

Taylor Grazing Act District Boundary

DATA STANDARD REPORT

February 11, 2010

Version 1.1

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

Purpose of Data Standard Report

The Data Standard Report is the necessary document for a new or revised National Data Standard. The DOI Data standards process requires certain pieces of information to be documented for a data standard to be valid. The Data Standard Report is the tool BLM uses to accomplish this documentation. The completed Report is distributed for review and comment on the content of the standard. The comments are gathered and resolutions are developed through working with the appropriate data stewards, commenters, and other Subject Matter Experts. More iterations can occur depending on comments and complexity of the data standard. Once all comments are resolved, the data standard report is then finalized.

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INTRODUCTION

Description of Standard

This standard will provide a common set of rules for data required to portray the enclosing lines of historical areas (districts) established under the Taylor Grazing Act. The standard will facilitate portrayal, queries, and use of this data set. This information is of particular use to the Rangeland community and is required for some processes. Once this spatial data is created it may be possible to link it with the Rangeland Administration System (RAS) and thereby eliminate the need to describe the BLM land type in a RAS table.

Affected Groups

Range Program, Grazing permittees/lessees, billing, and distribution of grazing receipts

Sponsor

Rob Roudabush, WO220 Division Chief

DATA STEWARD/CONTACT INFORMATION

Office	Role	Name	Contact Information
WO220	BLM Business Data Steward	Richard Mayberry	Richard_Mayberry@blm.gov 202-452-7750
WO210	GIS Contact	Bob Bewley	Bob_Bewley@blm.gov 202 452-5111

DATA SET CHARACTERISTICS

Overall Security

a.	Identify Security Level
	Public
b.	Privacy Information
	None

Data Privileges

Who has create, read, update, and/or delete privileges?

Rangeland Management Specialists, GIS Specialists

Data Collection & Maintenance Protocols

a.	Location Accuracy Requirements
	The expected spatial accuracy is +/- 1320 feet, based on the original documents establishing and updating the districts generally listing land descriptions to the aliquot (quarter, quarter) part. The actual measured spatial accuracy is located within the attributes of the data. Spatial Accuracy: ACCURACY MEASUREMENT IN FEET
b.	Data Content Accuracy Requirements
	The expected accuracy of the attributes within this data set is 90 percent.
c.	Collection & Input Protocols:
	To create the current boundaries of the districts, the boundaries will be built starting with the original secretary's orders from the National Archives and adding or subtracting areas as stated in later documents, using PLSS legal description for that district. If there is no official document, a document will be created that states how and why the boundary was changed. The RAS information can be used as needed. Once all boundary changes to the districts have been made, the current boundary will be copied to the current feature class.
d.	Update Procedures:
	This is historical information and updates would only occur on an ad hoc basis when modifications (i.e., exchanges) are made or corrections to data are found. The data will be provided to the national dataset by the end of January on an annual basis.

Data Quality

a.	Transaction level data quality:
	State Range Lead will review the data for quality upon entry within their administrative areas.
b.	Monitoring level data quality:
	State Range Lead will review data only upon modifications to the data set within their administrative areas.

