Geographic Names Information System (GNIS) data products
October 21, 2024

File format for GNIS text files: Domestic National, State, Topical Gazetteer, and Federal Codes
File format for GNIS geodatabase and geopackage files: Domestic National and State
File format for GNIS text file: Antarctica
File format for GNIS geodatabase and geopackage files: Antarctica

1. Text files
File format for Domestic National and States, Territories, and Associated Areas of the United States
File format for Domestic Topical Gazetteers: Populated Places and Historical Features
The files are available as a single National file; individual State files; or individual State files zipped into a single file. The Populated Places and Historical Features are subsets of the National file.

Field Name	Type	Length/Decimals	Description
feature_id	Number	10	Permanent, unique feature record identifier, see Appendix 3, number 1
feature_name	Character	120	Official feature name
feature_class	Character	50	For definitions, see Appendix 1
state_name	Character	100	The name of the state containing the primary coordinates. The state_name is the short form of the official state name. See Appendix 3, number 2
state_numeric	Number	2	
county_name	Character	100	The name of the county containing the primary coordinates. See Appendix 3, number 3
county_numeric	Number	3	
map_name	Character	100	Name of the USGS base series topographic map containing the primary coordinates.
date_created	Date		The date the record was initially entered into the Geographic Names Information System.
date_edited	Date		The date any attribute of an existing record was edited.
bgn_type	Character	12	The BGN fields represent information related to the latest decision on the official name by one of the four approving authorities: Board Decision; Congressional Legislation; Executive Order; Secretarial Order. The date represents date of approval.
bgn_authority	Character	25	
bgn_date	Date		
prim_lat_dms	Character	7	The official feature location, see Appendix 3, number 1. Datum is NAD83; Coordinates are listed in dms = degrees-minutes-seconds and dec = decimal degrees Records showing Unknown (dms) or 0,0 (dec) in latitude/longitude fields indicate that the location of the feature is Unknown. The 0,0 coordinate is not in error and does not reference the actual geographic coordinates at 0,0.
prim_long_dms	Character	8	
prim_lat_dec	Number	11/7	
prim_long_dec	Number	12/7	
source_lat_dms	Character	7	
source_long_dms	Character	8	
source_lat_dec	Number	11/7	
source_long_dec	Number	12/7	

			Source coordinates are available for the linear feature classes of stream, valley, or arroyo.

File format for Domestic Feature Description/History

In addition to the Feature ID, this file includes the following additional feature attributes: Description and History. This file must be associated using the Feature ID with one of the other files, such as an individual state or the National file. Not all records in the GNIS will have the Description or History fields populated. This file is available only as national in extent.

Field Name	Type	Length/Decimals	Description
feature_id	Number	10	Permanent, unique feature record identifier. See Appendix 3, number 1
description	Character	3000	Characteristics or information about a feature or the feature data.
history	Character	3000	Refers to the name origin, and/or cultural history of a feature.

File format for Domestic Government Units

This file contains the government entities for country, state, and county/county-equivalents and is available only as national in extent.

Field Name	Type	Length/Decimals	Description
feature_id	Number	10	Permanent, unique feature record identifier. See Appendix 3, number 1
unit_type	Character	50	Type of unit: Country, State, or County/County Equivalent
county_numeric	Number	3	The name of the county containing the primary feature location. See Appendix 3, number 3
county_name	Character	100	
state_numeric	Number	2	The name of the state containing the primary coordinates. The state_name is the short form of the official state name. See Appendix 3, number 2
state_alpha	Character	3	
state_name	Character	100	
country_alpha	Character	2	Two-character abbreviation for the country and the short-form name of the country. See Appendix 3, number 4.
country_name	Character	100	
feature_name	Character	120	Official feature name

File Format for Domestic Federal Codes

These files contain records that have assigned Census codes, Census class codes, General Services Administration (GSA) codes, or Office of Personnel Management (OPM) codes. The former FIPS 55-3 standard was superseded by INCITS 446-2008 (R2018). Former FIPS 55 data have been incorporated into the GNIS. The GNIS Feature ID superseded the FIPS 55 Place Code (now the Census Code) as the Federal and national standard geographic feature record identifier. The Census Bureau continues to assign five-digit Census Codes for internal purposes.

