BLM Administrative Units
(Boundaries)
IMPLEMENTATION GUIDELINES

June 6, 2011
Version 1.2

United States Department of the Interior
Bureau of Land Management
National Operations Center
Division of Resource Services
Denver Federal Center
Denver, Colorado 80225

Purpose of Implementation Guidelines

This document describes the physical design for the national data standard for the geospatial dataset. It is intended as a guideline for implementation. States may extend and expand upon this guideline in order to meet their specific needs, provided that when the data is pushed up to the national level, it will meet the minimum requirements as set forth in the Data Standard.

Table of Contents

INTRODUCTION

Data Structures Implemented

The data for inclusion in this data set shall be collected in a known datum and coordinate system. The data stored on the EGIS server in Denver shall be stored in geographic coordinates for national layers using the Bureau standard NAD 83 datum rather than in a specific projection. While the standard datum is NAD 83, there are multiple realizations of that datum in existence. The metadata for each data set shall contain more specific labeling of the datum as appropriate. Examples of this would include: NAD 83 (2007) or NAD 83 (CORS 96) (1997). Every effort should be made to be as specific as possible in delineating the appropriate datum.

A Bureau of Land Management (BLM) Administrative Unit is a geographic area in which an organizational unit of the BLM has distinct jurisdictional responsibility for land and resource management activities occurring on the public lands, the maintained rights of the United States (i.e. mineral estate) and actions relating to the Trust responsibilities of the U.S. Government as stipulated in Law or Treaty.

	Data Structures Implemented	
	There are four structures in this implementation:	
A	*admu_ofc_arc*	Represents the arc features that will define the polygons. These arcs will have the feature level metadata attributes shown assigned to them.
B	*admu_ofc_poly*	Represents the polygon features that show the boundaries for BLM Administrative Unit areas.
C	*admu_ofc_pt*	Represents the point features that show the physical locations of BLM Administrative Offices.
D	*admu_hist_ofc_poly*	Represents the polygon features that show the historical boundaries for BLM Administrative Unit areas that have changed.
E	*admu_hist_ofc_pt*	Represents the point features that show the historical locations of BLM Administrative Offices.

Design Considerations

This implementation covers both BLM administrative land areas and office locations. The land areas for higher level administrative

units (such as districts and administrative states) are not explicitly included in the implementation, but may be derived from the lower level administrative unit polygons that will be captured in the geodatabase. This feature class contains the necessary attribution to derive both the district unit boundary and the state unit boundary. Any change to the boundary or administrative code of a field office, district office, or state office will affect, potentially, the other two unit types. Therefore, documenting all changes in the admu_ofc_arc and admu_ofc_poly feature classes will allow for an accurate depiction of the field, district and state unit boundaries. State and District offices may maintain feature classes of their boundaries, or derive these on an as-needed basis. If the district and state boundary will be maintained as separate feature classes, then topology rules should be established to ensure that these polygons are coincident with the underlying feature class to be maintained as per this standard. Please refer to the BLM Administrative Units (Boundaries) Data Standard Report for the Business Rules.

Unique Identifiers

The BLM administrative land areas will be uniquely identified according to the Administrative Unit Code (ADM_UNIT_CD) attribute. This attribute is derived from the Federal Personnel Payroll System (FPPS) code that has been assigned to that area. If an area may be represented by two different FPPS codes, use the code for the area that is subordinate. For example, the Central Montana District Office and the Lewistown Field Office are coincident and share all borders. The unique identifier for this polygon should be derived from the FPPS code for the Lewistown Field office; the parent code would be that of the Central Montana District.

The BLM administrative office locations will be uniquely identified according to the Administrative Unit Code (ADM_UNIT_CD) that corresponds to that office. This attribute is derived from the FPPS code. This code may be the same as the code assigned to the area being administered out of the office. If there is more than one office at the same location, all offices should be represented by a point and identified by that office's code. For example, there are three offices located in St. George Utah; the Arizona Strip Field Office, the Arizona Strip District Office, and the St. George Field Office. Each of these offices has its own FPPS code which will be used as the basis for the unique identifiers.

Domains

There are domain tables that are common across other data standards and feature classes, and as such they must be implemented differently than those domains that are specific to the data standard (reference Domain Information located on the National Data Standards SharePoint under the "Instruction Materials" tab). These shared domains are not included in the geodatabase associated with these implementation guidelines.

The common domain names are included in the tables, in italic text. The domain values may be located in the Access Database which can be found on the National Data Standards SharePoint site. For instructions on adding these domains to the geodatabase, and linking them to the feature classes, please refer to the "Domains Management" document, in the "Domains Information" section located under the "Instruction Materials" tab on the National Data Standards SharePoint.

- *DOM_COORD_SOURCE_TYPE*

- *DOM_DEF_FEATURE_TYPE*
- *DOM_ADMIN_ST*
- *DOM_ADM_UNIT_CD*
- *DOM_BLM_ORG_TYPE*

The following domain is unique to the dataset; therefore, it is associated in the geodatabase and is included in the XML schema. The domain name is included in the tables, in normal text.
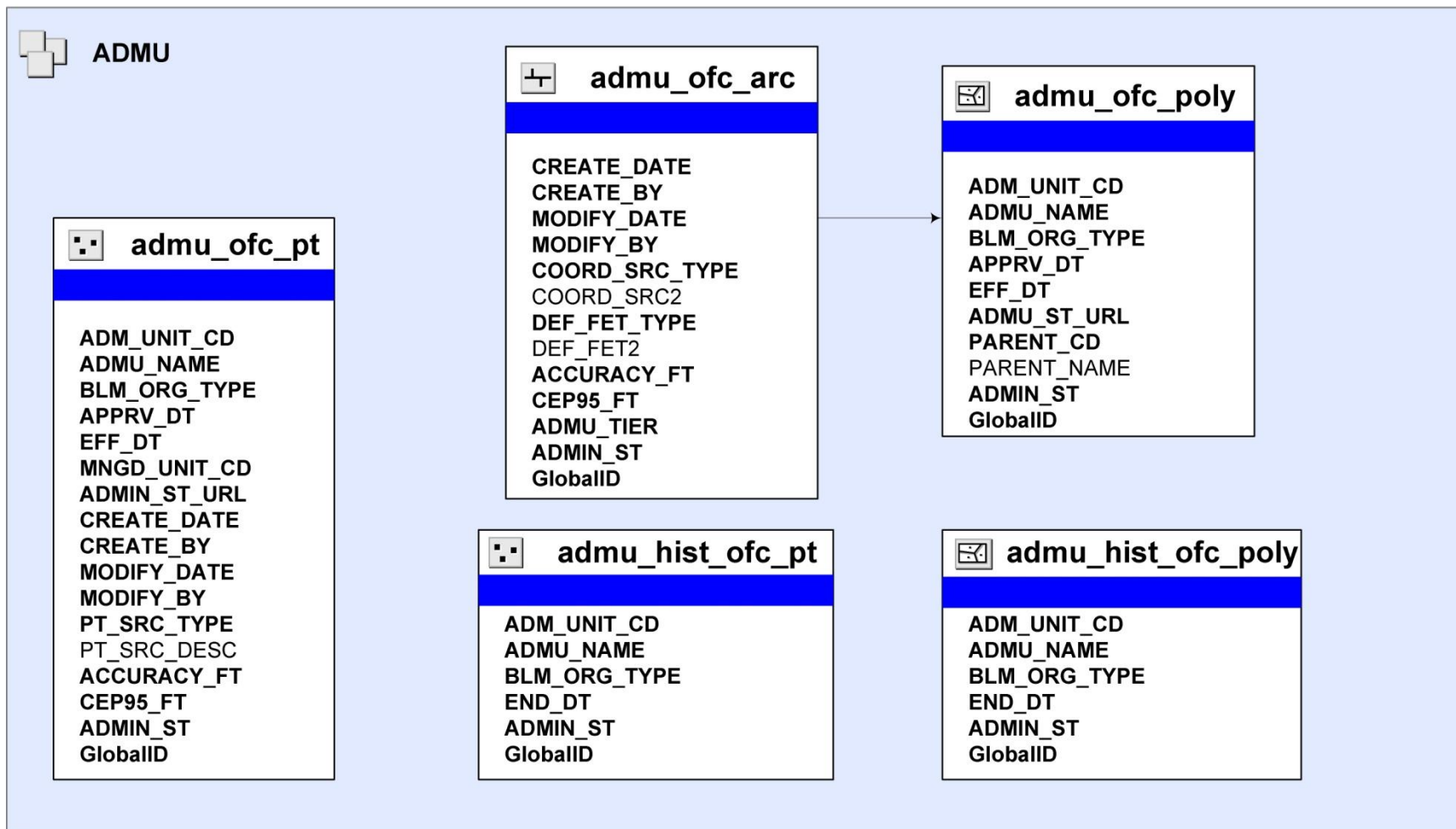
- ADMU_DOM_ADMU_TIER