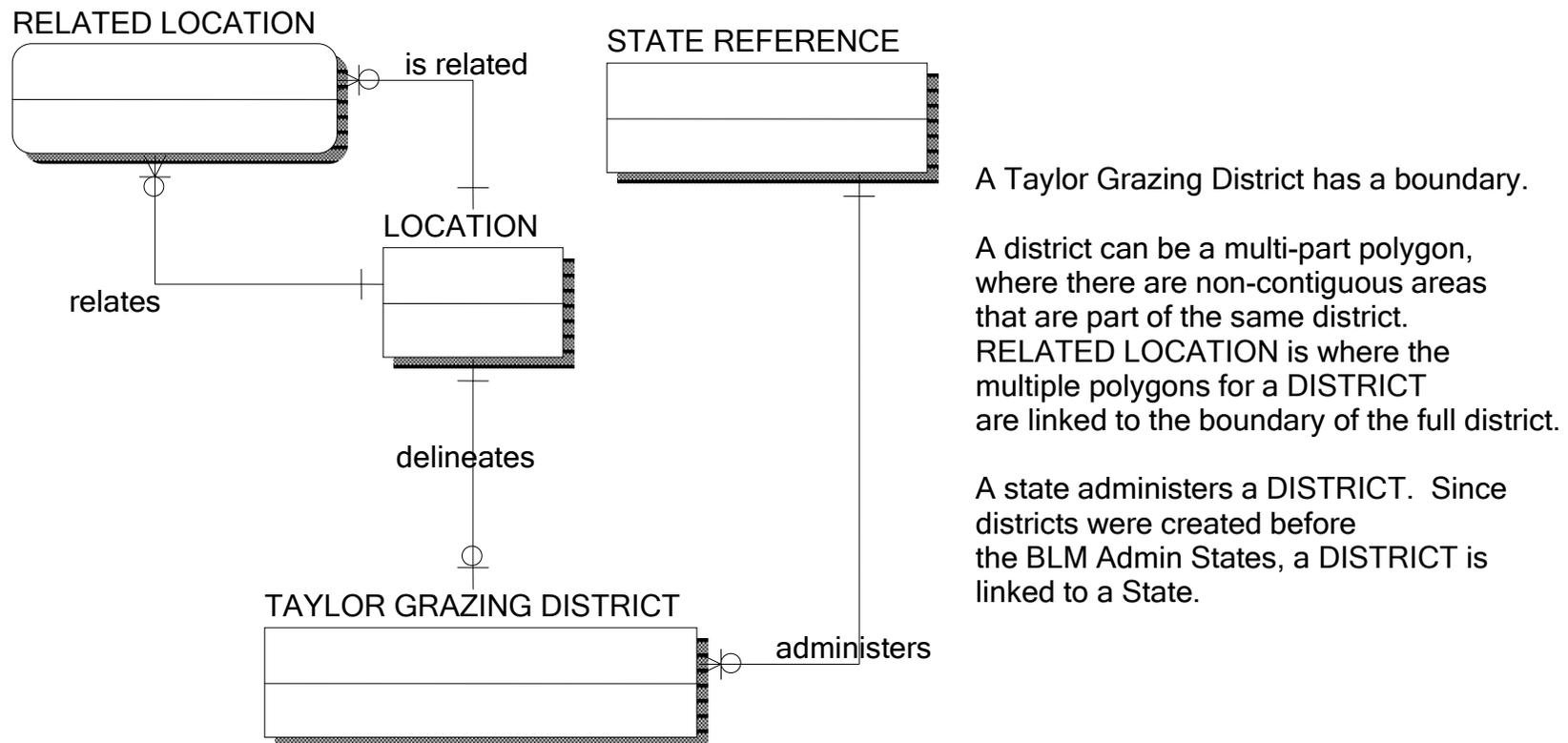
Relationship To Other Standards

Grazing Allotment and Pasture Data Standard, Range Administration System (RAS), land ownership, and cadastral.

DATA CHARACTERISTICS

Each data standard is to be supported by a data model which includes entities and relationships between entities. The logical data model with its associated data dictionary is included in Appendix B.

Taylor Grazing Act District Boundaries Conceptual Data Model



Legend: See Appendix C.

Taylor Grazing Act District Boundary Data Elements

The following is a list of the data elements and associated metadata relevant to this data standard. Any design considerations for these data elements are included in the implementation guidelines. Naming Conventions can be found in the "Data Administration and Management Handbook" BLM Manual H 1283-1.

TAYLOR GRAZING DISTRICT						
A district that was identified based on the Taylor Grazing Act of 1934 which regulates grazing on federal public lands. Lands within a Taylor Grazing Act district can be vacant, unappropriated, and unreserved lands from any part of the public domain of the United States (exclusive of Alaska), which are not in National Forests, National parks and National Park Service monuments, Indian reservations, revested Oregon and California Railroad grant lands, or revested Coos Bay Wagon Road grant lands, and which are chiefly valuable for grazing and raising forage crops; provided that no lands withdrawn or reserved for any other purpose shall be included in any such district. Permits are given for grazing privileges.						
Data Element Name	Type	Size	Req'd?	Key*	Attribute Definition	Comments
TAYLOR GRAZING DISTRICT IDENTIFIER	integer		Yes	PK	The designed primary key that will uniquely identify a single occurrence of the entity.	
TAYLOR GRAZING DISTRICT NAME	character	40	Yes		The name that is given to a Taylor Grazing District to distinguish it via a label rather than the number.	
TAYLOR GRAZING DISTRICT HISTORICAL DATE	date		Yes		The date on which the original Taylor Grazing District was created.	
TAYLOR GRAZING DISTRICT NUMBER	character	4	Yes		The number assigned to a Taylor Grazing District.	
TAYLOR GRAZING DISTRICT ORIGINAL ACRE MEASURE	decimal		Opt		The measure that indicates the original public land area of the Taylor Grazing District.	
TAYLOR GRAZING DISTRICT LOCATION END DATE	date		Opt		The date on which the location for a specific district is no longer effective.	
TAYLOR GRAZING DISTRICT LOCATION EFFECTIVE DATE	date		Yes		The date on which the location for a specific district is effective.	

*Key (PK: Primary Key) (FK: Foreign Key which is PK of related entity) (PK, FK: Foreign Key part of PK)

BUSINESS RULES

Rules under which data is used and modified (See H 1283-1, *Data Administration and Management Handbook, Chapter 8 – Documenting Business Rules*).

1. TGA Unique Identifier

When the data standard is implemented each district will be given a numeric identifier, which is unique at a national level for each district.	
Business Rule Source and Description	
Guidance	
Type of Business Rule	Current Implementation
Standard (Required)	Manual Process Upon conversion, each district will be assigned a number, starting at 1 and incrementing by 1 for each district within the administrative state.

2. TGA District Name

If a district does not have a name, the Taylor Grazing District Name will be the combination of the state that administers the district and the local Taylor Grazing District Number.	
Business Rule Source and Description	
Guidance	
Type of Business Rule	Current Implementation
Guideline (Optional)	Manual Process

3. TGA Multi-Part Polygon

A Taylor Grazing Act District can be a multi-part polygon. Pasture/allotment boundaries are usually not coincident with TGA District Boundaries.	
Business Rule Source and Description	
Guidance	
Type of Business Rule	Current Implementation
Guideline (Optional)	Manual Process

4. TGA Effective Date

If effective date of the Taylor Grazing Act is not known, the date when the district is created in the data set will be used as the effective date.

Business Rule Source and Description

Guidance

Type of Business Rule

Current Implementation

Guideline (Optional)

Manual Process

5. TGA District Boundary Modifications

If the Secretarial Orders creating the TGA district includes a legal land description that describes the boundaries of the district, and an updated cadastral survey moves the township/range line, the TGA district line moves with the updated cadastral survey. If a natural feature (such as a river) was used in the Secretarial Orders creating the TGA district boundary and the natural feature moves, the TGA boundary will follow cadastral survey rules as documented in “The Manual of Surveying Instructions”.