The files are available as a single National file; individual State files; or individual State files zipped into a single file.

Field Name	Type	Length/Decimals	Description
feature_id	Number	10	Permanent, unique feature record identifier. See Appendix 3, number 1
feature_name	Character	120	Official feature name
feature_class	Character	50	For definitions, see Appendix 1
census_code	Character	5	See Census' list of Geographic Codes.
census_class_code	Character	2	Formerly FIPS55 Place Code and FIPS55 Class Code. For a list of Census class codes used in GNIS, see Appendix 2
gsa_code	Character	4	GSA geographic location code. Maintained by GSA as a place reference for administrative and personnel purposes. Not otherwise used or referenced by GNIS.
opm_code	Character	9	OPM duty station code. Maintained by OPM as a place reference for administrative and personnel purposes. Not otherwise used or referenced by GNIS.
state_name	Character	100	The name of the state containing the primary coordinates. The state_name is the short form of the official state name. See Appendix 3, number 2
state_numeric	Number	2	
county_sequence	Number	3	Sequence of counties containing the feature. Sequence 1 corresponds to the primary location of the feature. The name of the county containing the primary coordinates. See Appendix 3, number 3
county_name	Character	100	
county_numeric	Number	3	
date_created	Date		The date the record was initially entered into the Geographic Names Information System.
date_edited	Date		The date any attribute of an existing record was edited.
bgn_type	Character	12	The BGN fields represent information related to the latest decision on the official name by one of the four approving authorities: Board Decision; Congressional Legislation; Executive Order; Secretarial Order. The date represents date of approval.
bgn_authority	Character	25	
bgn_date	Date		
prim_lat_dms	Character	7	The official feature location. See Appendix 3, number 1
prim_long_dms	Character	8	

prim_lat_dec	Number	11/7	Datum is NAD83; Coordinates are listed in dms = degrees-minutes-seconds and dec = decimal degrees
prim_long_dec	Number	12/7	
			Records showing Unknown (dms) or 0,0 (dec) in latitude/longitude fields indicate that the location of the feature is Unknown. The 0,0 coordinate is not in error and does not reference the actual geographic coordinates at 0,0.
			Source coordinates are available for the linear feature classes of stream, valley, or arroyo.

The data from the text file may be used to create a shapefile or the geodatabase or geopackage files may be downloaded already converted to these formats.

2. File format for Domestic National and State geodatabase files

The geodatabase files are available in a National or state extent and include the multi-point representation of GNIS data. The file name of the national is Gazetteer_National_GDB.gdb. The name of a state gazetteer geodatabase file uses the 2-character state abbreviation in the file name, i.e., Gazetteer_CO_GDB.gdb for the geodatabase for Colorado.

The data is organized in multiple feature classes, layers, and tables. The two feature classes are: Gazetteer_Vector and Topical_Gazetteer. Under the Gazetteer_Vector feature class are Gaz_Features and CellGrid_7_5Minute layers. Under Topical_Gazetteer are the PopulatedPlaces, HistoricalFeatures, GovernmentUnits, FederalCodes, FeatureDescriptionHistory, and DomesticNames layers. There are six tables associated with each geodatabase: Gaz_BGNDecisions, Gaz_Desigs, Gaz_InCounties, Gaz_InStates, Gaz_Names, and Gaz_Quads.