Boundary Changes

If the boundary of an administrative unit changes, that boundary change will most likely affect adjacent units as well. The change to the boundary will result in new or modified polygons for the affected administrative units. The original boundary polygons should be copied into the historical feature class with an end date corresponding to the effective date for the change. For example, Field Office B is adjacent to Field Office A. There are 640 acres in Field Office B that would be better managed from Field Office A. The boundaries of the two field offices are modified so that the 640 acres are now physically located within the boundary of Field Office A. This change was approved on January 1, 2010 and went into effect on March 1, 2010. The approval date applies to the entire area of both field offices, and not just the 640 acres. The original polygons for both field offices are copied into the historical feature class with an end date of March 1, 2010. New or modified polygons are created for both field offices with the appropriate approval and effective dates.

Physical Database Diagram

BLM Administrative Units Boundaries (File Geodatabase)

ADMU

admu_ofc_arc

CREATE_DATE
CREATE_BY
MODIFY_DATE
MODIFY_BY
COORD_SRC_TYPE
COORD_SRC2
DEF_FET_TYPE
DEF_FET2
ACCURACY_FT
CEP95_FT
ADMU_TIER
ADMIN_ST
GlobalID

admu_ofc_poly

ADM_UNIT_CD
ADMU_NAME
BLM_ORG_TYPE
APPRV_DT
EFF_DT
ADMU_ST_URL
PARENT_CD
PARENT_NAME
ADMIN_ST
GlobalID

admu_ofc_pt

ADM_UNIT_CD
ADMU_NAME
BLM_ORG_TYPE
APPRV_DT
EFF_DT
MNGD_UNIT_CD
ADMIN_ST_URL
CREATE_DATE
CREATE_BY
MODIFY_DATE
MODIFY_BY
PT_SRC_TYPE
PT_SRC_DESC
ACCURACY_FT
CEP95_FT
ADMIN_ST
GlobalID

admu_hist_ofc_pt

ADM_UNIT_CD
ADMU_NAME
BLM_ORG_TYPE
END_DT
ADMIN_ST
GlobalID

admu_hist_ofc_poly

ADM_UNIT_CD
ADMU_NAME
BLM_ORG_TYPE
END_DT
ADMIN_ST
GlobalID

Topology

Geodatabase and map topologies will be established to relate the active feature classes together, to maintain feature geometry, and to aid in the editing of features. The implementation of this data standard requires that polygons be defined by bounding arcs. Therefore, a minimum set of geodatabase topology rules are defined as part of the geodatabase to verify the coincidence between these two feature classes.

Map topology shall be established during edit sessions. Edits to the polygon shape will be performed by modifying the bounding arc. (Historical or archived polygons will not be edited once they become inactive). For additional information, refer to the Topology Rules document located on the National Data Standards SharePoint under the "Instruction Materials" tab. It is recommended that these tools be used and implemented to improve data quality and integrity.

Geodatabase Topology Rules	
The following are the minimum that should be implemented. Additional topology rules may be added depending on data requirements for each office. xxxx_arc, xxxx_poly, etc. represent the names of the feature classes that participate in the rule.	
Topology Rule	**Required?**
admu_ofc_arc **Must Not Overlap** We recommend that this topology rule be implemented for local data QC purposes. This topology rule is not included as part of the national standard because the bounding arcs for adjacent areas should be coincident; and thus, will overlap each other (i.e. state boundaries).	Optional
admu_ofc_arc **Must Not Self-Overlap**	Mandatory
admu_ofc_arc **Must Be Covered By Boundary Of** *admu_ofc_poly*	Mandatory
admu_ofc_poly **Boundary Must Be Covered By** *admu_ofc_arc*	Mandatory
admu_ofc_poly **Must Not Overlap**	Mandatory

Data Guidelines

Implementation of the data standards will occur at those organizational levels of the Bureau as appropriate. The standards are intended to be platform-independent.

There are some attributes that are intended to eventually become system generated when a system or application is developed to manage this dataset. At the present time there is no specific application for maintaining this data layer and therefore those attributes will currently need to be manually edited.

The attributes included in this implementation are those that have been established for the national data standard and cannot be modified except through the Data Standards Maintenance process. If additional attributes or domain values are desired by individual states/offices, create a new attribute and populate with a new attribute domain assignment. Metadata for the additional attributes must be documented by that office.

The format for entering the date in the geodatabase (GDB) will be MM/DD/YYYY. The ESRI software displays the date field according to how dates are formatted for display on the computer. The FGDC-compliant format for the date field is YYYYMMDD. There are two methods in which the FGDC format could be used for storing the date. The date format on the computer can be reset which may introduce unintended consequences within other programs, or the date field could be defined as a text field which would leave ample room for errors being introduced to the data. Although the National Data Standards are intended to be platform-independent, the ESRI GDB format is the current platform implemented throughout the BLM.

The Administrative State, District and Field Office codes were part of a three tier identification system, which has been replaced by the ten-character U.S. Department of the Interior Federal Personnel Payroll System (FPPS) Organization Code. For BLM national data standards, we will be using only the last eight characters of the FPPS organization code (the two-character BLM Administrative State Code and the six-character Administrative Office Code). While using these codes in combination can contribute to the creation of a unique identifier, they are also listed as separate attributes so that if the codes change at a single level, the concatenated code can then be regenerated. However, if the 8 character code is used as part of a unique identifier, the unique identifier is not re-generated if the organization code changes.