Business Rule Source and Description

Guidance

Type of Business Rule

Current Implementation

Standard (Required)

Manual Process

OTHER MATERIAL

Other supporting material that aids in the understanding or use of the data standard.

TGA Data Standard Proposal

TGA Implementation Guidelines

DOMAINS SPECIFIC TO THIS DATA STANDARD

No domains specific to Taylor Grazing District Boundaries.

APPENDIX A: DOI DATA CATEGORIES

Data Subject Areas and Information Classes are categories of information that support a DOI line of business. According to the DOI Data Standardization Handbook, one or more categories must be identified for a data standard. Any changes to these categories and their definitions would be made through the DOI Data Advisory Committee (DAC).

Subject Area: A collection of data classifications representing broad categories of information that support a line of business.

Information Class: A logical grouping of entities that are subcategories of the subject areas.

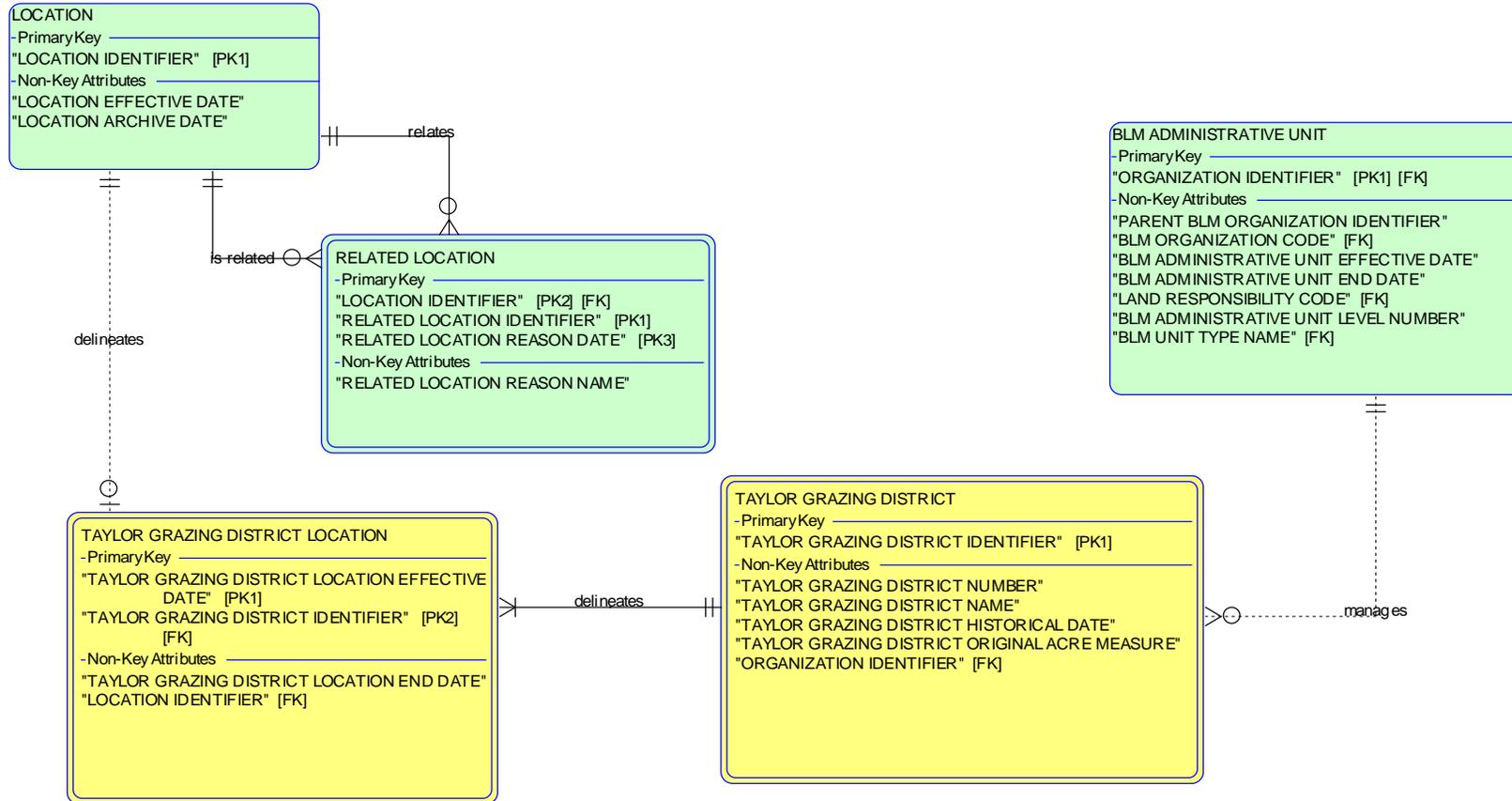
Only the Subject Areas and Information Classes that are appropriate to this data standard are included in this listing. For the full list of Subject Areas and their Information Classes please see http://web.blm.gov/data_mgt/guidelines/DOI_SubjectArea_InfoClass.doc.

