



Governmental Unit Boundary Data Content Standard (Working Draft, Version 2.0)

Subcommittee on Cultural and Demographic Data
Federal Geographic Data Committee

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Federal Geographic Data Committee
Department of Agriculture • Department of Commerce • Department of Defense • Department of Energy
Department of Housing and Urban Development • Department of the Interior • Department of State
Department of Transportation • Environmental Protection Agency
Federal Emergency Management Agency • Library of Congress
National Aeronautics and Space Administration • National Archives and Records Administration
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Federal Geographic Data Committee

Established by Office of Management and Budget Circular A-16, the Federal Geographic Data Committee (FGDC) promotes the coordinates development, use, sharing, and dissemination of geographic data.

The FGDC is composed of representatives from the Departments of Agriculture, Commerce, Defense, Energy, Housing and Urban Development, the Interior, State, and Transportation; the Environmental Protection Agency; the Federal Emergency Management Agency; the Library of Congress; the national Aeronautics and Space Administration; the National Archives and Records Administration; and the Tennessee Valley Authority. Additional federal agencies participate on FGDC subcommittees and working groups. The Department of the Interior chairs the committee.

FGDC subcommittees work on issues related to data categories coordinated under the circular. Subcommittees establish and implement standards for data content, quality, and transfer; encourage the exchange of information and the transfer of data; and organize the collection of geographic data to reduce duplication of efforts. Working groups are established for issues that transcend data categories.

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1. INTRODUCTION

Office of Management and Budget (OMB) Circular A-16¹ recognizes Federal agency responsibilities for spatial data categories and directs the responsible agencies to develop, through the Federal Geographic Data Committee (FGDC), standards for spatial data categories to ensure that the data produced by all agencies are compatible. Circular A-16 assigns responsibility for “... collecting, processing, and tabulating cultural (e.g., economic data and the names and boundaries of domestic governmental entities) and demographic data through its decennial, economic, agriculture, and governments censuses and related statistical activities” to the Department of Commerce. The Department of Commerce delegated the Census Bureau to fulfill its A-16 obligation for cultural and demographic data. As Chair of the FGDC Subcommittee on Cultural and Demographic Data (SCDD), the Census Bureau is sponsoring a governmental unit (GU) boundary data content standard under the auspices of the SCDD to best meet the needs of all Federal agencies and other data producers and users.

Further, Executive Order 12906² identifies a National Digital Geospatial Data Framework comprised of geospatial data “that are significant, in the determination of the FGDC, to a broad variety of users within any geographic area or nationwide.” Executive Order 12906 recognizes boundary elements as one of three specific framework elements. GU boundaries are an important component of the domain of boundary elements. Boundary layers are integral to geographic information systems (GIS) and serve as a fundamental base layer for many thematic datasets. A large number of data producers and users (including Federal agencies, State and local governments, and private concerns) present data that are either directly or indirectly referenced to GUs.

Although sets of GU boundaries are maintained and distributed by a relatively few number of Federal agencies, individual GU boundaries are collected from a large number of State and local governments. The Census Bureau, as one of the agencies tasked with the collection of boundary data, conducts an annual Boundary and Annexation Survey (BAS) of a specified universe of counties and legally equivalent entities, minor civil divisions, and incorporated places (all are GUs) to determine the inventory of legally defined entities and the correct names, political descriptions, and legal boundaries of counties, minor civil divisions, and incorporated places. The recurring need to update and maintain the boundaries of GUs and the widespread importance and use of GU boundaries, coupled with the desire of many data users for up-to-date GU boundary information, makes a common methodology for describing GU boundaries and ease of GU boundary exchange a high priority.

¹ Office of Management and Budget (OMB) Circular No. A-16 Revised, Coordination of Surveying, Mapping, and Related Spatial Data Activities, October 19, 1990.

² U.S. Executive Office of the President, 1994, Coordinating geographic data acquisition and access: the National Spatial Data Infrastructure (Executive Order 12906): Washington, Executive Office of the President.