To populate the field for the Administrative Unit Code attribute in the geodatabase (ADM_UNIT_CD), individual offices should download the Access database containing the common domains from the National Data Standards SharePoint located at http://teamspace/sites/blmnds/default.aspx. Click on the link for "Access Database-Domains" in the left column to download the Access database. The field should be populated with the office code for the lowest level of the organization that has jurisdiction.

Accuracy Goals for the GIS Dataset

Definitions:

Accuracy: (*technical*) The degree to which the result of a measurement, calculation, or specification conforms to the correct value or a standard: the accuracy of radiocarbon dating; accuracies of 50 – 70% [Oxford English Dictionary]

Precision: The degree of refinement with which an operation is performed or a measurement stated [Merriam-Webster]; the "closeness of agreement between indications or measured quantity values obtained by replicate measurements on the same or similar objects under specified conditions."

CEP: Circular Error Probable refers to the 50% probability that a specified location falls within the radius of a circle or ellipse. For example, if a CEP of 5 meters is quoted then 50% of horizontal (GPS) point positions should be within 5 meters of the true position [NovAtel, Trimble].

CEP$_{95}$: is an ellipse within which there is a 95% probability that the desired coordinate exists. This is sometimes referred to as a 95% confidence factor.

The goal for horizontal accuracy for each feature location will be + or - 40 feet at 1:24,000 scale, as documented in the data standard report. The accuracy and its confidence level (precision) will be documented in the feature level metadata for each feature. The confidence level should be recorded, in feet, as the CEP$_{95}$.

Dataset Review Cycle

The data for the BLM Administrative Units (Boundaries) should be reviewed, at a minimum, on an annual basis for updates. Based on program direction, the timing of this should be during October. The data standard itself will also be reviewed annually or at the time of request by the users through the data steward.

National Dataset Update Cycle

The national level data for the BLM Administrative Units (Boundaries) should be updated on the NOC EGIS server according to the Update Procedures Section of the Data Standard Report. This update shall occur through replication, with the updated information reflected on the BLM external data server within 30 days. State and local offices shall update their data within two weeks of approved changes.

Records Retention

The entire geodatabase for BLM Administrative Unit Boundaries will be archived on an annual basis, by October 15, for the previous fiscal year. **Note: Records issues will be handled according to official policy for Records Management.**

DATA STANDARD IMPLEMENTATION DETAILS

A. BLM Administrative Unit Boundary Polygon Arcs (admu_ofc_arc)

The arc features used to define the polygons are described in the following table. These attributes serve to store the feature level metadata information for the polygon boundaries, and document the origin and characteristics of each arc.

This table also includes an attribute for the administrative boundary tier level. This attribute is for use in mapping administrative boundaries. The tier should be coded according to the highest level tier that the arc represents. For example, if an arc represents the boundary for both a field office (tier 3), and a district office (tier 2) it should be coded as ADM_TIER = 2.

BLM Administrative Unit Boundary Polygon Arcs Attributes						
GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?
CREATE_DATE	Created Date	Date	YES	09/09/9999		NO
CREATE_BY	Created By Name	Char(30)	YES	UNK		NO
MODIFY_DATE	Modified Date	Date	YES	09/09/9999		NO
MODIFY_BY	Modified By Name	Char(30)	YES	UNK		NO
COORD_SRC_TYPE	Coordinate Source Type Code	Char(5)	YES	UNK	DOM_COORD_SOURCE_TYPE	NO
COORD_SRC2	Coordinate Source Code	Char(25)	NO			NO
DEF_FET_TYPE	Defining Feature Type Code	Char(15)	YES	UNK	DOM_DEF_FEATURE_TYPE	NO
DEF_FET2	Defining Feature Code	Char(30)	NO			NO
ACCURACY_FT	Accuracy Measurement In Feet	Long Integer	YES	-1		NO
CEP95_FT	95% Confidence Factor In Feet	Long Integer	YES	-1		NO
ADMU_TIER	Administrative Boundary Tier	Char(1)	YES	3	ADMU_DOM_ADMU_TIER	NO
ADMIN_ST	Administrative State Code	Char(2)	YES		DOM_ADMIN_ST	NO
GlobalID	GlobalID	UUID	YES			NO

GIS Name	Logical Name	Definition/Design Considerations
CREATE_ DATE	Location Effective Date	**Logical Definition:** The date which is the calendar year, month, and day when the position of the Location was produced. **Design Considerations:** As a new feature is added to the system its creation date will be collected and maintained. The date will be in the format of MM/DD/YYYY. Default: 09/09/9999
CREATE_ BY	Not applicable	**Logical Definition:** Not on the logical model. **Design Considerations:** The UserID (BLM login ID) of the person who created or imported the data into the BLM GIS system. This attribute will be deleted before providing the data to the public. Default: UNK
MODIFY_ DATE	Location Modified Date	**Logical Definition:** The date which is the calendar year, month, and day when the position of the Location was last modified. **Design Considerations:** As a feature is edited or modified while in the system its modification date will be collected and maintained. The date will be in the format of MM/DD/YYYY. Default: 09/09/9999
MODIFY_BY	Not applicable	**Logical Definition:** Not on the logical model. **Design Considerations:** The UserID (BLM login ID) of the person who edited or modified data in the BLM GIS system will be collected and maintained. This attribute will be deleted before providing the data to the public. Default: UNK

GIS Name	Logical Name	Definition/Design Considerations
COORD_SRC_TYPE	Location Source Type Name	**Logical Definition:** The name that identifies the general category for the origin of the location coordinate, representing a compilation of the state adopted source codes. The domain contains those values that would most likely be used in the determination of source codes for the data set. **Design Considerations:** Attribute Domain Assignment: *DOM_COORD_SOURCE_TYPE* Default: UNK
COORD_SRC2	Location Source Description Specific Name	**Logical Definition:** The name that identifies a more specific description of the location (coordinate source). **Design Considerations:** Suggested values for codes appear in the domains appendix. The user may leave this value "null", choose one of the suggested codes, or enter another value appropriate to the data. This domain is not intended to be all inclusive but may be used as a starting point for state-level lists of domain values. This list is not intended to be a substitute for the accuracy values that are found in the 'Accuracy Measurement Table'. This is an optional attribute.
DEF_FET_TYPE	Defining Feature Type Name	**Logical Definition:** The name that identifies the high-level category for the actual physical or mapping characteristics (features) from which the arcs are derived. **Design Considerations:** Attribute Domain Assignment: *DOM_DEF_FEATURE_TYPE* Default: UNK
DEF_FET2	Defining Feature Description Name	**Logical Definition:** The name that identifies a more specific description of the feature from which the arcs are derived to create polygon boundaries. This information further describes the physical or mapping feature that makes up the polygon boundary. **Design Considerations:** Suggested code values appear in the domains appendix. The user may leave this value "null", choose one of the suggested codes, or enter another value appropriate to the data. This domain is not intended to be all inclusive but may be used as a starting point for state-level lists of domain values. This is an optional attribute.

GIS Name	Logical Name	Definition/Design Considerations
ACCURACY_FT	Line Form Accuracy Measure	**Logical Definition:** The measure that describes how close, in Line Form UOM Type Name the actual location is to the spatial depiction. **Design Considerations:** The Accuracy Measurement defines how close, in feet, the actual ground location is to the spatial depiction in GIS. This value would typically be determined by one of three methods: 1) the map accuracy value, if a USGS map was used to define the boundary; 2) the expected spatial accuracy achieved with GPS; or 3) the measurement of that accuracy as is noted in the *National Standard for Spatial Data Accuracy (NSSDA)*[1] which is a data usability standard issued by the Federal Geographic Data Committee (FGDC). Default: -1 **A value of -1 indicates that the accuracy is unknown or that no reliable estimate can be made**. Below is an **example** table of accuracy measurements. (Attempting to list all values in a domain table would produce an infinite list.)