This standard proposal covers the following DOI Subject Areas and Information Classes:	
Controls And Oversight (Subject Area)	<i>Information about the supervision, oversight, and administrative operations and programs of the DOI and its external partners that ensure compliance with applicable laws and regulations, and the prevention of waste, fraud, and abuse. This includes the evaluation of conformance with policy, guidance, standards, and statutory requirements, as well as a means to evaluate the overall quality of products and services.</i>
<ul style="list-style-type: none"> • Assessment (Information Class) 	<i>The process of gathering qualitative and/or quantitative information for the purpose of making a judgment or decision.</i>
<ul style="list-style-type: none"> • Conservation (Information Class) 	<i>Information about activities devoted to ensuring the preservation of land, water, wildlife, and natural resources, both domestically and internationally. It also includes information about the sustainable stewardship of natural resources on federally owned/controlled lands for commercial use (mineral mining, grazing, forestry, fishing, etc.).</i>
Geospatial and Geography (Subject Area)	<i>Information about data that includes a terrestrial coordinate system or geographic reference. This includes geospatial data sets, mapping, imagery, coverages, elevations, and features.</i>
<ul style="list-style-type: none"> • Map (Information Class) 	<i>A graphic depiction on a flat surface of the physical features of the whole or a part of the earth or other body, or of the heavens, using shapes to represent objects and symbols to describe their nature. Maps generally use a specified projection and indicate the direction of orientation.</i>
<ul style="list-style-type: none"> • Spatial Data Set (Information Class) 	<i>A collection of spatial data and its related descriptive data, organized for efficient storage and retrieval. A simple data set might be a single file with many records, each of which references the same set of fields. A more robust spatial data set includes data about the spatial locations and shapes of geographic features, recorded as points, lines, areas, pixels, grid cells, or TIN (Triangulated Irregular Network) sample points, as well as their attributes.</i>

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 percent.

Taylor Grazing District Boundary 4/14/2009 version 4 DRAFT



Legend: See Appendix C.

Data Dictionary

This lists entities and attributes (in alphabetical order, not hierarchical or chronological order) in the logical data model shown above.

Entity Name	Entity Description	Logical Data Element Name	Type	Size	Required?	Key*	Definition
TAYLOR GRAZING DISTRICT		DRAFT ENTITY					
<p>A district that was identified based on the Taylor Grazing Act of 1934 which regulates grazing on federal public lands. Lands within a Taylor Grazing Act district can be vacant, unappropriated, and unreserved lands from any part of the public domain of the United States (exclusive of Alaska), which are not in National Forests, National Parks and National Park Service monuments, Indian reservations, revested Oregon and California Railroad grant lands, or revested Coos Bay Wagon Road grant lands, and which are chiefly valuable for grazing and raising forage crops; provided that no lands withdrawn or reserved for any other purpose shall be included in any such district. Permits are given for grazing privileges.</p>							
		TAYLOR GRAZING DISTRICT IDENTIFIER	integer		Yes	PK	The designed primary key that will uniquely identify a single occurrence of the entity.
		TAYLOR GRAZING DISTRICT NAME	character	40	Yes		The name that is given to a Taylor Grazing District to distinguish it via a label rather than the number.
		TAYLOR GRAZING DISTRICT HISTORICAL DATE	date		Yes		The date on which the original Taylor Grazing District was created.
		TAYLOR GRAZING DISTRICT NUMBER	character	4	Yes		The number assigned to a Taylor Grazing District.
		ORGANIZATION IDENTIFIER	integer		Yes	FK	The designed primary key that will uniquely identify a single occurrence of the entity.
		TAYLOR GRAZING DISTRICT ORIGINAL ACRE MEASURE	decimal		Opt		The measure that indicates the original public land area of the Taylor Grazing District.
TAYLOR GRAZING DISTRICT LOCATION		DRAFT ENTITY					
<p>The area that bounds a Taylor Grazing district.</p>							
		TAYLOR GRAZING DISTRICT LOCATION END DATE	date		Opt		The date on which the location for a specific district is no longer effective.
		TAYLOR GRAZING DISTRICT LOCATION EFFECTIVE DATE	date		Yes		The date on which the location for a specific district is effective.
		LOCATION IDENTIFIER	integer		Yes	PK, FK	The designed primary key that will uniquely identify a single occurrence of the entity.
		TAYLOR GRAZING DISTRICT IDENTIFIER	integer		Yes	PK, FK	The designed primary key that will uniquely identify a single occurrence of the entity.

*Key (PK: Primary Key) (FK: Foreign Key which is PK of related entity)
(PK, FK: Foreign Key part of PK)