80 **1.1 Objective**

81
82 The purpose of the Governmental Unit Boundary Data Content Standard (the
83 Standard) is to provide consistency in the collection and interchange of GU
84 boundaries and to facilitate their maintenance, analysis, and comparison.
85

86 **1.2 Scope**

87
88 The Standard is a data content standard. Data content standards are defined by the
89 FGDC Standard Reference Model as standards that provide semantic definitions of a
90 set of objects. The Standard identifies and defines the components required for
91 describing the content of a GU boundary.
92

93 **1.3 Applicability**

94
95 The Standard adopts the Federal Information Processing Standard (FIPS) Publication
96 55-3³ description of a GU as
97

98 *A geographic entity that has the ability to have elected officials and*
99 *raise revenues through taxes.*
100

101 The Standard applies to all FGDC-recognized GUs. (Subclause 3.1.1 includes a
102 complete listing of FGDC-recognized GUs.) The Standard additionally shall be
103 applied by an organization to its organization-recognized GUs.
104

105 The Standard does not apply to non-governmental units, although its principles may
106 be extended to all geographic entities.
107

108 The Standard specifies the content necessary for the successful interchange of a GU
109 boundary; the Standard does not specify a particular structure for either storage or
110 interchange of boundary files. Data producers and users may structure GU
111 boundaries in any desired format for their internal use and interchange.
112
113

³ National Institute of Standards and Technology, December 28, 1994, Codes for Named Populated Places, primary County Divisions, and Other Locational Entities of the United States, Puerto Rico, and the Outlying Areas, FIPS PUB 55-3, U.S. Government Printing Office, Washington, D.C.

2.0 DEFINITIONS/SYMBOLS AND ABBREVIATIONS

For the purposes of the Standard, the following definitions and symbols and abbreviations apply.

2.1 Definitions

2.1.1 boundary – line defining the limits of a geographic entity

NOTE: A boundary may or may not follow a visible feature

2.1.2 bounded. - topological relationship of a geographic entity contained within a delimiting line

Note: Applicable at the type or instance level.

2.1.3 coextensive with – one-to-one areal maintenance relationship between two geographic entities or features that must have the same limits or extent

Note: Applicable at the instance level.

2.1.4 contains nested – one-to-many areal maintenance relationship between a geographic entity or feature and others where nesting relationships are inherited

Note: A nesting relationship implies one geographic entity must be totally within another.

Note: Applicable at the instance level.

2.1.5 composes – topological relationship of a geographic entity or feature always forming a part of another

Note: Composes assumes a geographic entity is contained entirely within, or encompassed by, another.

Note: Applicable at the type or instance level.

2.1.6 composed of – topological relationship of a geographic entity or feature always being formed by one or more others

Note: Applicable at the type or instance level.

2.1.7 governmental unit – geographic entity that has the ability to have elected officials and raise revenues through taxes

2.1.8 government unit boundary description component – element identifying and storing discrete units of information on governmental unit boundaries

2.1.9 instance – single representation of a feature type

2.1.10 list relationship – maintained list of areal links between geographic entities or features

2.1.11 maintenance relationship – common areal information that must be maintained between one or more geographic entities or features

- 160 Note: Applicable at the type level.
161
162 2.1.12 nests within – many-to-one areal maintenance relationship between geographic
163 entities or features where one totally encompasses another and at least parts of others
164 NOTE: Applicable at the instance level.
165
166 2.1.13 non-bounded – topological relationship of a geographic entity lacking a delimiting
167 line
168 Note: Non-bounded is the absence of being bounded.
169 Note: Applicable at the type or instance level.
170
171 2.1.14 topological relationship – spatial condition or characteristic required for creating and
172 maintaining the internal topology of a database (or file)
173
174 2.1.15 type – representation of a class of real world phenomenon with common
175 characteristics
176

177 2.2 Symbols and Abbreviations

179	ANSI	American National Standards Institute
180	Cadastral Standard	Cadastral Data Content Standard for the National Spatial Data 181 Infrastructure
182	FIPS PUB	Federal Information Processing Standards Publication
183	FGDC	Federal Geographic Data Committee
184	GU	governmental unit
185	ISO/TC 211	International Organization of Standardization Technical 186 Committee 211, Geographic Information/Geomatics
187	Metadata Standard	Content Standards for Digital Geospatial Metadata
188	SCDD	Subcommittee on Cultural and Demographic Data
189	the Standard	Governmental Unit Boundary Data Content Standard
190		

191 **3.0 THE DATA CONTENT OF GU BOUNDARIES**

192
193 The Standard defines a GU and identifies the components required to describe GU
194 boundaries (the components are referred to within the Standard as the GU Boundary
195 Description Components).