<table>
<tr><th colspan="2">Accuracy Measurement Example Table</th></tr>
<tr><td>1</td><td>+/- 1 Feet</td></tr>
<tr><td>10</td><td>+/- 10 Feet</td></tr>
<tr><td>15</td><td>+/- 15 Feet</td></tr>
<tr><td>20</td><td>+/- 20 Feet</td></tr>
<tr><td>100</td><td>+/- 100 Feet</td></tr>
</table>

[1] Federal Geographic Data Committee. 1998. Geospatial Positioning Accuracy Standards Part 3: National Standard for Spatial Data Accuracy, FGDC-STD-007.3-1998

GIS Name	Logical Name	Definition/Design Considerations
CEP95_FT	Not Applicable	**Logical Definition:** Not on the logical model. **Design Considerations:** The Circular Error Probable 95% (CEP95) refers to the radius, in feet, of a circle/ellipse, where there is a 95% probability that the feature coordinate actually exists. The reporting standard in the horizontal component is the radius of a circle of uncertainty, such that the true or theoretical location of the point falls within that circle 95-percent of the time. (Geospatial Positioning Accuracy Standards, Part 1: Reporting Methodology, FGDC-STD-007.1-1998) Default: -1
ADMU_TIER	Not applicable	**Logical Definition:** Not on the logical model. **Design Considerations:** This attribute has been added for cartographic purposes, and to aid in mapping the BLM Administrative boundaries. The national/international boundary should be coded with 0, the state boundary with 1, district boundaries with 2, field office boundaries with 3, and sub-field office boundaries with 4. Attribute Domain Assignment: ADMU_DOM_ADMU_TIER Default: 3

GIS Name	Logical Name	Definition/Design Considerations
ADMIN_ST	State Alphabetic Code	**Logical Definition:** An alphabetic abbreviation that represents each of the 50 states of the United States, the District of Columbia, the outlying areas of the United States, and associated areas. FIPS PUB 5-2 **Design Considerations:** An administrative unit that identifies the state or geographic area which has administrative jurisdiction over lands, and cases. The land for a case may not be physically located in the associated administrative state. Only those states that are BLM administrative states are in the domain for this entity. Example: Montana is the Administrative State for public lands in the geographic States of Montana, South Dakota, and North Dakota. Two letter, upper case abbreviation for the administrative state office. The current list of values is: AK, AZ, CA, CO, ES, ID, MT, NM, NV, OR, UT, and WY. In the FPPS Organization Codes, use the second two characters (after the LL) (e.g. LL**AK**030900) Note: This attribute is included for purposes of replication. Attribute Domain Assignment: *DOM_ADMIN_ST*
GlobalID	Not Applicable	**Logical Definition:** Not on logical model **Design Considerations:** 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. Note**:** This attribute is included for purposes of replication.

B. BLM Administrative Unit Boundary Polygons (admu_ofc_poly)

The polygon features for active BLM Administrative Unit Boundaries are defined below. Domain values are used when appropriate.

This feature class should be used to document the physical boundary of an administrative unit. In some cases, the administrative unit may manage areas outside of the boundary for other programs' purposes. Please refer to the BLM Administrative Unit (Boundaries) Data Standard Report for the full list and detailed descriptions of the Business Rules that govern the data standard, and this implementation.

GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?
**BLM Administrative Unit Boundary Polygon Attributes**
ADM_UNIT_CD	Administrative Unit Code	Char(8)	YES		*DOM_ADM_UNIT_CD*	NO
ADMU_NAME	Administrative Unit Name	Char(40)	YES			NO
BLM_ORG_TYPE	BLM Organization Type	Char(20)	YES	Field	*DOM_BLM_ORG_TYPE*	NO
APPRV_DT	Approval Date	Date	YES	09/09/9999		NO
EFF_DT	Effective Date	Date	YES	09/09/9999		NO
ADMU_ST_URL	State Office URL	Char(150)	YES			NO
PARENT_CD	Parent Admin Code	Char(8)	YES		*DOM_ADM_UNIT_CD*	NO
PARENT_NAME	Parent Name	Char(40)	NO			NO
ADMIN_ST	Administrative State Code	Char(2)	YES		*DOM_ADMIN_ST*	NO
GlobalID	GlobalID	UUID	YES			NO

GIS Name	Logical Name	Definition/Design Considerations
ADM_UNIT_CD	State Alphabetic Code + BLM Organization Code	**Logical Definition:** The code that indicates the formal grouping of positions into designated units and the assignment of functions and responsibilities to those units based on the DOI FPPS structure. **Design Considerations:** The BLM administrative unit/office that is a combination of Administrative State Code and Administrative Office Code that fully identifies the geographic area which has jurisdiction over the lands. This is an eight-character code. In the FPPS Organization Codes, use the last eight characters (e.g. LL**AK030900**). Attribute Domain Assignment: *DOM_ADM_UNIT_CD*
ADMU_NAME	Organization Name	**Logical Definition:** The official name by which the organization is known. An organization may include businesses, agencies, or corporations, but not individual persons. **Design Consideration:** The name that corresponds to the administrative unit code for the polygon. The value for this attribute should be derived from the FPPS codes.
BLM_ORG_TYPE	Organization Type Name	**Logical Definition:** A name that indicates the type of organization that is being described. **Design Considerations:** The organization type (field office, district office, administrative state, or other) corresponding to the polygon. Attribute Domain Assignment: *DOM_BLM_ORG_TYPE* Default: Field

GIS Name	Logical Name	Definition/Design Considerations
APPRV_DT	BLM Organization Unit Approval Date	**Logical Definition:** The date on which the BLM Washington Office or Assistant Secretary, Land and Minerals Management approved or concurred with the change to the organization unit number, name and/or administrative unit boundaries. **Design Considerations:** The date that the change to the administrative unit was approved. The date will be in the format of MM/DD/YYYY. If the approval date is unknown for the initial data load, the default date will be used. Changes that occur after implementation of the standard must use the actual approval date. Default: 09/09/9999
EFF_DT	Administered BLM Land Location Effective Date	**Logical Definition:** The date on which an area of BLM land becomes the responsibility of a BLM administrative unit. **Design Considerations:** Effective date when the administrative unit number, name, or physical boundary was changed. The date will be in the format of MM/DD/YYYY. The effective date will occur on or after the approval date. If the effective date is unknown for the initial data load, the default date will be used. Changes that occur after implementation of the standard must use the actual effective date. Default: 09/09/9999
ADMU_ST_URL	Not Applicable	**Logical Definition:** Not on the logical model. **Design Considerations:** The URL of the State Office website. The standard format for a BLM state website is http://www.blm.gov/xx/st/en.html where "xx" is the 2-character state abbreviation.