The example below shows the structure for the geodatabase:
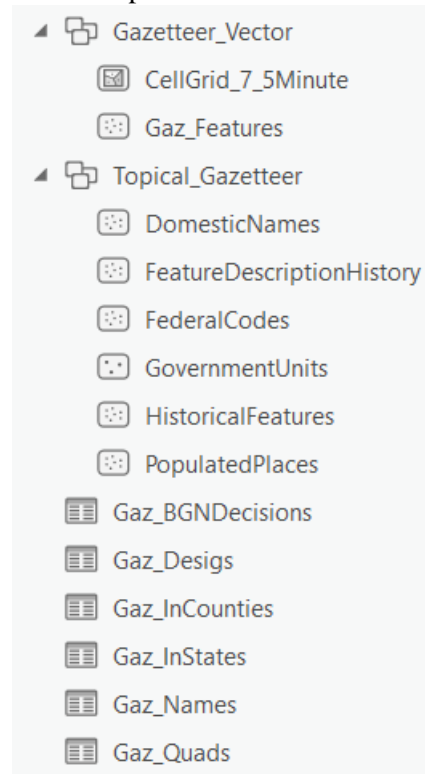
Users have the option of using the raw data in Gaz_Features and associated tables or can use the Topical Gazetteer data that has already been prepared using custom queries. The tables have a one-to-many relationship to the Feature_ID in Gaz_Features. The Topical Gazetteer layers mimic the Text file fields listed above but represent the feature locations as multi-point spatial data, providing a more complete representation of each record in GNIS.

The layer Gaz_Features may be related to any of the tables via the Feature_ID. The CellGrid_7_5Minute layer represents the 7.5-minute quadrangles that cover the extent of the selected geodatabase, either national or state and is provided as a reference layer. The geodatabase provides the multipoint representation of the feature as it crosses each 7.5-minute quadrangle, which is not available through the text files.
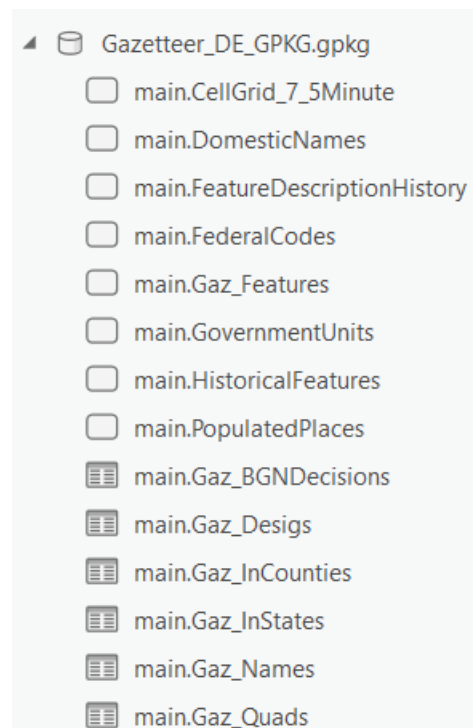
The DomesticNames is the main file for the prepared GNIS data. For a state file, any point that crosses the state will be included in the layer. The PopulatedPlaces, HistoricalFeatures, and FederalCodes, layers are subsets of the DomesticNames layer. The FeatureDescriptionHistory layer is meant to be related to the DomesticNames, PopulatedPlaces, or HistoricalFeatures layers. The following describes the content of the data layers:

- DomesticNames – includes feature information, state and county information, Entry/Edit Information, BGN Information, and Coordinate Information for all names within or passing through the state. The National file contains all the data in the database at the time of file creation.
- PopulatedPlaces – subset of the DomesticNames layer and contains those features classified as Populated Place.
- HistoricalFeatures – subset of the DomesticNames layer and contains those features identified as Historical. A designation of Historical indicates that the name is no longer in use, or the feature no longer serves the original purpose.
- GovernmentUnits – contains the country, state, and county information.
- FederalCodes – contains those records that have assigned Census codes, Census Class Codes, GSA Codes, or OPM Codes.
- FeatureDescriptionHistory – contains those records that have the Description or History fields populated. Not all records in GNIS will have these fields populated. This layer is meant to be related to the DomesticNames, PopulatedPlaces, or HistoricalFeatures layers.

3. File format for Domestic National and State GeoPackage files
These files are an open format for geospatial information and is also provided as an alternative to the geodatabase. These files are available as a National or state extent GeoPackage and include the multi-point representation of the data. The file name of the national is Gazetteer_National_GPKG.gpkg. The name of a state gazetteer geodatabase file uses the 2-character state abbreviation in the file name, i.e., Gazetteer_CO_GPKG.gpkg for the GeoPackage for Colorado.

