U.S. Census Bureau
Optimal Metadata Submission Guidelines

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DRAFT

As a part of the U.S. Census Bureau's Geographic Support System Initiative (GSS-I), the Census Bureau is committed to accepting data from our partners beginning in fiscal year 2013. The following tables list the metadata elements that are **optimal** for providing the Census Bureau with the information it needs to use partner data. The elements in the tables describe the entity responsible for the maintenance of the data, use restrictions, data lineage, known data defects and a description of the geographic area the data represents.

Note that elements for commonly used projections are shown in the table. If you use a different projection than those listed, please provide the specific parameters in accordance with the Federal Geographic Data Committee (FGDC) Content Standard for Digital Geospatial Metadata (CSDGM), which can be found at: http://www.fgdc.gov/metadata.

The National States Geographic Information Council's (NSGIC) GIS Inventory can be used to create "starter metadata" that includes some of the Census Bureau's optimal metadata elements. The GIS Inventory can be found here: http://www.nsgic.org/gis-inventory.
Additional metadata editors are referenced at: http://www.fgdc.gov/metadata/geospatial-metadata-tools.

**FGDC Document Referenced**

| Document Number | Document Name |
|---|---|
| FGDC-STD-001-1998 | Content Standard for Digital Geospatial Metadata (CSDGM) |

**Identification Information**

| Element and Description | CSDGM Short Name | CSDGM Element # |
|---|---|---|
| ***Citation Information*** | | |
| Originator (The name of the organization that developed the product) | origin | 8.1 |
| Publication Date (The date the data was released) | pubdate | 8.2 |
| Title (The name of the product being released) | title | 8.4 |
| ***Description*** | | |
| Abstract (A brief summary of the product) | abstract | 1.2.1 |
| Purpose (Reason why the data was developed) | purpose | 1.2.2 |
| ***Time Period of Content*** | | |
| Beginning Date (The start date of the period the data cover) | begdate | 9.3.1 |
| Ending Date (The end date of the period the data cover) | enddate | 9.3.3 |
| Currentness Reference (Basis on which the Beginning Date and Ending Date are determined ) | current | 1.3.1 |
| ***Status*** | | |
| Progress (The state of the product. It can either be "Complete", "In work" or "planned") | progress | 1.4.1 |
| Maintenance and Update Frequency (The frequency with which changes are made to the data) | update | 1.4.2 |
| ***Bounding Coordinates*** | | |
| West Bounding Coordinate (The western most coordinate of coverage in decimal degrees) | westbc | 1.5.1.1 |
| East Bounding Coordinate(The eastern most coordinate of coverage in decimal degrees) | eastbc | 1.5.1.2 |
| North Bounding Coordinate (The northern most coordinate of coverage in decimal degrees) | northbc | 1.5.1.3 |
| South Bounding Coordinate (The southern most coordinate of coverage in decimal degrees) | southbc | 1.5.1.4 |
| ***Theme Keywords*** | | |
| Theme Keyword Thesaurus (A reference to a formally registered thesaurus. If none is used, the value is "none") | themekt | 1.6.1.1 |
| Theme Keyword (A common-use word or phrase to describe the product. An example would be "address") | themekey | 1.6.1.2 |
| ***Place Keywords*** | | |
| Place Keyword Thesaurus (A reference to a formally registered thesaurus. If none is used, the value is "none") | placekt | 1.6.2.1 |
| Place Keyword (The geographic name of a location described by the product) | placekey | 1.6.2.2 |
| ***Constraints*** | | |
| Access Constraints (Any legal restrictions on accessing the product) | accconst | 1.7 |
| Use Constraints (Any legal restrictions on using the product) | useconst | 1.8 |

**Data Quality Information**

| Element and Description | CSDGM Short Name | CSDGM Element # |
|---|---|---|
| ***Quality Reports*** | | |
| Logical Consistency Report (Details of the tests performed on the data) | logic | 2.2 |
| Completeness Report (information about omissions, selection criteria used to develop data) | complete | 2.3 |
| ***Process Steps*** | | |
| Process Description (An explanation of how the data was processed) | procdesc | 2.5.2.1 |
| Process Date (The date the process described under Process Description was completed) | procdate | 2.5.2.3 |