196 **3.1 Description of a Governmental Unit**

197
198
199 There are many variations to the definition of a governmental unit. Because of these
200 variations, geographic entities recognized as GUs by one organization may not be
201 acknowledged as GUs by other organizations.

202
203 The Standard adopts the FIPS 55-3 definition of a GU as

204
205 *A geographic entity that has the ability to have elected officials and*
206 *raise revenues through taxes.*

207
208 FIPS 55-3 provides a coding system and assigns class codes to a wide variety of
209 geographic entities, including GUs recognized by the Census Bureau for the purpose
210 of tabulating statistical data and non-governmental unit geographic entities. For
211 comparative purposes, the Census Bureau's⁴ description of a GU is

212
213 *A geographic entity established by legal action, and for the purpose of*
214 *implementing administrative or governmental functions.*

215
216 All area and population of the United States are part of one or more legal units and at
217 least one GU.

218
219 Users of the Standard shall evaluate their geographic entities and determine if the
220 entities fit the Standard's description of a GU.

221 **3.1.1 FGDC-recognized GUs**

222
223 The FGDC recognizes the following GUs as comprising the domain of framework
224 GUs⁵:

- 225
226
227
 - 228 • Nation,
 - 229 • States and statistically equivalent areas,
 - 230 • Counties and statistically equivalent areas,
 - Incorporated places and consolidated cities,

⁴ U.S. Department of Commerce, Economics and Statistics Administration, Census Bureau, November 1995. Geographic Areas Reference Manual. Washington, D.C.

⁵ Federal Geographic Data Committee. 1995. Development of a National Digital Geospatial Framework. Federal Geographic Data Committee. Washington, D.C.

- 231 • Functioning and legal minor civil divisions (in 28 states and the District of
232 Columbia),
233 • Federal- or State-recognized American Indian Reservations and Trustlands, and
234 • Alaska Native Regional Corporations.
235

236 **3.1.2 Census Bureau, Geography Division-recognized GUs**

237
238 Informative Appendix A is a table of the Census Bureau, Geography Division-
239 recognized GUs. The table is included in the Standard for informational purposes
240 only to aid organizations in identifying their GUs. The table should not be considered
241 a definitive, exhaustive listing of GUs. The table does not include the many GUs that
242 fit the Standard’s description of a GU but are not recognized by Geography Division
243 as geographic areas relevant to its mission of reporting census data.
244

245 The FGDC-recognized GUs are a subset of the Census Bureau, Geography Division-
246 recognized GUs⁶.
247

248 **3.2 GU Boundary Description Component Requirement**

249
250 The Standard identifies the GU Boundary Description Components required to
251 describe GU boundaries.
252

253 The GU Boundary Description Components shall be used to describe GU boundaries.
254 The GU Boundary Description Components are applicable to databases, individual
255 datasets, dataset series, and individual GU boundaries.
256

257 The GU Boundary Description Components may be used to describe the boundary of
258 any geographic entity.
259

260 **3.3 GU Boundary Description Component Characteristics**

261
262 GU Boundary Description Components shall identify and store discrete units of
263 information. The GU Boundary Description Components are organizationally
264 presented in three sections:
265

- 266 • Section 1.0 References
 - 267 • Section 2.0 GU Type Information
 - 268 • Section 3.0 GU Instance Information
- 269

270 Each of the major sections contains subsections; sections are used to establish both
271 organization and relationships.
272

⁶ The exception to this statement is State-recognized American Indian Reservations and Trustlands. The Census Bureau recognized State-recognized American Indian Reservations and Trustlands as GUs for 1990 decennial census data; however, they are not being considered as GUs for 2000 decennial census data.

273 Normative Appendix B includes:
274

- 275 • A graphic illustration of the sections and their GU Boundary Description
276 Components.
- 277 • A table of the sections, their GU Boundary Description Components, and the
278 characteristics of each GU Boundary Description Component.