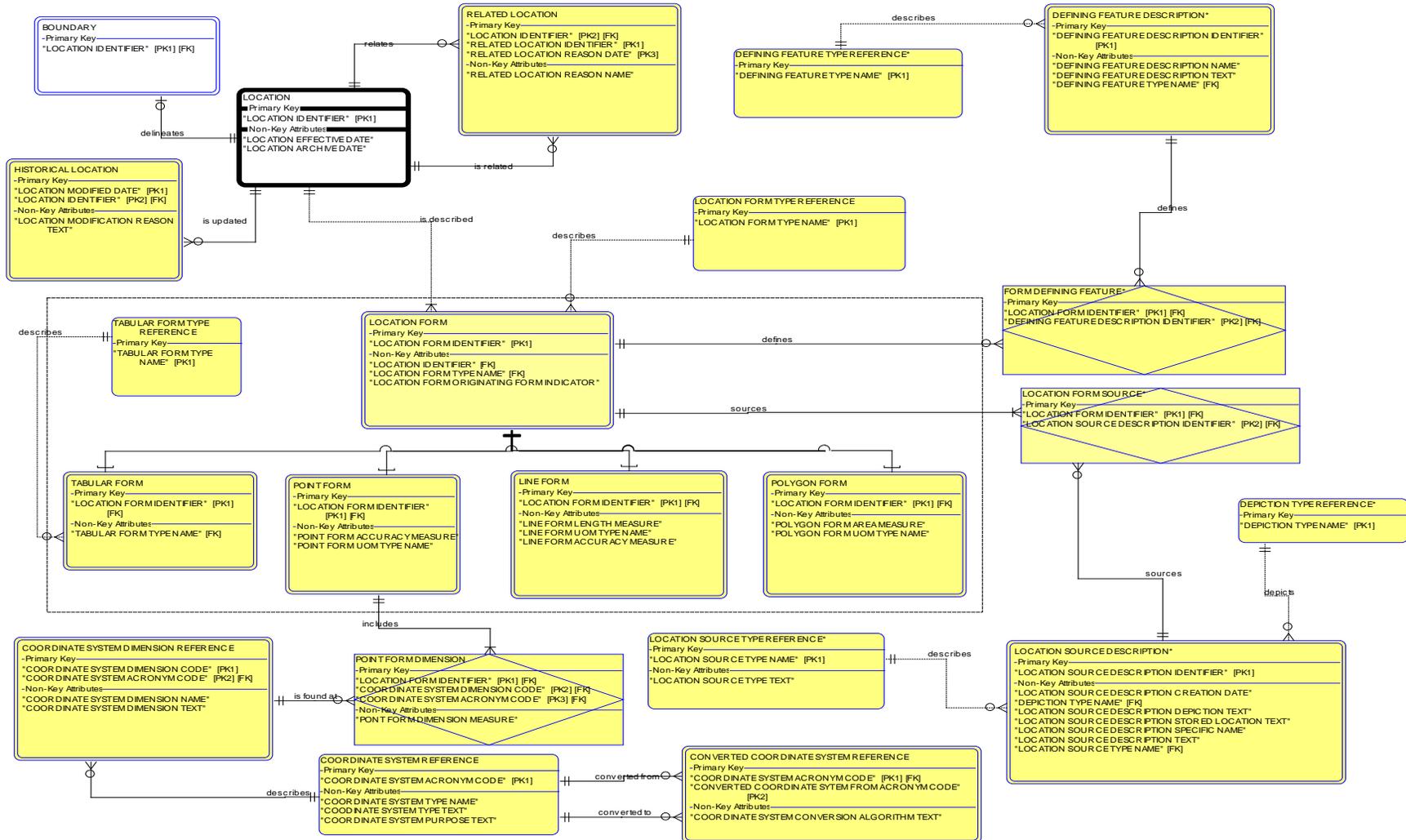
The following entities shown on the logical data model are not part of this standard but are here for informational purposes.

Entity Name	Entity Description	Logical Data Element Name	Type	Size	Required?	Key*	Definition
BLM ADMINISTRATIVE UNIT		DRAFT ENTITY					
An organizational unit within BLM, some units have distinct jurisdictional responsibility for all activities in a geographic area. The formal grouping of positions into designated units and the assignment of functions and responsibilities to those units.							
		ORGANIZATION IDENTIFIER	integer		Yes	PK, FK	The designed primary key that will uniquely identify a single occurrence of the entity.
		PARENT BLM ORGANIZATION IDENTIFIER	character	10	Opt	FK	The identifier for the administrative unit that has responsibility for other units. For example, the Administrative Office is responsible for the Administrative State Office, which is responsible for District Offices.
		BLM ORGANIZATION CODE	character	7	Yes		The code that indicates the formal grouping of positions into designated units and the assignment of functions and responsibilities to those units.
		BLM ADMINISTRATIVE UNIT END DATE	date		Yes		The date on which a BLM Administrative unit ends.
		BLM ADMINISTRATIVE UNIT EFFECTIVE DATE	date		Yes		The date on which a BLM Administrative unit begins.
		BLM ADMINISTRATIVE UNIT LAND RESPONSIBILITY CODE	character	10	Yes		A code that indicates if the BLM administrative unit is responsible for an area of BLM land.
		BLM ADMINISTRATIVE UNIT LEVEL NUMBER	number	2	Yes		A number that indicates the level of the organization for the BLM administrative unit.
		BLM UNIT TYPE NAME	character	20	Yes		A name that indicates the type of BLM organizational unit.
LOCATION		DRAFT ENTITY					
A defined place that requires a way to locate it by some means. Note: Entities linked to Location have the potential for a geospatial aspect.							
		LOCATION ARCHIVE DATE	date		Opt		The date which is the calendar year, month, and day when the position of the Location is considered no longer valid but has historical value.
		LOCATION EFFECTIVE DATE	date		Yes		The date which is the calendar year, month, and day when the position of the Location was produced.
		LOCATION IDENTIFIER	integer		Yes	PK, FK	The designed primary key that will uniquely identify a single occurrence of the entity.