Compared with the geodatabase there are 8 layers and 6 tables. The data is not subdivided between feature classes as with the geodatabase. Each layer name is prefixed with 'main.xx' but the names are consistent between the geodatabase and the GeoPackage. The following shows the listing for a GeoPackage file:

As with the geodatabase file, the main.Gaz_Features file is meant to be related to the tables via the Feature_ID. The main.CellGrid_7_5Minute layer represents the 7.5-minute quadrangles that cover the extent of the selected geodatabase, either national or state and is provided as a reference layer. The GeoPackage provides the multipoint representation of the feature as it crosses each 7.5-minute quadrangle along with each cell, which is not available through one of the text files.

The main.DomesticNames is the main file for the prepared GNIS data. For a state file, any point that crosses the state will be included in the layer. The main.PopulatedPlaces, main.HistoricalFeatures, and main.FederalCodes, layers are subsets of the main.DomesticNames layer. The main.FeatureDescriptionHistory layer is meant to be related to the main.DomesticNames, main.PopulatedPlaces, or main.HistoricalFeatures layers. The following describes the content of the data layers:

- main.DomesticNames – includes feature information, state and county information, Entry/Edit Information, BGN Information, and Coordinate Information for all names within or passing through the state. The National file contains all the data in the database at the time of file creation.
- main.PopulatedPlaces – subset of the main.DomesticNames layer and contains those features classified as Populated Place.
- main.HistoricalFeatures – subset of the main.DomesticNames layer and contains those features identified as Historical. A designation of Historical indicates that the name is no longer in use, or the feature no longer serves the original purpose.
- main.GovernmentUnits – contains the country, state, and county information.
- main.FederalCodes – contains those records that have assigned Census codes, Census Class Codes, GSA Codes, or OPM Codes.
- main.FeatureDescriptionHistory – contains those records that have the Description or History fields populated. This file is meant to be related to the main.DomesticNames, main.PopulatedPlaces, or main.HistoricalFeatures layers.

4. File format for Antarctica text file

Field Name	Type	Length/Decimals	Description
feature_id	Number	10	Permanent, unique feature record identifier, see Appendix 3, number 1
antarctica_id	Number	10	Identifier under previous data format. IDs are used as a reference and are no longer updated.
scar_placeid	Number	12	Scientific Committee on Antarctic Research (SCAR) Place ID. Field is updated as data is submitted to SCAR database.
feature_name	Character	120	Official feature name
feature_class	Character	50	For definitions, see Appendix 4
date_created	Date		The date the record was initially entered into the Geographic Names Information System.
date_edited	Date		The date any attribute of an existing record was edited.
bgn_type	Character	12	The BGN fields represent information related to the latest decision on the official name by one of the four approving authorities: Board Decision; Congressional Legislation; Executive Order; Secretarial Order. The date represents date of approval.
bgn_authority	Character	25	
bgn_date	Date		
prim_lat_dms	Character	7	The official feature location, see Appendix 3, number 1. Datum is NAD83; Coordinates are listed in dms = degrees-minutes-seconds and dec = decimal degrees Records showing Unknown (dms) or 0,0 (dec) in latitude/longitude fields indicate that the location of the feature is Unknown. The 0,0 coordinate is not in error and does not reference the actual geographic coordinates at 0,0. Source coordinates are available for the linear feature classes of stream, valley, or arroyo.
prim_long_dms	Character	8	
prim_lat_dec	Number	11/7	
prim_long_dec	Number	12/7	
description	Character	3000	Characteristics of information about a feature or the feature data.
history	Character	3000	Refers to the name origin and/or cultural history of a feature.

Appendix 1. List of Feature Classes for Domestic Names in the Geographic Names Information System

This list shows all feature classes catalogued in the GNIS and their definitions and provides examples of generic names associated with the feature class.

Arch
Natural arch-like opening in a rock mass (bridge, natural bridge, sea arch).

Area
Any one of several areally extensive natural features not included in other categories (badlands, barren, delta, fan, garden).