279

280 GU Boundary Description Components are defined by seven characteristics:
281

Name	A label assigned to the GU Boundary Description Component.
Definition	The GU Boundary Description Component description.
Obligation	A descriptor indicating whether a GU Boundary Description Component shall always be present or sometimes be present (i.e. contain values). The descriptor may have the following values: Mandatory (M) The GU Boundary Description Component shall be present. Conditional (C) The GU Boundary Description Component shall be present if those documenting their GU boundary(s) determine the characteristic being described to be of importance. Optional (O) The GU Boundary Description Component may be present or not. Optional GU Boundary Description Components have been defined to provide an authoritative guide to those looking to fully document their GU Boundary(s).
Condition	Specification of the condition under which the GU Boundary Description Component is mandatory for the Conditional obligation.
Maximum Occurrence	The number of instances a GU Boundary Description Component may have.
Data Type	Specification of the set of distinct values for representing GU Boundary Description Components (for example, text, integer, real, or date.)
Domain Values	Specification of the set of distinct values for each GU Boundary Description Component.

282

283 3.4 GU Boundary Description Component Model

284

285 Informative Appendix C provides a generic model depicting an overview of, and the
286 rationale behind, the GU Boundary Description Components.

287

288 **Appendix A (Informative) Census Bureau, Geography Division-recognized Domain**
289 **of GUs**
290

291 Most Census Bureau, Geography Division-recognized GUs have officially recognized
292 boundaries. Whereas GUs may be either single- or general-purpose in function, the
293 Geography Division recognizes primarily general purpose GUs⁷ General purpose GUs may
294 be characterized by their entity type or by their functional status.

295
296 **Entity Types:**
297

- 298 • Administrative entity (Admin) – A geographic area, usually with legally defined
299 boundaries but often without elected officials, created to administer elections and
300 other governmental functions.
- 301 • Legal entity (Legal) – A geographic entity whose boundaries, name, origin, and
302 political/statistical area description result from charters, laws, treaties, or other
303 administrative or governmental action (may be referred to as a political entity).
- 304 • Statistically equivalent entity (StatEquiv) – A type of geographic entity that, for the
305 purposes of data tabulation and presentation, the Census Bureau treats as the
306 counterpart of a similar type of entity; for example, in Louisiana (which has no
307 counties) the parish is the statistical equivalent of a county. Statistically equivalent
308 entities are not, strictly speaking, GUs.

309
310 **Functional Status** is the administrative or legal activities associated with performing the
311 legally prescribed functions of a GU; that is, the administrative or legal entity is functioning
312 or nonfunctioning; and if functioning is either active or inactive:

- 313 • Functioning – A general-purpose GU that has the legal capacity to elect or appoint
314 officials, raise revenues, provide services, and enter into contracts.
 - 315 • Active – A GU that has elected or appointed officials, raises revenues, and
316 performs governmental activities (such as enactment of laws, provision of
317 services, and entering into contracts).
 - 318 • Inactive – A GU that is not exercising its legal capacity to have elected or
319 appointed officials; thus, it neither raises revenue nor provides services.
- 320 • Nonfunctioning – A legally defined GU that does not have appointed or elected
321 officials, raise revenues, or perform general purpose governmental activities such as
322 enacting laws, entering into contracts, or providing services. The term usually refers
323 to an entity established to administer a task assigned to another GU. GUs that are of
324 the entity types administrative or statistically equivalent may be considered
325 nonfunctioning.
326

⁷ The Census Bureau, Governments Division recognizes both general- and single purpose GUs. Governments Division releases data on public finances and employment for “governmental entities” which are defined as, “A government is an organized entity which, in addition to having governmental character, has sufficient discretion in the management of its own affairs to distinguish it as separate from the administrative structure of any other governmental unit.” (Governments Finance and Employment Classification Manual). More information can be obtained by writing Governments Division, Census Bureau, Washington, D.C. 20233.

327
 328 The table lists the GUs recognized by the Census Bureau, Geography Division. The table is
 329 not a definitive, exhaustive listing of GUs as it does not include GUs that fit the Standard’s
 330 description of a GU but are not recognized by Geography Division as geographic areas
 331 relevant to its mission of reporting census data.