GIS Name	Logical Name	Definition/Design Considerations
PARENT_CD	BLM Organization Unit Parent Identifier	**Logical Definition:** The identifier for the administrative unit that has responsibility for other units. **Design Considerations:** The code that indicates the formal grouping of positions into designated units and the assignment of functions and responsibilities to those units based on the DOI FPPS structure. The BLM administrative unit/office that is a combination of Administrative State Code and Administrative Office Code that fully identifies the geographic area which has jurisdiction over the lands. This is the parent of the administrative unit being mapped. An Administrative State may be the parent of District Offices, Field Offices, or other autonomous areas (i.e. National Monuments). A District Office is the parent of Field Offices. This attribute may be used to derive the boundaries of the parent administrative unit, and should reflect organizational tiers. This is an eight-character code. In the FPPS Organization Codes, use the last eight characters (e.g. LL**AK030900**). Attribute Domain Assignment: *DOM_ADM_UNIT_CD*
PARENT_NAME	Organization Name	**Logical Definition:** The official name by which the organization is known. An organization may include businesses, agencies, or corporations, but not individual persons. **Design Consideration:** Optional Attribute. The name by which the administrative parent unit is coded in the FPPS.

GIS Name	Logical Name	Definition/Design Considerations
ADMIN_ST	State Alphabetic Code	**Logical Definition:** An alphabetic abbreviation that represents each of the 50 states of the United States, the District of Columbia, the outlying areas of the United States, and associated areas. FIPS PUB 5-2 **Design Considerations:** An administrative unit that identifies the state or geographic area which has administrative jurisdiction over lands, and cases. The land for a case may not be physically located in the associated administrative state. Only those states that are BLM administrative states are in the domain for this entity. Example: Montana is the Administrative State for public lands in the geographic States of Montana, South Dakota, and North Dakota. Two letter, upper case abbreviation for the administrative state office. The current list of values is: AK, AZ, CA, CO, ES, ID, MT, NM, NV, OR, UT, and WY. In the FPPS Organization Codes, use the second two characters (after the LL) (e.g. LL**AK**030900) Note: this attribute is included for purposes of replication. Attribute Domain Assignment: *DOM_ADMIN_ST*
GlobalID	Not Applicable	**Logical Definition:** Not on logical model. **Design Considerations:** 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. Note: This attribute is included for purposes of replication.

C. BLM Administrative Unit Office Points (admu_ofc_pt)

The point features depicting the physical locations for active BLM Administrative Unit Offices are defined below. These points should represent those offices at the field office level and above. Other types of offices such as duty stations and temp stations are not included in this implementation.

Each office in this feature class should be represented by a point, regardless of whether the office is co-located with others at the same location. One physical location may administer more than one administrative unit, and have multiple offices co-located in that location. Therefore, point features may be coincident. An offset may be assigned for cartographic purposes if desired.

This feature class includes attributes to store the feature level metadata information. Domain values are used when appropriate.

BLM Administrative Unit Office Point Attributes						
GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?
ADM_UNIT_CD	Administrative Unit Code	Char(8)	YES		*DOM_ADM_UNIT_CD*	NO
ADMU_NAME	Administrative Unit Name	Char(40)	YES			NO
BLM_ORG_TYPE	BLM Organization Type	Char(20)	YES	Field	*DOM_BLM_ORG_TYPE*	NO
APPRV_DT	Approval Date	Date	YES	09/09/9999		NO
EFF_DT	Effective Date	Date	YES	09/09/9999		NO
MNGD_UNIT_CD	Managed Admin Unit Code	Char(8)	YES		*DOM_ADM_UNIT_CD*	NO
ADMU_ST_URL	State Office URL	Char(150)	YES			NO
CREATE_DATE	Created Date	Date	YES	09/09/9999		NO
CREATE_BY	Created By Name	Char(30)	YES	UNK		NO
MODIFY_DATE	Modified Date	Date	YES	09/09/9999		NO
MODIFY_BY	Modified By Name	Char(30)	YES	UNK		NO
PT_SRC_TYPE	Point Source Type	Char(5)	YES	UNK		NO
PT_SRC_DESC	Point Source Description	Char(40)	NO			NO
ACCURACY_FT	Accuracy Measure In Feet	Long Integer	YES	-1		NO
CEP95_FT	95% Confidence Factor In Feet	Long Integer	YES	-1		NO
ADMIN_ST	Administrative State Code	Char(2)	YES		*DOM_ADMIN_ST*	NO
GlobalID	GlobalID	UUID	YES			NO

GIS Name	Logical Name	Definition/Design Considerations
ADM_UNIT_CD	State Alphabetic Code + BLM Organization Code	**Logical Definition:** The code that indicates the formal grouping of positions into designated units and the assignment of functions and responsibilities to those units based on the DOI FPPS structure. **Design Considerations:** The BLM administrative unit/office that is a combination of Administrative State Code and Administrative Office Code that fully identifies the geographic area which has jurisdiction over the lands. This is the code for the office, which may or may not be the same as all lands administered from that office. This is an eight-character code. In the FPPS Organization Codes, use the last eight characters (e.g. LL**AK030900**). Attribute Domain Assignment: *DOM_ADM_UNIT_CD*
ADMU_NAME	Organization Name	**Logical Definition:** The official name by which the organization is known. An organization may include businesses, agencies, or corporations, but not individual persons. **Design Considerations:** The name by which the office is coded in FPPS. The name of the office may or may not reflect the names of the areas being administered from the office location.
BLM_ORG_TYPE	Organization Type Name	**Logical Definition:** A name that indicates the type of organization that is being described. **Design Considerations:** The organization type (field office, district office, administrative state, or other) corresponding to the type of area being administered from the office. Attribute Domain Assignment: *DOM_BLM_ORG_TYPE* Default: Field

GIS Name	Logical Name	Definition/Design Considerations
APPRV_DT	BLM Organization Unit Approval Date	**Logical Definition:** The date on which the BLM Washington Office or Assistant Secretary, Land and Minerals Management approved or concurred with the change to the organization unit number, name and/or administrative unit boundaries. **Design Considerations:** The date that the change to the office was approved. The date will be in the format of MM/DD/YYYY. If the approval date is unknown for the initial data load, the default date will be used. Changes that occur after implementation of the standard must use the actual approval date. Default: 09/09/9999
EFF_DT	BLM Organization Effective Date	**Logical Definition:** The date on which an area of BLM land becomes the responsibility of a BLM administrative unit. **Design Considerations:** Effective date when the administrative unit number, name, or physical location of the office changed. The effective date will be on or after the approval date. The date will be in the format of MM/DD/YYYY. If the effective date is unknown for the initial data load, the default date will be used. Changes that occur after implementation of the standard must use the actual effective date. Default: 09/09/9999
MNGD_UNIT_CD	State Alphabetic Code + BLM Organization Code	**Logical Definition:** The code that indicates the formal grouping of positions into designated units and the assignment of functions and responsibilities to those units based on the DOI FPPS structure. **Design Considerations:** The BLM administrative unit/office that is a combination of Administrative State Code and Administrative Office Code that fully identifies the geographic area which has jurisdiction over the lands. This should be the code for the land area being administered from the office. This is an eight-character code. In the FPPS Organization Codes, use the last eight characters (e.g. LL**AK030900**). Attribute Domain Assignment: *DOM_ADM_UNIT_CD*