Arroyo
Colloquial usage in southwestern United States. The valley of an ephemeral stream with a flat floor and steep banks or the ephemeral stream flowing through a valley with a flat floor and steep banks, either hydrographic or hypsographic ('āwa'a, draw, wash, gully).

Bar
Natural accumulation of sand, gravel, or alluvium forming an underwater or exposed embankment (ledge, reef, sandbar, shoal, spit).

Basin
Natural depression or relatively low area enclosed by higher land (amphitheater, bolson, cirque, depression, hole, lua, pit, sink).

Bay
Indentation of a coastline or shoreline enclosing a part of a body of water; a body of water partly surrounded by land (arm, bahía, bight, cove, estuary, gulf, hono, inlet, kū'ono, sound).

Beach
The sloping shore along a body of water that is washed by waves or tides and is usually covered by sand or gravel (coast, kahakai, kapa kai, shore, strand).

Bench
Area of level to gently sloping land on the flank of an elevation such as a hill, ridge, or mountain where the slope of the land rises on one side and descends on the opposite side (first bottom, flood-plain step, level, terrace, tread).

Bend
Curve in the course of a stream or the land within the curve; A curve in a linear body of water (bottom, loop, meander).

Canal
Waterway, primarily manmade, used by watercraft or for drainage, irrigation, mining, or waterpower ('auwai, ditch, lateral, sluice).

Cape
Projection of land extending into a body of water (lae, neck, peninsula, point).

Census
A statistical area delineated locally specifically for the tabulation of Census Bureau data (census designated place, census county division, unorganized territory, various types of American Indian/Alaska Native statistical areas). Distinct from Civil and Populated Place.

Channel
Linear deep part of a body of water through which the main volume of water flows and is frequently used as a route for watercraft (passage, reach, strait, thalweg, thoroughfare, throughfare). Not a Stream or Valley.

Civil
A political division formed for administrative purposes (borough, county, incorporated place, municipio, parish, town, township). Distinct from Census and Populated Place.

Cliff
Very steep or vertical slope on one side (bluff, crag, escarpment, head, headland, nose, pali, palisades, precipice, promontory, rim, rimrock, scarp).

Crater
Circular-shaped depression at the summit of a volcanic cone or one on the surface of the land caused by the impact of a meteorite; a manmade depression caused by an explosion (bowl, caldera, lua, maar).

Crossing
A place at which a river or stream may be crossed (landing, ferry, ford).

Falls
Perpendicular or very steep fall of water in the course of a stream (cascade, cataract, wailele, waterfall).

Flat
Relative level area within a region of greater relief (clearing, glade, pan, park, playa lake, salina, upland, papa).

Gap
Low point or opening between hills or mountains or in a ridge or mountain range (col, notch, pass, saddle, water gap, wind gap).

Glacier
Body or stream of ice moving outward and downslope from an area of accumulation; an area of relatively permanent snow or ice on the top or side of a mountain or mountainous area (icefield, ice patch, snow patch).

Gut

Relatively small coastal waterway connecting larger bodies of water or other waterways (creek, inlet, slough).

Island
Area of dry or relatively dry land surrounded by water or low wetland (archipelago, atoll, cay, hammock, hummock, isla, isle, key, moku, mokupuni, rock).

Isthmus
Narrow section of land in a body of water connecting two larger land areas.

Lake
Natural body of inland water (backwater, lac, lagoon, laguna, loko, oxbow, pond, pool, resaca, tank, tarn, waterhole).

Lava
Formations resulting from the consolidation of molten rock on the surface of the Earth (lava flow, kīpuka, māwae, traps).

Levee
Natural or manmade embankment flanking a stream (bank, berm, kuāuna).

Military
Place or facility used for various aspects of or relating to military activity.

Pillar
Vertical, standing, often spire-shaped, natural rock formation (chimney, hoodoo, monument, pinnacle, pōhaku, rock tower).

Plain
A region of general uniform slope, comparatively level and of considerable extent; can refer to the flat area of a large mesa (desert, grassland, highland, kula, plateau, savanna).