332
 333 The table identifies the FGDC-recognized GUs. These GUs are considered a part of
 334 framework by the FGDC.

335
 336 Additionally, the GU entity type(s) are noted. Functional status is not provided, as it is more
 337 an individual, rather than type, level aspect of GUs.
 338

Census Bureau, Geography Division Recognized GU	Description	FGDC framework GU	Entity Type(s)
Alaska Native Regional Corporation (ANRC)	A corporate area established by the Alaska Native Claims Settlement Act, 1971, to conduct both the business and nonprofit affairs of Alaska Natives.	YES	Legal
Alaska Native Village (ANV)⁸	A type of local governmental unit found in Alaska, with boundaries identified for the Census Bureau by an appropriate authority, that constitutes an association, band, clan, community, group, tribe, or village recognized pursuant to the ANCSA. (ANVs do not have legally defined boundaries.)	No	?
American Indian Reservation (Federal) (AIR(F))	An area of American Indian tribe jurisdiction established by treaty, statute, and/or executive order as recognized by the Bureau of Indian Affairs.	YES	Legal
	Colony (American Indian) – A type of American Indian reservation.		
	Community (American Indian) – A type of American Indian reservation.		
	Pueblo – A type of American Indian Reservation.		
	Rancheria (American Indian) – A type of American Indian reservation.		
	Reserve (American Indian) – A type of American Indian reservation.		
Consolidated Government	A governmental unit that comprises two or more legal entities that have joined together to form a common government; for example a consolidated city-county government. The combined governmental units may or may not occupy the same territory.	No	Legal

⁸ ANVs are GUs without boundaries.

U.S. Census Bureau, Geography Division Recognized GU	Description	FGDC framework GU	Entity Type(s)
County or Equivalent Entity (County)	First order division of a State or Equivalent Entity.	YES	Legal or StatEquiv
	Borough – In Alaska, the type of governmental unit that is the primary legal subdivision of the organized portion of the State, similar to a county in other States.		Legal
	Census Area – The statistical equivalent of a county in Alaska. Census areas are delineated cooperatively by the State of Alaska and the Census Bureau for statistical purposes in the portion of Alaska not within an organized borough; they were used first in the 1980 census.		StatEquiv
	County Equivalent – A geographic entity that is not legally referred to as a county, but is recognized by the Census Bureau as equivalent to a county for purposes of data representation.		StatEquiv
	Dependent Place – An incorporated place or CDP that is legally or statistically part of the county(ies) and/or county subdivision(s) within which it is located. There are three types of dependent places: (1) an incorporated place that is legally part of the county(ies) and/or MCD(s) within which it is located, (2) an incorporated place that is legally part of the county(ies) and statistically part of the county subdivision(s) within which it is located, and (3) a CDP that always is statistically part of the county(ies) and county subdivision(s) within which it is located.		Legal or StatEquiv
	District – A type of nonfunctioning county equivalent found in American Samoa.		Legal
	Independent City – An incorporated city that is a primary division of a state and legally not part of any county. (The Census Bureau treats an independent city as both a county equivalent and an MCD equivalent for data tabulation purposes.)		StatEquiv
	Island – A type of nonfunctioning county equivalent in American Samoa and the Virgin Islands of the United States.		StatEquiv
	Municipio – A type of governmental unit that is the primary legal subdivision of Puerto Rico (The Census Bureau treats the municipio as the statistical equivalent of a County.)		Legal
	Municipality – A type of functioning county equivalent found in the Northern Mariana Islands for the 1990 census		StatEquiv
	Parish – A type of governmental unit that is the primary legal subdivision of Louisiana, similar to a county in other States.		Legal or StatEquiv
	state – A functioning county equivalent in Palau, where it also serves as a nonfunctioning MCD.		StatEquiv