Entity Name	Entity Description	Logical Data Element Name	Type	Size	Required?	Key*	Definition
RELATED LOCATION		DRAFT ENTITY					
		A valid relationship between two LOCATIONS for a specific reason.					
		RELATED LOCATION IDENTIFIER	integer		Yes	PK, FK	The designed primary key that will uniquely identify a single occurrence of the entity. The first location that has a relationship with another location.
		RELATED LOCATION REASON NAME	character	40	Yes		The name that indicates the reason why two locations are related. Possible values: multi-part polygon, polygon lines, overlapping polygons.
		RELATED LOCATION REASON DATE	date		Yes		The date when two locations became related for the reason stated.
		LOCATION IDENTIFIER	integer		Yes	PK, FK	The designed primary key that will uniquely identify a single occurrence of the entity.
*Key							(PK: Primary Key) (FK: Foreign Key which is PK of related entity) (PK, FK: Foreign Key part of PK)

Location Logical Data Model

Data Model that provides information on standard attributes for feature level metadata. It is **not part of this data standard** and does not need to be reviewed for the data standard, merely provides more information and relationships.



Legend: See Appendix C.

Entity Name	Entity Description	Logical Data Element Name	Type	Size	Req'd?	Key*	Definition
BOUNDARY							DRAFT ENTITY
The edge of a location that demarks the change from one location to another location.							
		LOCATION IDENTIFIER	integer		Yes	PK	The designed primary key that will uniquely identify a single occurrence of the entity.
CONVERTED COORDINATE SYSTEM REFERENCE							DRAFT ENTITY
The domain of values for the algorithm used to convert from one coordinate system to another.							
		COORDINATE SYSTEM CONVERSION ALGORITHM TEXT	character	60	Yes		The text that contains the algorithm used to convert from one coordinate system to another.
		COORDINATE SYSTEM ACRONYM CODE	character	10	Yes	PK, FK	The code that is considered the acronym for the coordinate system type.
		CONVERTED COORDINATE SYSTEM FROM ACRONYM CODE	character	10	Yes	PK	The code for the coordinate system that is being converted from (to another coordinate system).
COORDINATE SYSTEM DIMENSION REFERENCE							DRAFT ENTITY
The dimensions that are part of a given coordinate system type.							
		COORDINATE SYSTEM DIMENSION TEXT	character	100	Yes		The text that further describes the dimension for a given coordinate system type.
		COORDINATE SYSTEM DIMENSION CODE	character	10	Yes	PK	The code that is used to designate a dimension for a coordinate system type.
		COORDINATE SYSTEM DIMENSION NAME	character	10	Yes		The name associated with a code that is used to designate a dimension for a coordinate system type.
		COORDINATE SYSTEM ACRONYM CODE	character	10	Yes	PK, FK	The code that is considered the acronym for the coordinate system type.
COORDINATE SYSTEM REFERENCE							DRAFT ENTITY
A reference framework consisting of a set of points, lines and/or surfaces; including a set of rules used to define the positions of points in space in either two or three dimensions.							
		COORDINATE SYSTEM TYPE TEXT	character	100	Yes		The text that describes the particular coordinate system type.
		COORDINATE SYSTEM TYPE NAME	character	40	Yes		The name given to a particular coordinate system type.
		COORDINATE SYSTEM ACRONYM CODE	character	10	Yes	PK	The code that is considered the acronym for the coordinate system type.
		COORDINATE SYSTEM PURPOSE TEXT	character	100	Yes		The text that describes the purpose or purposes of a given coordinate system type.
DEFINING FEATURE DESCRIPTION*							APPROVED ENTITY: BLM
The values associated with second level of detail that can be used to define/create the location, based on the Defining Feature Type Name. There is not a finite set of values for this.							
		DEFINING FEATURE DESCRIPTION NAME	character	40	Opt		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.

Entity Name	Entity Description	Logical Data Element Name	Type	Size	Req'd?	Key*	Definition
		DEFINING FEATURE DESCRIPTION TEXT	character	200	Yes		The text that provides further details on the Defining Feature Description.
		DEFINING FEATURE DESCRIPTION IDENTIFIER	integer		Yes	PK	The designed primary key that will uniquely identify a single occurrence of the entity.
		DEFINING FEATURE TYPE NAME	character	30	Yes		The name that identifies the high-level category for the actual physical or mapping characteristics (features) from which the arcs are derived.
DEFINING FEATURE TYPE REFERENCE*							APPROVED ENTITY: BLM
A domain for the description of the characteristic (feature) constructed from a geographic feature that was used to create the location boundary.							
		DEFINING FEATURE TYPE NAME	character	30	Yes	PK	The name that identifies the high-level category for the actual physical or mapping characteristics (features) from which the arcs are derived.
DEPICTION TYPE REFERENCE*							APPROVED ENTITY: BLM
The domain of values for the way a location is depicted either in scale or resolution.							
		DEPICTION TYPE NAME	character	10	Yes	PK	The name that designates the detail with which the location is depicted, either in resolution or scale.
FORM DEFINING FEATURE*							APPROVED ENTITY: BLM
The defining features associated with a specific location form.							
		LOCATION FORM IDENTIFIER	integer		Yes	PK, FK	The designed primary key that will uniquely identify a single occurrence of the entity.
		DEFINING FEATURE DESCRIPTION IDENTIFIER	integer		Yes	PK, FK	The designed primary key that will uniquely identify a single occurrence of the entity.
HISTORICAL LOCATION							DRAFT ENTITY
The date and reason why a location's information has changed. Business Rule: this is for administrative changes, not necessarily for corrections to data.							
		LOCATION MODIFICATION REASON TEXT	character	200	Yes		The text which is the explanation for why data about a location has changed for administrative reasons.
		LOCATION MODIFIED DATE	date		Yes	PK	The date which is the calendar year, month, and day when the position of the Location was last modified.
		LOCATION IDENTIFIER	integer		Yes	PK, FK	The designed primary key that will uniquely identify a single occurrence of the entity.
LINE FORM							DRAFT ENTITY
A series of connected, coordinate points forming a simple linear feature. It is used to represent rivers and roads, or to form the boundary of polygons (GIS dictionary). Note: In our current physical environment this includes all types of straight and curved lines including ones that intersect.							
		LOCATION FORM IDENTIFIER	integer		Yes	PK, FK	The designed primary key that will uniquely identify a single occurrence of the entity.
		LINE FORM LENGTH MEASURE	decimal		Yes		The measure of the length of the line described in the Line Form UOM Type Name.
		LINE FORM UOM TYPE NAME	character	20	Yes		The domain value associated with the Unit of Measure used for the Line Form Length Measure.
		LINE FORM ACCURACY MEASURE	decimal		Yes		The measure that describes how close, in Line Form UOM Type Name the actual location is to the spatial depiction.