Populated Place
Place or area with clustered or scattered buildings and a permanent human population (city, settlement, town, village). A populated place is usually not incorporated and by definition has no legal boundaries. However, a populated place may have a corresponding "civil" record, the legal boundaries of which may or may not coincide with the perceived populated place. Distinct from Census and Civil classes.

Range
A single mass of hills or mountains; a complex, interconnected series of mountain ranges having a well-defined longitudinal trend (cordillera, mountain belt, sierra).

Rapids
Fast-flowing section of a stream with turbulent flow, often shallow and with exposed rock or boulders, where discharge is mostly influenced by velocity rather than width and depth (dalles, riffle, ripple).

Reservoir
Artificially impounded body of water (kūmano, lake, luawai, tank).

Ridge
Elevation with a narrow, elongated crest that can be part of a hill or mountain (arête, crest, chenier, cuesta, divide, esker, hogback, mogote, lae, ridge, spur).

Sea
Large body of salt water (gulf, kai, moana, ocean).

Slope
A gently inclined part of the Earth's surface (grade, pitch).

Spring
Place where underground water flows naturally to the surface of the Earth (puna, seep).

Stream
Linear body of water flowing on the Earth's surface (anabranch, awāwa, bayou, branch, brook, creek, distributary, fork, kahawai, kill, pup, rio, river, run, slough).

Summit
Prominent elevation rising above the surrounding level of the Earth's surface; does not include pillars, ridges, or ranges; can occur as a single isolated mass or in a group (ahu, ballon, berg, bald, butte, cerro, colina, cone, cumbre, dome, head, hill, horn, knob, knoll, mauna, mesa, mesita, mound, mount, mountain, nuʻu, peak, puʻu, rock, sugarloaf, table, volcano).

Swamp
Poorly drained wetland, fresh or saltwater, wooded or grassy, possibly covered with open water (bog, cienega, everglades, fen, marais, marsh, pocosin, slough).

Valley
Linear depression in the Earth's surface that generally slopes from one end to the other (awāwa, barranca, canyon, chasm, cirque, cove, coulee, draw, fjord, glen, gorge, gulch, gulf, gully, hollow, ravine).

Woods
Small area covered with a dense growth of trees; does not include an area of trees under the administration of a political agency.

Appendix 2. Census Bureau Class Codes used for Domestic Names in GNIS
Note that there are some Census Class Codes specific to GNIS and are not in Census' list of Class Codes. Also note that some of the codes reference feature types that are no longer in GNIS, such as Airport. For more information about Census' Geographic Codes please see Geographic Codes.

A1   Airport with scheduled commercial flights that also serves as a military installation.

A3   Airport with scheduled commercial flights that does not serve as a military installation.

A4   Airport without scheduled commercial flights that does not serve as a military installation.

A6   Airport without scheduled commercial flights located within a military installation.

B0   Post Offices not corresponding to other locational entities.

C1   Incorporated Places. An active incorporated place that does not serve as a county subdivision equivalent.

C2   An active incorporated place legally coextensive with a county subdivision but treated as independent of any county subdivision.

C3   A consolidated city.

C4   An active incorporated place with an alternate official common name.

C5   An active incorporated place that is independent of any county subdivision and serves as a county subdivision equivalent.

C6   An active incorporated place that partially is independent of any county subdivision and serves as a county subdivision equivalent or partially coextensive with a county subdivision but treated as independent of any county subdivision.

C7   An incorporated place that is independent of any county.

C8   The balance of a consolidated city excluding the separately incorporated place(s) within that consolidated government.

C9   An inactive or nonfunctioning incorporated place.

D0   Statistical or legal area administered and/or claimed by two or more American Indian tribes.

D1   Legal federally recognized American Indian area consisting of reservation and associated off-reservation trust land.

D2   Legal federally recognized American Indian area consisting of reservation only.

D3   Legal federally recognized American Indian area consisting of off-reservation trust land only.

D4   Legal state-recognized American Indian area.

D6   Statistical American Indian area defined for a federally recognized tribe that does not have a reservation or off-reservation trust land specifically a tribal designated statistical area or Oklahoma tribal statistical area but excluding Alaska Native village statistical areas.

D7   A tribal subdivision.