Census Bureau, Geography Division Recognized GU	Description	FGDC framework GU	Entity Type(s)
County Subdivision	A legal or statistical division of a county recognized by the Census Bureau for data presentation. (Note – only legal divisions are presented in this table)	No	Legal or StatEquiv
	Borough – In New Jersey and Pennsylvania, a county subdivision.		
	Pseudo MCD – Refers to the MCD recognized in, and comprising the area of, Arlington County, Virginia; St. Louis, Missouri; other independent cities; and independent places below the county level. Although these entities have no MCDs, it is inappropriate to classify them as unorganized territory.		
	Township (civil or governmental) – A type of county subdivision that can be functioning or nonfunctioning in Missouri. In States where land was subdivided under the Public Land Survey System (PLSS), many townships correspond to the survey townships.		
	Village – A type of incorporated place in 20 States and American Samoa. The Census Bureau treats all villages in New Jersey, South Dakota, and Wisconsin, and some villages in Ohio as county subdivisions.		
Incorporated Place (INC) continued on next page	A type of governmental unit, incorporated under State law as a city, town (except in New England, New York, and Wisconsin), borough (except in Alaska and New York), or village, having legally prescribed limits, powers, and functions.	YES	Legal
	Borough – In Connecticut, New Jersey, and Pennsylvania, an incorporated place.		Legal
	City – A type of incorporated place in 49 States and the District of Columbia. (In 20 States, some or all cities are not part of any MCD, and the Census Bureau also treats these as county subdivisions, statistically equivalent to MCDs.)		Legal
	Coextensive Place – A place that covers exactly the same area and has the same boundaries as its county subdivision or county.		Legal
	Consolidated City (CC) -- An incorporated place that has combined its governmental functions with a county or subcounty entity but contains one or more other incorporated places that continue to function as local governments within the consolidated government.		
	Dependent Place – An incorporated place or Census Designated Place that is legally or statistically part of the county(ies) and/or county subdivision(s) within which it is located. (The Census Bureau also tabulates the statistical data for the place as part of the total for the county(ies) and/or county subdivision(s) that these data are part of.)		

Census Bureau, Geography Division Recognized GU	Description	FGDC framework GU	Entity Type(s)
Incorporated Place (INC) continued from previous page	Extended City – An incorporated place that contains large, sparsely settled area(s) within its legally defined boundaries; that is, one or more areas with a population density of less than 100 persons per square mile, each of which is at least 5 square miles in extent, which together constitute at least 25 percent of the place’s total land area or at least 25 squared miles. These low-density areas are classified as rural; the remainder of the extended city is classified as rural.	YES	
	Independent Place – An incorporated place that legally is not part of any county. (The Census Bureau treats an independent place as a primary division of a county and an MCD equivalent for data tabulation purposes.)		
	Place – A concentration of population either legally bounded as an incorporated place, or identified by the Census Bureau as a Census Designated Place (CDP).		
	Rural Place – The population and territory outside any urbanized area and the urban part of any place with a decennial census population of 2,500 or more.		
	Urban Place – Any place with a decennial census population of 2,500 or more, whether incorporated or census designated (a CDP), and any place regardless of population located within a UA.		
	Village – A type of incorporated place in 20 States and American Samoa. The Census Bureau treats all villages in New Jersey, South Dakota, and Wisconsin, and some villages in Ohio as county subdivisions.		Legal
Minor Civil Division or Equivalent Entity (MCD) continued on next page	A type of governmental unit that is the primary legal subdivision of a county in 28 States, created to govern or administer an area rather than a specific population. There are several types of MCDs.	YES	Legal
	Assessment District – A nonfunctioning MCD defined only to administer tax assessments for a county.		Admin
	Barrio -- A nonfunctioning legal subdivision of a municipio in Puerto Rico. A barrio (or group of barrios) is the area from which municipio officials and the Commonwealth legislature are elected. (The Census Bureau treats barrios as an MCD.) [Also referred to as Ciudad by the government of Puerto Rico prior to the 1990 decennial census.]		Legal
	Barrio-pueblo – A nonfunctioning legal subdivision of a municipio in Puerto Rico, treated as an MCD by the Census Bureau. The barrio-pueblo replaces the pueblo reported in decennial censuses prior to 1990. The barrio-pueblo is differentiated from other barrios because it is the historical center and seat of government of its municipio.		Legal
	Borough – In New York, a functioning MCD; the boroughs are the five entities, one for each county, that together constitute New York city.		Legal
	Civil Township – A type of MCD with a functioning government.		Legal
	Election District – A nonfunctioning class of MCDs in Guam and Maryland.		Admin