Entity Name	Entity Description	Logical Data Element Name	Type	Size	Req'd?	Key*	Definition
LOCATION		DRAFT ENTITY					
A defined place that requires a way to locate it by some means. Note: Entities linked to Location have the potential for a geospatial aspect.							
		LOCATION ARCHIVE DATE	date		Opt		The date which is the calendar year, month, and day when the position of the Location is considered no longer valid but has historical value.
		LOCATION EFFECTIVE DATE	date		Yes		The date which is the calendar year, month, and day when the position of the Location was produced.
		LOCATION IDENTIFIER	integer		Yes	PK	The designed primary key that will uniquely identify a single occurrence of the entity.
LOCATION FORM		DRAFT ENTITY					
The form in which the location is described such as the description, shape, or appearance of the location.							
		LOCATION FORM IDENTIFIER	integer		Yes	PK	The designed primary key that will uniquely identify a single occurrence of the entity.
		LOCATION IDENTIFIER	integer		Yes	FK	The designed primary key that will uniquely identify a single occurrence of the entity.
		LOCATION FORM TYPE NAME	character	10	Yes	FK	The type of form in which the location is described or appears. Point, line, polygon, or tabular.
		LOCATION FORM ORIGINATING FORM INDICATOR	character	3	Yes		The value that indicates if this is the way in which the location was first drawn/described. (yes, no)
LOCATION FORM SOURCE*		APPROVED ENTITY: BLM					
The actual origin of the location sources that were used to create a specific location form.							
		LOCATION FORM IDENTIFIER	integer		Yes	PK, FK	The designed primary key that will uniquely identify a single occurrence of the entity.
		LOCATION SOURCE DESCRIPTION IDENTIFIER	integer		Yes	PK, FK	The designed primary key that will uniquely identify a single occurrence of the entity.
LOCATION FORM TYPE REFERENCE		DRAFT ENTITY					
The domain for the type of form in which the location is described or appears whether in words, numbers of features (point line or polygon). This has been called a feature in geospatial communities.							
		LOCATION FORM TYPE NAME	character	10	Yes	PK	The type of form in which the location is described or appears. Point, line, polygon, or tabular
LOCATION SOURCE DESCRIPTION*		APPROVED ENTITY: BLM					
The values that provide a second level of detail about the location (coordinate) source origin. Note: There is not a finite set of these values.							
		LOCATION SOURCE DESCRIPTION CREATION DATE	date		Yes		The date on which the location source was originally created. This could just be a year (ccyy).
		LOCATION SOURCE DESCRIPTION STORED LOCATION TEXT	character	100	Yes		The text that provides the additional description of where the coordinate source can be found.
		LOCATION SOURCE DESCRIPTION DEPICTION TEXT	character	20	Yes		The text that describes the actual resolution or scale in which the location is depicted. Examples for Resolution: 1 meter, 10 feet. Examples for Scale: 1 in 10,000, 1 in 100. This does not have a domain or list of valid values.
		DEPICTION TYPE NAME	character	10	Yes	FK	The name that designates the detail with which the location is depicted, either in resolution or scale.

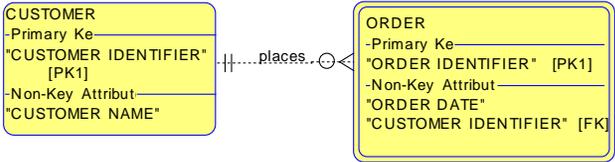
Entity Name	Entity Description	Logical Data Element Name	Type	Size	Req'd?	Key*	Definition
		LOCATION SOURCE DESCRIPTION IDENTIFIER	integer		Yes	PK	The designed primary key that will uniquely identify a single occurrence of the entity.
		LOCATION SOURCE DESCRIPTION TEXT	character	200	Yes		The text that provides further details on the Location (coordinate) Source Description.
		LOCATION SOURCE DESCRIPTION SPECIFIC NAME	character	40	Opt		The name that identifies a more specific description of the location (coordinate source).
		LOCATION SOURCE TYPE NAME	character	40	Yes	FK	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.
LOCATION SOURCE TYPE REFERENCE*							APPROVED ENTITY: BLM
The domain for the types of sources for the original location description / form.							
		LOCATION SOURCE TYPE NAME	character	40	Yes	PK	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.
		LOCATION SOURCE TYPE TEXT	character	100	Yes		The text that describes the Location Source Type.
POINT FORM							DRAFT ENTITY
A zero-dimensional abstraction of an object, with its location specified by a set of coordinates (GIS dictionary).							
		LOCATION FORM IDENTIFIER	integer		Yes	PK, FK	The designed primary key that will uniquely identify a single occurrence of the entity.
		POINT FORM ACCURACY MEASURE	decimal		Yes		The measure that describes how close the spatial depiction of the point is to the actual location.
		POINT FORM UOM TYPE NAME	character	20	Yes		The name of the domain value associated with the Unit of Measure used for the Point Form Accuracy Measure.
POINT FORM DIMENSION							DRAFT ENTITY
The measure associated with each dimension of a Coordinate System.							
		PONT FORM DIMENSION MEASURE	decimal		Yes		The measure that is associated with a specific coordinate system dimension.
		LOCATION FORM IDENTIFIER	integer		Yes	PK, FK	The designed primary key that will uniquely identify a single occurrence of the entity.
		COORDINATE SYSTEM DIMENSION CODE	character	10	Yes	PK, FK	The code that is used to designate a dimension for a coordinate system type.
		COORDINATE SYSTEM ACRONYM CODE	character	10	Yes	PK, FK	The code that is considered the acronym for the coordinate system type.
POLYGON FORM							DRAFT ENTITY
An area bounded by a closed line. It is used to describe spatial elements, such as administrative and political boundaries and areas of homogeneous land use and soil types (GIS dictionary). Note: In our physical environment, this includes all types of polygons, including ones that overlap.							
		LOCATION FORM IDENTIFIER	integer		Yes	PK	The designed primary key that will uniquely identify a single occurrence of the entity.