GIS Name	Logical Name	Definition/Design Considerations
ADMIN_ST_URL	Not Applicable	**Logical Definition:** Not on the logical model. **Design Considerations:** The URL of the State Office website. The standard format for a BLM state website is http://www.blm.gov/xx/st/en.html where "xx" is the 2-character state abbreviation.
CREATE_ DATE	Location Effective Date	**Logical Definition:** The date which is the calendar year, month, and day when the position of the Location was produced. **Design Considerations:** As a new feature is added to the system its creation date will be collected and maintained. The date will be in the format of MM/DD/YYYY. Default: 09/09/9999
CREATE_ BY	Not applicable	**Logical Definition:** Not on the logical model. **Design Considerations:** The UserID (BLM login ID) of the person who created or imported the data into the BLM GIS system. This attribute will be deleted before providing the data to the public. Default: UNK
MODIFY_ DATE	Location Modified Date	**Logical Definition:** The date which is the calendar year, month, and day when the position of the Location was last modified. **Design Considerations:** As a feature is edited or modified while in the system its modification date will be collected and maintained. The date will be in the format of MM/DD/YYYY. Default: 09/09/9999
MODIFY_BY	Not applicable	**Logical Definition:** Not on the logical model. **Design Considerations:** The UserID (BLM login ID) of the person who edited or modified data in the BLM GIS system will be collected and maintained. This attribute will be deleted before providing the data to the public. Default: UNK

GIS Name	Logical Name	Definition/Design Considerations
PT_SRC_TYPE	Location Source Type Name	**Logical Definition:** The name that identifies the general category for the origin of the location coordinate, representing a compilation of the state adopted source codes. The domain contains those values that would most likely be used in the determination of source codes for the data set. **Design Considerations:** The type of source used to determine coordinates for the point feature. This is a free-form text field. The user may enter whichever value is most appropriate to the data that provides information on the source of the point (e.g. GPS, GIS, Geocd). Default: UNK
PT_SRC_DESC	Location Source Description Specific Name	**Logical Definition:** The name that identifies a more specific description of the location (coordinate source). **Design Considerations:** This is an optional attribute. The user may leave this value "null" or enter another value appropriate to the data that more fully describes the source of the point feature. This attribute is not intended to be a substitute for the accuracy values that are found in the 'Accuracy Measurement Table'.

GIS Name	Logical Name	Definition/Design Considerations
ACCURACY_FT	Point Form Accuracy Measure	**Logical Definition:** The measure that describes how close, in Point Form UOM Type Name the actual location is to the spatial depiction. **Design Considerations:** The Accuracy Measurement defines how close, in feet, the actual ground location is to the spatial depiction in GIS. This value would typically be determined by one of three methods: 1) the map accuracy value, if a USGS map was used to define the boundary; 2) the expected spatial accuracy achieved with GPS; or 3) the measurement of that accuracy as is noted in the *National Standard for Spatial Data Accuracy (NSSDA)*[1] which is a data usability standard issued by the Federal Geographic Data Committee (FGDC). Default: -1 **A value of -1 indicates that the accuracy is unknown or that no reliable estimate can be made**. Below is an **example** table of accuracy measurements. (Attempting to list all values in a domain table would produce an infinite list.) <table><tr><th colspan="2">Accuracy Measurement Example Table</th></tr><tr><td>1</td><td>+/- 1 Feet</td></tr><tr><td>10</td><td>+/- 10 Feet</td></tr><tr><td>15</td><td>+/- 15 Feet</td></tr><tr><td>20</td><td>+/- 20 Feet</td></tr><tr><td>100</td><td>+/- 100 Feet</td></tr></table> [1] Federal Geographic Data Committee. 1998. <u>Geospatial Positioning Accuracy Standards Part 3: National Standard for Spatial Data Accuracy</u>, FGDC-STD-007.3-1998

GIS Name	Logical Name	Definition/Design Considerations
CEP95_FT	Not Applicable	**Logical Definition:** Not on the logical model. **Design Considerations:** The Circular Error Probable 95% (CEP95) refers to the radius, in feet, of a circle/ellipse, where there is a 95% probability that the feature coordinate actually exists. The reporting standard in the horizontal component is the radius of a circle of uncertainty, such that the true or theoretical location of the point falls within that circle 95-percent of the time. (Geospatial Positioning Accuracy Standards, Part 1: Reporting Methodology, FGDC-STD-007.1-1998) <div align=center>Default: -1</div>
ADMIN_ST	State Alphabetic Code	**Logical Definition:** An alphabetic abbreviation that represents each of the 50 states of the United States, the District of Columbia, the outlying areas of the United States, and associated areas. FIPS PUB 5-2 **Design Considerations:** An administrative unit that identifies the state or geographic area which has administrative jurisdiction over lands, and cases. The land for a case may not be physically located in the associated administrative state. Only those states that are BLM administrative states are in the domain for this entity. Example: Montana is the Administrative State for public lands in the geographic States of Montana, South and North Dakota. Two letter, upper case abbreviation for the administrative state office. The current list of values is: AK, AZ, CA, CO, ES, ID, MT, NM, NV, OR, UT, and WY. In the FPPS Organization Codes, use the second two characters (after the LL) (e.g. LL**AK**030900) Note: This attribute is included for purposes of replication. <div align=center>Attribute Domain Assignment: *DOM_ADMIN_ST*</div>

GIS Name	Logical Name	Definition/Design Considerations
GlobalID	Not Applicable	**Logical Definition:** Not on logical model. **Design Considerations:** 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. Note: This attribute is included for purposes of replication.

D. BLM Administrative Unit Boundary Historical Polygons (admu_hist_ofc_poly)

The intent of the historical feature class is to store changes only. The historical feature class should remain empty until a feature has changed. Routine maintenance on the polygon does not constitute a change. The Historical Administrative Unit Boundary features are a result of the Administrative Unit Boundary polygons being permanently changed as a result of a business need. The resulting polygons are no longer active, but will be stored for historical reference. There are no arc features tied to these polygons; once a polygon is inactive and is moved to the historical polygon feature class it should not be edited further. If the polygon needs to be recreated, a copy of the feature can be moved back to the active feature class and editing can be conducted there. The state or local office may keep historical arcs as needed, or run an annual archive if desired, or as required. Domains will not be used within a historical feature class because any feature and its associated attributes should be copied from the active feature class.

BLM Administrative Unit Boundary Historical Polygon Attributes						
GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?
ADM_UNIT_CD	Administrative Unit Code	Char(8)	YES			NO
ADMU_NAME	Administrative Name	Char(40)	YES			NO
BLM_ORG_TYPE	BLM Organization Type	Char(20)	YES			NO
END_DT	End Date	Date	YES			NO
ADMIN_ST	Administrative State Code	Char(2)	YES			NO
GlobalID	GlobalID	UUID	YES			NO

GIS Name	Logical Name	Definition/Design Considerations
ADM_UNIT_CD	State Alphabetic Code + BLM Organization Code	**Logical Definition:** The code that indicates the formal grouping of positions into designated units and the assignment of functions and responsibilities to those units based on the DOI FPPS structure. **Design Considerations:** The BLM administrative unit/office that is a combination of Administrative State Code and Administrative Office Code that fully identifies the geographic area which has jurisdiction over the lands. This is an eight-character code. In the FPPS Organization Codes, use the last eight characters (e.g. LL**AK030900**). Attribute Domain Assignment: *DOM_ADM_UNIT_CD*
ADMU_NAME	Organization Name	**Logical Definition:** The official name by which the organization is known. An organization may include businesses, agencies, or corporations, but not individual persons. **Design Consideration:** The value for this attribute should correspond to the FPPS code of the polygon from the active feature class that was moved into this feature class.
BLM_ORG_TYPE	Organization Type Name	**Logical Definition:** A name that indicates the type of organization that is being described. **Design Considerations:** The organization type (field office, district office, administrative state, or other) corresponding to the polygon.
END_DT	Administered BLM Land Location End Date	**Logical Definition:** The date on which an area of BLM Land is no longer the responsibility of a BLM administrative unit. **Design Considerations:** The date where the boundary of an administered BLM Land location was changed. The date will be in the format of MM/DD/YYYY.