**Entity and Attribute Information**

| Element and Description | CSDGM Short Name | CSDGM Element # |
|---|---|---|
| Entity and Attribute Overview (A detailed summary of the entity types, attributes and values in the address and/or feature file) | eaover | 5.2.1 |
| Entity and Attribute Detail Citation (A reference to the complete description of the entity types and values) | eadetcit | 5.2.2 |

**Contact Information**

| Element and Description | CSDGM Short Name | CSDGM Element # |
|---|---|---|
| Contact Organization (The name of the entity that is responsible for the product) | cntorg | 10.2.1 |
| Address Type (The type of address described by the Address element. This is usually 'mailing') | addrtype | 10.4.1 |
| Address (The street address of the entity that is responsible for the product) | address | 10.4.2 |
| City (The city the entity that is responsible for the product is located in) | city | 10.4.3 |
| State or Province (The state the entity that is responsible for the product is located in) | state | 10.4.4 |
| Postal Code (The ZIP code of the entity that is responsible for the product) | postal | 10.4.5 |
| Contact Voice Telephone (The voice telephone number for the entity that is responsible for the product) | cntvoice | 10.5 |
| Contact Facsimile Telephone (The fax number for the entity that is responsible for the product) | cntfax | 10.7 |
| Contact Electronic Mail Address (The email address for the entity that is responsible for the product) | cntemail | 10.8 |

**Metadata Information**

| Element and Description | CSDGM Short Name | CSDGM Element # |
|---|---|---|
| Metadata Date (The date the metadata file was created) | metd | 7.1 |
| Metadata Standard Name ( always Content Standard for Digital Geospatial Metadata) | metstdn | 7.5 |
| Metadata Standard Version (always FGDC-STD-001-1998) | metstdv | 7.6 |

**Spatial Reference Information* - unprojected coordinates**

| Element and Description | CSDGM Short Name | CSDGM Element # |
|---|---|---|
| ***Geographic*** | | |
| Latitude Resolution (The minimum difference between two adjacent latitude values expressed in Geographic Coordinate Units of measure) | latres | 4.1.1.1 |
| Longitude Resolution (The difference between two adjacent longitude values in Geographic Coordinate Units expressed in coordinate units of measure) | longres | 4.1.1.2 |
| Geographic Coordinate Units (Units used for the Latitude Resolution and Longitude Resolution elements) | geogunit | 4.1.1.3 |
| ***Geodetic Model*** | | |
| Horizontal Datum Name (Either "North American Datum of 1927" or "North American Datum of 1983") | horizdn | 4.1.4.1 |
| Ellipsoid Name (Either "Clarke 1866" or "Geodetic Reference System 80") | ellips | 4.1.4.2 |
| Semi-Major Axis (The radius of the equatorial axis of the ellipsoid in meters) | semiaxis | 4.1.4.3 |
| Denominator of Flattening Ratio (The denominator of the ratio of difference between the equatorial and polar radii) | denflat | 4.1.4.4 |