E1   Statistical area that represents the densely settled portion of an Alaska Native village; an Alaska Native village statistical area.

E7   An Alaska Native Regional Corporation.

F1   Legal Hawaiian home land consisting of lands held in trust for the benefit of Native Hawaiians.

H1   An active county or equivalent feature.

H4   An inactive county or equivalent feature.

H5   A statistical county equivalent feature.

H6   A county that is coextensive with an incorporated place, part of an incorporated place, or a consolidated city and the governmental functions of the county are part of the municipal government.

M1   A military or other defense installation that is partially within a census designated place.

M2   A military or other defense installation entirely within a census designated place.

M3   Health care facility.

M4   Federally managed park, forest, or other area.

M9   Federal facility not classified elsewhere.

P1   Populated Place that is also an incorporated place with the same name and the same Census Code.

P4   Populated Place with an alternate official name that is also an incorporated place.

T1   An active county subdivision that is not coextensive with an incorporated place.

T2   An active county subdivision that is coextensive with a census designated place.

T5   An active county subdivision that is coextensive with an incorporated place.

T9   An inactive county subdivision.

U1   A census designated place with an official federally recognized name.

U2   A census designated place without an official federally recognized name.

U3   Alternate official common name for an incorporated or census designated place.

U4   Official common name for a populated location within an incorporated place.

U5   Populated Place that is also a census designated place with the same name.

U6   A populated place that is not a census designated or incorporated place having an official federally recognized name.

U7   An official named locality that is substantively within the boundaries of a census designated place.

X0   Deleted feature that was a non-governmental entity.

X1   Deleted feature that was a governmental entity.

Z1   A nonfunctioning county subdivision.

Z3   A county subdivision defined as an unorganized territory.

Z4   A nonfunctioning or disorganized historical county subdivision no longer recognized by the Census Bureau.

Z5   A statistical county subdivision.

Z6   A sub-minor civil division.

Z8   A county subdivision that is legally coextensive with all or part of an incorporated place that the Census Bureau does not recognize.

Appendix 3: Sources for ANSI standards and FIPS codes

1. The Feature ID is an ANSI standard as defined as INCITS 446-2008 (R2018): Identifying Attributes for Named Physical and Cultural Features (Except Roads and Highways) of the United States, Its Territories, Outlying Areas, and Freely Associated Areas, and the Waters to the Same to the Limit of the Twelve-Mile Statutory Zone.

2. The unique two-number state code is defined in INCITS 38-2009 (replacing FIPS 5-2): Information Technology – Codes for the Identification of the States and Equivalent Areas within the United States, Puerto Rico, and the Insular Areas.

3. The unique three-number county code is defined in INCITS 31-2009 (replacing FIPS 6-4): Information Technology – Codes for the Identification of Counties and Equivalent Areas of the United States, Puerto Rico, and the Insular Areas.

4. Country 2-character abbreviation as identified in the GENC standard - the US government profile of ISO 3166.

Appendix 4: List of Feature Classes for Antarctica Names in the Geographic Names Information System

This list shows all feature classes for Antarctica catalogued in the GNIS and their definitions and provides examples of generic names associated with the feature class.

Airport
Manmade facility maintained for the use of aircraft (airfield, airstrip, landing field, landing strip).

Arch
Natural arch-like opening in a rock mass (bridge, natural bridge, sea arch).

Area
Any one of several areally extensive natural features not included in other categories (badlands, barren, delta, fan, garden).

Bar
Natural accumulation of sand, gravel, or alluvium forming an underwater or exposed embankment (ledge, reef, sandbar, shoal, spit).

Basin
Natural depression or relatively low area enclosed by higher land (amphitheater, bolson, cirque, depression, hole, pit, sink).

Bay
Indentation of a coastline or shoreline enclosing a part of a body of water; a body of water partly surrounded by land (arm, bahía, bight, cove, estuary, gulf, inlet, sound).

Beach
The sloping shore along a body of water that is washed by waves or tides and is usually covered by sand or gravel (coast, shore, strand).