GIS Name	Logical Name	Definition/Design Considerations
ADMIN_ST	State Alphabetic Code	**Logical Definition:** An alphabetic abbreviation that represents each of the 50 states of the United States, the District of Columbia, the outlying areas of the United States, and associated areas. FIPS PUB 5-2 **Design Considerations:** An administrative unit that identifies the state or geographic area which has administrative jurisdiction over lands, and cases. The land for a case may not be physically located in the associated administrative state. Only those states that are BLM administrative states are in the domain for this entity. Example: Montana is the Administrative State for public lands in the geographic States of Montana, South and North Dakota. Two letter, upper case abbreviation for the administrative state office. The current list of values is: AK, AZ, CA, CO, ES, ID, MT, NM, NV, OR, UT, and WY. In the FPPS Organization Codes, use the second two characters (after the LL) (e.g. LL**AK**030900)
GlobalID	Not Applicable	**Logical Definition:** Not on logical model. **Design Considerations:** 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. Note: This attribute is included for purposes of replication only.

E. BLM Administrative Unit Office Historical Points (admu_hist_ofc_pt)

The intent of the historical feature class is to store changes only. The historical feature class should remain empty until a feature has changed. The Historical Administrative Unit Office point features are a result of an Administrative Unit Office point being permanently changed as a result of a business need. The resulting points are no longer active, but will be stored for historical reference. Domains will not be used within a historical feature class because any feature and its associated attributes should be copied from the active feature class.

BLM Administrative Unit Office Historical Point Attributes						
GIS NAME	ALIAS	DATA FORMAT	REQUIRED?	DEFAULT VALUE	DOMAIN NAME	DERIVED?
ADM_UNIT_CD	Administrative Unit Code	Char(8)	YES			NO
ADMU_NAME	Administrative Name	Char(40)	YES			NO
BLM_ORG_TYPE	BLM Organization Type	Char(20)	YES			NO
END_DT	End Date	Date	YES			NO
ADMIN_ST	Administrative State Code	Char(2)	YES			NO
GlobalID	GlobalID	UUID	YES			NO

GIS Name	Logical Name	Definition/Design Considerations
ADM_UNIT_CD	State Alphabetic Code + BLM Organization Code	**Logical Definition:** The code that indicates the formal grouping of positions into designated units and the assignment of functions and responsibilities to those units based on the DOI FPPS structure. **Design Considerations:** The BLM administrative unit/office that is a combination of Administrative State Code and Administrative Office Code that fully identifies the geographic area which has jurisdiction over the lands This is an eight-character code. In the FPPS Organization Codes, use the last eight characters (e.g. LL**AK030900**). Attribute Domain Assignment: *DOM_ADM_UNIT_CD*

GIS Name	Logical Name	Definition/Design Considerations
ADMU_NAME	Organization Name	**Logical Definition:** The official name by which the organization is known. An organization may include businesses, agencies, or corporations, but not individual persons. **Design Consideration:** The value for this attribute should correspond to the FPPS code of the point from the active feature class that was moved into this feature class.
BLM_ORG_TYPE	Organization Type Name	**Logical Definition:** A name that indicates the type of organization that is being described. **Design Considerations:** The organization type (field office, district office, administrative state, or other) corresponding to the point.
END_DT	BLM Organization End Date	**Logical Definition:** The date on which a BLM organization code is no longer used to describe a unit. **Design Considerations:** Date when the organization unit number, name, or physical location is no longer effective. The date will be in the format of MM/DD/YYYY.
ADMIN_ST	State Alphabetic Code	**Logical Definition:** An alphabetic abbreviation that represents each of the 50 states of the United States, the District of Columbia, the outlying areas of the United States, and associated areas. FIPS PUB 5-2 **Design Considerations:** An administrative unit that identifies the state or geographic area which has administrative jurisdiction over lands, and cases. The land for a case may not be physically located in the associated administrative state. Only those states that are BLM administrative states are in the domain for this entity. Example: Montana is the Administrative State for public lands in the geographic States of Montana, South Dakota, and North Dakota. Two letter, upper case abbreviation for the administrative state office. The current list of values is: AK, AZ, CA, CO, ES, ID, MT, NM, NV, OR, UT, and WY. In the FPPS Organization Codes, use the second two characters (after the LL) (e.g. LL**AK**030900)

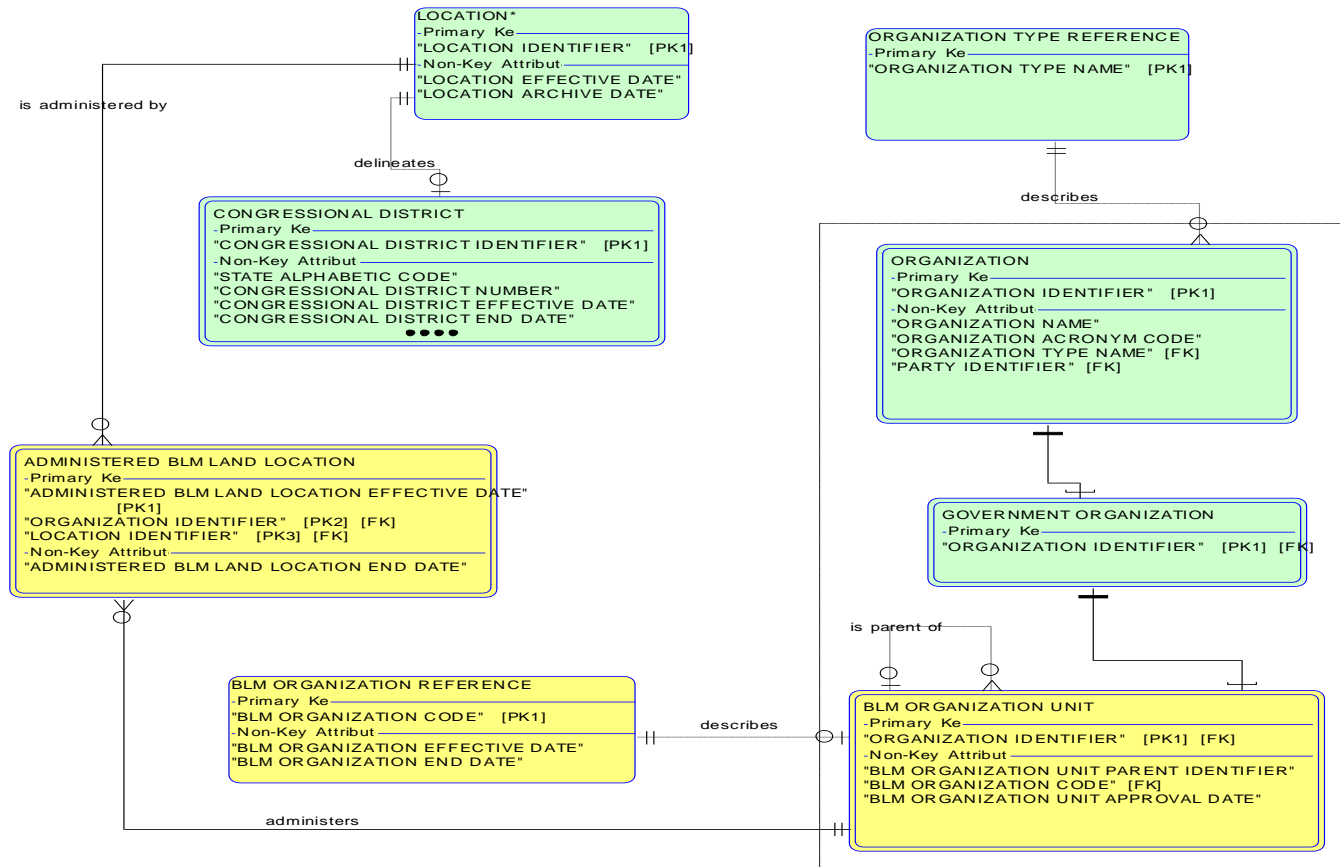| GIS Name	Logical Name	Definition/Design Considerations
GlobalID	Not Applicable	**Logical Definition:** Not on logical model. **Design Considerations:** Software generated value. A field of type UUID (Universal Unique Identifier) in which values are automatically assigned by the geodatabase when a row is created. This field is not editable and is automatically populated when it is added for existing data. Note: This attribute is included for purposes of replication only.

