/dom_BLM_ORG_CODE.xls.

A.4 dom_COORD_SRC

Coordinate Source Code. The source of the geographic coordinates (lines, points, polygons).

Code	Description
CADNSDI	CADNSDI - Coordinates from or snapped to the CADNSDI dataset
CFF	CFF - Lines duplicated or buffered from Cartographic Feature Files (USFS)
DEM	DEM - Digital Elevation Model (30 m or better accuracy) used for creation of contours
DGPS	DGPS - Feature obtained from a Global Positioning System device with Real Time Correction (SBAS)
DIS	DIS - Lines generated to connect discontinuous features
DLG	DLG - Lines duplicated or buffered from (24K scale accuracy) USGS Digital Line Graphs
DOQ	DOQ - Screen digitized linework over digital orthophotography backdrop (DOQ, NAIP, OSIP, or others)
DRG	DRG - Screen digitized linework over Digital Raster Graphic backdrop
GCD	GCD - Lines snapped to (pre-CADNSDI) Geographic Coordinate Database Points
GPS	GPS - Coordinates obtained from a Global Positioning System device
IMG	IMG - Linework derived from interpretation of satellite or other non-photographic imagery
LiDAR	LiDAR - LiDAR points, lines, or polygons generated through interpretation or analysis.
MAP	MAP - Digitized coordinates from hardcopy map or onto a map backdrop
MTP	MTP - Lines duplicated from Digital Master Title Plat
SOURCEL	SOURCEL - Coordinates duplicated from a BLM GIS source layer.
SOURCEX	SOURCEX - Source Layer from non-BLM GIS
SRV	SRV - Survey methods were used to create the linework (e.g., COGO)
TIGER	TIGER - Tiger Data
TRS	TRS - Coordinates only given as a legal description (township, range, section)
UNK	UNK - Unknown coordinate source
WOD	WOD - WODDB Photogrammetric

A.5 dom_ESMTROW_FTR

Easement ROW Feature Code. Type of geographic or legal feature associated with the Easement or ROW.

Code	Description
ADMIN_SITE	ADMIN_SITE - Administrative Site

Code	Description
COMM_SITE	COMM_SITE - Communication Site
DITCH_CANAL	DITCH_CANAL - Ditch or Canal
FENCE	FENCE - Fence
FIBEROPTIC	FIBEROPTIC - Fiber Optic Cable
GEOSURVEY	GEOSURVEY - Geosurvey
MINMAT_SITE	MINMAT_SITE - Mineral Material Site
OTHER	OTHER - Other ROW not defined in this list
PARCEL	PARCEL - Parcel
PIPELINE	PIPELINE - Pipeline
POWER_STORAGE	POWER_STORAGE - Power Storage
POWERLINE	POWERLINE - Powerline
RAILROAD	RAILROAD - Railroad
RECREATION SITE	RECREATION SITE - Recreation Site
RESERVOIR	RESERVOIR - Reservoir
ROAD	ROAD - Road
ROAD NOT BUILT	ROAD NOT BUILT - Road authorized but not constructed
STAGING	STAGING - Staging
TELE_BURIED	TELE_BURIED - Telephone Buried
TELEPHONE	TELEPHONE - Telephone
TRAIL	TRAIL - Trail
WATER_GAP	WATER_GAP - Water Gap
WATER_GAUGE	WATER_GAUGE - Water Gauge
WATERTANK	WATERTANK - Water Tank
WINDTOWER	WINDTOWER - Windtower

A.6 dom_ESMTROW_TP

Easement ROW Type Code. Indicates whether feature is an Easement or a ROW and the general type.

Code	Description
CNSC	CNSC - Conservation or Scenic easement
ESMT	ESMT - Easement
LWCF	LWCF - Land and Water Conservation Fund Easement
OTHER	OTHER - Other type of Easement or Right-of-Way
ROW	ROW - Right-of-Way
RROW	RROW - Reciprocal Right-of-Way

Code	Description
RWP	RWP - Perpetual unilateral right-of-way permits, i.e., permits that are not included within reciprocal right-of-way

A.7 dom_EXCL_TP

Easement Exclusive Type Code. The specific type of an easement, as shown in the legal documents.

Code	Description
EXCLUSIVE	EXCLUSIVE - Easements generally open to the public
NONEXCLUSIVE	NONEXCLUSIVE - Easements generally administrative only, not open to the public or third parties
NA	NA - Not Applicable
UNKNOWN	UNKNOWN - The type of easement (exclusive/nonexclusive) is not identified

A.8 dom_JURIS_CODE

Jurisdiction Organization Code. Management entity that has administrative responsibilities or jurisdiction for a geographic location.

Code	Description
BL	BL - Bureau of Land Management
BP	BP - Bonneville Power Administration
BR	BR - Bureau of Reclamation
CE	CE - Corps of Engineers
CG	CG - U.S. Coast Guard
DA	DA - U.S. Dept. of Agriculture (Except the Forest Service)
DD	DD - U.S. Dept. of Defense (Except the Corps of Engineers)
FA	FA - Federal Aviation Administration
FC	FC - Federal Energy Regulatory Commission
FS	FS - U.S. Forest Service
FW	FW - U.S. Fish and Wildlife Service
GS	GS - U.S. Geological Survey
GSA	GSA - General Services Administration
IA	IA - Bureau of Indian Affairs and Tribal Units
LG	LG - Local Government
NP	NP - National Park Service
PV	PV - Private Lands
PVI	PVI - Private, Industrial
PVN	PVN - Private, NonIndustrial

Code	Description
PVU	PVU - Private, Urban
SDT	SDT - State Transportation Department
ST	ST - State Managed Lands
STF	STF - State Forests
STL	STL - State Division of Lands
STP	STP - State Parks
STW	STW - State Wildlife Refuges
UN	UN - Undetermined

A.9 dom_STATUS_P

Facility Proposed Status Code. The status of a proposed facility, structure, or application.

Code	Description
Initial	Initial - Pre-application or scoping, action not yet started
Pending	Pending - Active proposal, application filed
Suspended	Suspended - Activity halted
Relinquished	Relinquished - Proposal released by the proponent
Rejected	Rejected - Considered by BLM and found unsuitable
Closed	Closed - Realty case closed; proposal expired