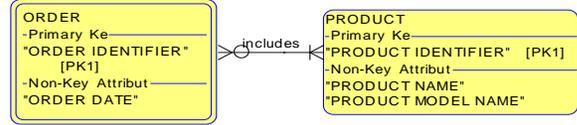
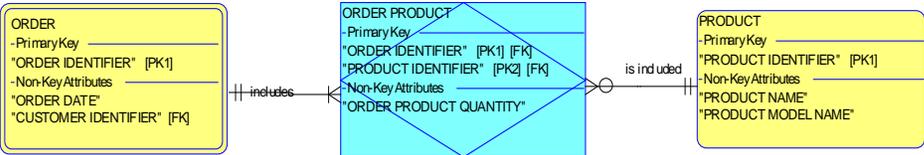
Entity Name	Entity Description	Logical Data Element Name	Type	Size	Req'd?	Key*	Definition
		POLYGON FORM UOM TYPE NAME	character	20	Yes		The name of the domain value associated with the Unit of Measure used for the Polygon Form Length Measure.
		POLYGON FORM AREA MEASURE	decimal		Yes		The area of the polygon described in the Polygon Form UOM Type Name.
RELATED LOCATION							DRAFT ENTITY
A valid relationship between two LOCATIONS for a specific reason.							
		RELATED LOCATION IDENTIFIER	integer		Yes	PK	The designed primary key that will uniquely identify a single occurrence of the entity. The first location that has a relationship with another location.
		RELATED LOCATION REASON NAME	character	40	Yes		The name that indicates the reason why two locations are related. Possible values: multi-part polygon, polygon lines, or overlapping polygons.
		RELATED LOCATION REASON DATE	date		Yes	PK	The date when two locations became related for the reason stated.
		LOCATION IDENTIFIER	integer		Yes	PK, FK	The designed primary key that will uniquely identify a single occurrence of the entity.
TABULAR FORM							DRAFT ENTITY
Descriptive information about a location, usually alphanumeric. This can be a single name or a combination of attributes that make up an address.							
		LOCATION FORM IDENTIFIER	integer		Yes	PK, FK	The designed primary key that will uniquely identify a single occurrence of the entity.
		TABULAR FORM TYPE NAME	character	20	Yes	FK	The name of the sub-category of the location form type which is true for tabular or alphanumeric descriptions of a location.
TABULAR FORM TYPE REFERENCE							DRAFT ENTITY
The domain for the type of tabular form that is being used to describe the location.							
		TABULAR FORM TYPE NAME	character	20	Yes	PK	The name of the sub-category of the location form type which is true for tabular or alphanumeric descriptions of a location.

*Key (PK: Primary Key) (FK: Foreign Key which is PK of related entity) (PK, FK: Foreign Key part of PK)

APPENDIX C: READING A LOGICAL DATA MODEL

	<p>ENTITY</p> <ul style="list-style-type: none"> 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: <i>ORDER</i>). <p>ATTRIBUTES</p> <ul style="list-style-type: none"> The adjective which is the data or information about an entity; describes an entity (<i>ORDER NUMBER, ORDER DATE</i>). 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 the same name as another customer, so <i>CUSTOMER IDENTIFIER</i> 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.
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 <p>The line includes optionality (minimum occurrences, inner symbol) and cardinality (maximum occurrences, symbol next to entity) = one 0 = zero < > = many</p>	<p>RELATIONSHIP</p> <ul style="list-style-type: none"> 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 <i>CUSTOMER</i> places zero to many <i>ORDERS</i>), and right to left (An <i>ORDER</i> is placed by one and only one <i>CUSTOMER</i>). 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.
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	<p>Many to Many:</p> <ul style="list-style-type: none"> In a logical data model, many to many relationships are resolved. In the example to the left an <i>ORDER</i> includes one to many <i>PRODUCT</i>s and a <i>PRODUCT</i> can be in zero or many <i>ORDER</i>s.
	<p>Associative Entity:</p> <ul style="list-style-type: none"> resolves the many to many. with the diamond symbol.