APPENDIX A: DOMAIN VALUES

Domain values are maintained separately from the data standard. This is due to values being more likely to have an addition or change that would not affect the data standard. Domain values cannot be added to attributes specific to the standard (except thru the data standardization maintenance step). A state can extend the data standard with a new attribute which can have a state specific domain list. However, all attributes that are required as part of the standard must have a value from the data standard domain list. Any additional attributes and their associated domain values must be documented with metadata by that office.

For domains specific to this standard, see admu_domains_100818.docx

For Feature Level Metadata Domains, please see Domain Information, located on the National Data Standards SharePoint under the "Instruction Materials" tab.

APPENDIX B: LOGICAL DATA MODEL

The entities in green are not part of this standard and do not need to be reviewed. They are provided to show context and provide relationships to other data only. To improve viewing, zoom to 200%; to print a larger version, use the 11"x17" model on the same webpage as this document."

Legend: See Appendix C

APPENDIX C: READING A LOGICAL DATA MODEL

CUSTOMER -Primary Ke "CUSTOMER IDENTIFIER" [PK1] -Non-Key Attribut "CUSTOMER NAME"	***ENTITY*** • *The noun or object on something of relevance to the business* • *Shown as a box, with the name (singular in capital letters at the top, example below: ORDER)* ***ATTRIBUTES*** • *The adjective which is the data or information about an entity; describes an entity (ORDER NUMBER, ORDER DATE)* • *Has **only one** valid value for an occurrence of an entity at any given time The same value of an attribute may describe more than one entity occurrence* • *PK = Primary Key – uniquely identifies an occurrence of an entity (one customer may have same name as another customer, so CUSTOMER IDENTIFIER is unique for a customer)* • *FK = Foreign Key – the primary key of the parent entity is a Foreign key in the child entity* • *The Word Identifier indicates that this will be a designed key, its format is not known, but the modeling tool required a format and size. The actual content and size of the identifier will be determined during design.*
CUSTOMER -Primary Ke "CUSTOMER IDENTIFIER" [PK1] -Non-Key Attribut "CUSTOMER NAME" ╟──places──○< ORDER -Primary Ke "ORDER IDENTIFIER" [PK1] -Non-Key Attribut "ORDER DATE" "CUSTOMER IDENTIFIER" [FK] *The line includes optionality (minimum occurrences, inner symbol) and cardinality (maximum occurrences, symbol next to entity) / = one 0 = zero < or > = many*	***RELATIONSHIP*** • *The verb which shows an association between entities and represents business rules* • *Represented by a line between two entities with active verb or verb phase (all small letters)* • *Reading : Left to right (A CUSTOMER places zero to many ORDERs) and right to left (An ORDER is placed by one and only one CUSTOMER)* • *Because a Customer can have many Orders, the Customer is considered the Parent Entity and the Order is considered the Child Entity). So the way you read it is normally from the Parent Entity to the Child Entity*
ORDER -Primary Ke "ORDER IDENTIFIER" [PK1] -Non-Key Attribut "ORDER DATE" >──includes──< PRODUCT -Primary Ke "PRODUCT IDENTIFIER" [PK1] -Non-Key Attribut "PRODUCT NAME" "PRODUCT MODEL NAME" ORDER -Primary Key "ORDER IDENTIFIER" [PK1] -Non-Key Attributes "ORDER DATE" "CUSTOMER IDENTIFIER" [FK] ╟──includes──< ORDER PRODUCT -Primary Key "ORDER IDENTIFIER" [PK1] [FK] "PRODUCT IDENTIFIER" [PK2] [FK] -Non-Key Attributes "ORDER PRODUCT QUANTITY" is included──○ PRODUCT -Primary Key "PRODUCT IDENTIFIER" [PK1] -Non-Key Attributes "PRODUCT NAME" "PRODUCT MODEL NAME"	***Many to Many*** • *In a logical data model, many to many relationships are resolved. In the example to the left an ORDER includes one to many PRODUCTs and a PRODUCT can be in zero or many ORDERs.* ***Associative Entity*** • *resolves the many to many* • *with the diamond symbol*

Page 38 of 39

APPENDIX D: ATTRIBUTE METADATA TERMINOLOGY

The following matrix describes the metadata for the Data Standards Implementation Details.

Attribute Metadata Field	Metadata Definition	Example
GIS Name	*The abbreviated name of the field as it appears in the database*	*RCVR_TYPE*
Alias	*An alternative name that is more descriptive and user-friendly than the Logical or GIS Field Name*	*GPS RECEIVER TYPE*
Data Format	*Specific type of data allowed/# of characters or numbers/Precision & Scale*	*Char(15)*
Required?	*If an attribute does or does not have to have a value. If "YES", the attribute is required, if "NO", the attribute is optional.*	*NO*
Default Value	*Value that will apply if no other value is specified; included in domain value list.*	*N/A*
Domain Name	*Name of the table for that attribute, containing the Code, Description, and Definition for each value in the table*	*DOM_RCVR_TYPE*
Derived?	*If the attribute value is derived from the value of one or more other attribute values (YES) otherwise, (NO) the value is not derived. The description of how the attribute is derived will be included in the Definition/Design Consideration.*	*NO*
Logical Attribute Name	*The business name of the attribute which includes the entity name, and representation term*	*Global Positioning System Receiver Type Name*