Bench
Area of level to gently sloping land on the flank of an elevation such as a hill, ridge, or mountain where the slope of the land rises on one side and descends on the opposite side (first bottom, flood-plain step, level, terrace, tread).

Bend
Curve in the course of a stream or the land within the curve; A curve in a linear body of water (bottom, loop, meander).

Building
A manmade structure with wall and a roof for protection of people and (or) materials.

Cape
Projection of land extending into a body of water (lae, neck, peninsula, point).

Cave
Natural underground passageway or chamber, or a hollowed out cavity in the side of a cliff (cavern, grotto).

Channel
Linear deep part of a body of water through which the main volume of water flows and is frequently used as a route for watercraft (passage, reach, strait, thalweg, thoroughfare, throughfare). Not a Stream or Valley.

Cliff
Very steep or vertical slope on one side (bluff, crag, escarpment, head, headland, nose, palisades, precipice, promontory, rim, rimrock, scarp).

Crater
Circular-shaped depression at the summit of a volcanic cone or one on the surface of the land caused by the impact of a meteorite; a manmade depression caused by an explosion (bowl, caldera, lua, maar).

Falls
Perpendicular or very steep fall of water in the course of a stream (cascade, cataract, waterfall).

Flat
Relative level area within a region of greater relief (clearing, glade, pan, park, playa lake, salina, upland).

Gap
Low point or opening between hills or mountains or in a ridge or mountain range (col, notch, pass, saddle, water gap, wind gap).

Glacier
Body or stream of ice moving outward and downslope from an area of accumulation; an area of relatively permanent snow or ice on the top or side of a mountain or mountainous area (icefield, ice patch, snow patch).

Gut
Relatively small coastal waterway connecting larger bodies of water or other waterways (creek, inlet, slough).

Island
Area of dry or relatively dry land surrounded by water or low wetland (archipelago, atoll, cay, hammock, hummock, isla, isle, key, moku, rock).

Isthmus
Narrow section of land in a body of water connecting two larger land areas.

Lake
Natural body of inland water (backwater, lac, lagoon, laguna, oxbow, pond, pool, resaca, tank, tarn, waterhole).

Lava
Formations resulting from the consolidation of molten rock on the surface of the Earth (kepula, lava flow, māwae, traps).

Pillar
Vertical, standing, often spire-shaped, natural rock formation (chimney, hoodoo, monument, pinnacle, pōhaku, rock tower).

Plain
A region of general uniform slope, comparatively level and of considerable extent; can refer to the flat area of a large mesa (desert, grassland, highland, kula, plateau, savanna).

Range
A single mass of hills or mountains; a complex, interconnected series of mountain ranges having a well-defined longitudinal trend (cordillera, mountain belt, sierra).

Rapids
Fast-flowing section of a stream with turbulent flow, often shallow and with exposed rock or boulders, where discharge is mostly influenced by velocity rather than width and depth (dalles, riffle, ripple).

Reservoir
Artificially impounded body of water (lake, tank).

Ridge
Elevation with a narrow, elongated crest that can be part of a hill or mountain (arête, crest, chenier, cuesta, divide, esker, hogback, mogote, lae, ridge, spur).

Sea
Large body of salt water (gulf, ocean).

Slope
A gently inclined part of the Earth's surface (grade, pitch).

Spring
Place where underground water flows naturally to the surface of the Earth (seep).

Stream
Linear body of water flowing on the Earth's surface (anabranch, awāwa, bayou, branch, brook, creek, distributary, fork, kill, pup, rio, river, run, slough).

Summit
Prominent elevation rising above the surrounding level of the Earth's surface; does not include pillars, ridges, or ranges; can occur as a single isolated mass or in a group (ahu, ballon, berg, bald, butte, cerro, colina, cone, cumbre, dome, head, hill, horn, knob, knoll, mauna, mesa, mesita, mound, mount, mountain, peak, puʻu, rock, sugarloaf, table, volcano).

Valley
Linear depression in the Earth's surface that generally slopes from one end to the other (barranca, canyon, chasm, cirque, cove, coulee, draw, fjord, glen, gorge, gulch, gulf, gully, hollow, ravine).