**Spatial Reference Information - State Plane Coordinates using a Lambert Conformal Conic projection**

| Element and Description | CSDGM Short Name | CSDGM Element # |
|---|---|---|
| ***Planar / Grid Coordinate System / State Plane Coordinate System / Lambert Conformal Conic*** | | |
| Grid Coordinate System Name (Either "State Plane Coordinate System 1927", or "State Plane Coordinate System 1983") | gridsysn | 4.1.2.2.1 |
| SPCS Zone Identifier (Identifier for the State Plane Coordinate System zone) | spcszone | 4.1.2.2.4.1 |
| Standard Parallel (A line of constant latitude, expressed in decimal degrees, at which the surface of the Earth and the plane intersect. This may be used 1 or 2 times) | stdparll | 4.1.2.1.23.1 |
| Standard Parallel (A line of constant latitude, expressed in decimal degrees, at which the surface of the Earth and the plane intersect) | stdparll | 4.1.2.1.23.1 |
| Longitude of Central Meridian (The line of longitude at the center of the Lambert Conformal Conic Projection in decimal degrees) | longcm | 4.1.2.1.23.2 |
| Latitude of Projection Origin (The latitude chosen as the origin of the coordinates for the map projection) | latprjo | 4.1.2.1.23.3 |
| False Easting (The value added to all "x" values in the coordinates for a map projection) | feast | 4.1.2.1.23.4 |
| False Northing (The value added to all "y" values in the coordinates for a map projection) | fnorth | 4.1.2.1.23.5 |
| ***Planar Coordinate Information*** | | |
| Planar Coordinate Encoding Method (Method used to represent horizontal positions within the coordinate system. Either "coordinate pair", "distance and bearing" or "row and column") | plance | 4.1.2.4.1 |
| Abscissa Resolution (The minimum distance between "X" values of two adjacent points in the planar data set. This is the "fuzzy tolerance") | abusers | 4.1.2.4.2.1 |
| Ordinate Resolution (The minimum distance between "Y" values of two adjacent points in the planar data set. This is the "fuzzy tolerance") | ordres | 4.1.2.4.2.2 |
| Planar Distance Units (The units of measure used to define the Coordinate Resolution) | plandu | 4.1.2.4.4 |
| ***Geodetic Model*** | | |
| Horizontal Datum Name (Either "North American Datum of 1927" or North American Datum of 1983") | horizdn | 4.1.4.1 |
| Ellipsoid Name (Either "Clarke 1866" or "Geodetic Reference System 80") | ellips | 4.1.4.2 |
| Semi-Major Axis (The radius of the equatorial axis expressed in meters) | semiaxis | 4.1.4.3 |
| Denominator of Flattening Ratio (The denominator of the ratio of difference between the equatorial and polar radii) | denflat | 4.1.4.4 |

**Spatial Reference Information - State Plane Coordinates using a Transverse Mercator projection**

| Element and Description | CSDGM Short Name | CSDGM Element # |
|---|---|---|
| ***Planar / Grid Coordinate System / State Plane Coordinate System / Transverse Mercator*** | | |
| Grid Coordinate System Name ("Universal Transverse Mercator") | gridsysn | 4.1.2.2.1 |
| SPCS Zone Identifier (Identifier for the State Plane Coordinate System zone) | spcszone | 4.1.2.2.4.1 |
| Scale Factor at Central Meridian (a multiplier for reducing a distance obtained from a map by computation or scaling to the actual distance along the central meridian) | sfctrmer | 4.1.2.1.23.17 |
| Longitude of Central Meridian (The line of longitude at the center of the Lambert Conformal Conic Projection in decimal degrees) | longcm | 4.1.2.1.23.2 |
| Latitude of Projection_Origin (The latitude chosen as the origin of the coordinates for the map projection) | latprjo | 4.1.2.1.23.3 |
| False Easting (The value added to all "x" values in the coordinates for a map projection) | feast | 4.1.2.1.23.4 |
| False Northing (The value added to all "y" values in the coordinates for a map projection) | fnorth | 4.1.2.1.23.5 |
| ***Planar Coordinate Information*** | | |
| Planar Coordinate Encoding Method (Either "coordinate pair", "distance and bearing" or "row and column") | plance | 4.1.2.4.1 |
| Abscissa Resolution (The minimum distance between "X" values of two adjacent points in the planar data set. This is the "fuzzy tolerance") | absres | 4.1.2.4.2.1 |
| Ordinate Resolution (The minimum distance between "Y" values of two adjacent points in the planar data set. This is the "fuzzy tolerance") | ordres | 4.1.2.4.2.2 |

| | | |
|---|---|---|
| Planar Distance Units (The units of measure used to define the Coordinate Resolution) | plandu | 4.1.2.4.4 |
| ***Geodetic Model*** | | |
| Horizontal Datum Name (Either "North American Datum of 1927" or North American Datum of 1983") | horizdn | 4.1.4.1 |
| Ellipsoid Name (Either "Clarke 1866" or "Geodetic Reference System 80") | ellips | 4.1.4.2 |
| Semi-Major Axis (The radius of the equatorial axis expressed in meters) | semiaxis | 4.1.4.3 |
| Denominator of Flattening Ratio (The denominator of the ratio of difference between the equatorial and polar radii) | denflat | 4.1.4.4 |

***Provide information for <u>one</u> of the three common Spatial Reference systems listed above (unprojected coordinates, State Plane Coordinates using a Lambert Conformal Conic projection, or State Plane Coordinates using a Transverse Mercator projection). Refer to the FGDC CSDGM if the Spatial Reference system you use is not listed.**