Census Bureau, Geography Division Recognized GU	Description	FGDC framework GU	Entity Type(s)
Minor Civil Division or Equivalent Entity (MCD) continued on next page	Election Precinct (EP) – A nonfunctioning class of MCDs in Illinois and Nebraska that represent a voting area.	YES	Admin
	Gore – A type of nonfunctioning MCD found in Maine and Vermont.		Admin
	Grant – A type of nonfunctioning MCD in New Hampshire and Vermont.		Admin
	Independent City – An incorporated city that is a primary division of a state and legally not part of any county. (The Census Bureau treats independent cities as both a county equivalent and an MCD equivalent for data tabulation purposes.)		StatEquiv
	Island – A type of nonfunctioning MCD Equivalent in American Samoa.		StatEquiv
	Location – A type of nonfunctioning MCD found in New Hampshire.		Admin
	Magisterial District – A type of nonfunctioning MCD found in Virginia and West Virginia.		Admin
	Municipal District – A type of nonfunctioning MCD found in Guam.		Admin
	Municipality – A functioning MCD found in the Northern Mariana Islands for the 1980 decennial census and in Palau for the 1990 Census.		Legal
	Parish Governing Authority District (PGAD) – A type of nonfunctioning MCD found in Louisiana used for reporting decennial census data.		Legal
	Plantation – A type of functioning MCD found in Maine.		Legal
	Police Jury Ward – A type of nonfunctioning MCD found in Louisiana and used to tabulate data in the 1980 and several earlier decennial censuses; replaced by the parish governing authority district for the 1990 census.		Admin
	Precinct – A legal entity subdividing a county, established by counties or municipalities for administrative or electoral purposes and used by the Census Bureau as an MCD in Illinois and Nebraska.		Admin
	Pueblo – Before the 1990 census, the term used for the legal subdivision, or MCD equivalent, of a municipio (the county equivalent) in Puerto Rico. The term barrio-pueblo replaced pueblo for the 1990 census.		Legal
	Purchase – A type of nonfunctioning MCD found in New Hampshire.		Admin
	Reservation – A type of functioning MCD found in Maine and New York, consisting of an American Indian reservation recognized by the Federal government or a State government; the reservation is independent of any other MCD.		StatEquiv
	Road District – A type of functioning MCD found in Potter County, Pennsylvania, originally established to maintain roads, that has become a general-purpose government.		Legal
	state – A functioning county equivalent in Palau, where it also serves as a nonfunctioning MCD.		Admin

Census Bureau, Geography Division Recognized GU	Description	FGDC framework GU	Entity Type(s)
Minor Civil Division or Equivalent Entity (MCD) continued from previous page	Supervisor’s District – A nonfunctioning MCD found in Mississippi, used for the election of a member to the county board.	YES	Admin
	Township (civil or governmental) – A type of functioning MCD in 12 States, a type of nonfunctioning MCD in 3 states (Arkansas, New Hampshire, and North Carolina. In States where land was subdivided under the Public Land Survey System (PLSS), many townships correspond to the survey townships.		Legal or Admin
	Township (congressional or survey) – A unit of land created under the Public Land Survey System (PLSS) for the sale of public lands. A survey township is usually a six-square-mile area consisting of 36 one-square-mile sections aligned along cardinal compass points. Survey townships have not been used for decennial census tabulations in recent decades except where they are organized into a civil township; if unorganized, the area is treated as the statistical equivalent of an MCD, called an unorganized territory.		StatEquiv
	Unorganized Territory (UT) – The statistical equivalent of an MCD encompassing contiguous area that is not within any organized MCD or an incorporated place. The Census Bureau identified UTs in nine states for the 1990 census.		StatEquiv
Nation	An area under the jurisdiction of a sovereign government.	YES	Legal
School District (SD)	The territory administered by the elected or appointed authorities of a State, county, or other local governmental unit to provide educational services to a resident population. A school district typically includes several school buildings, teachers, and related staff. The Census Bureau provided data tabulations for school districts from the 1970, 1980, and 1990 censuses.	No	Admin
	Elementary School District – A school district inclusive of kindergarten through either the eight or ninth grade or the first through either the eight or the ninth grade.		Admin
	Secondary School District – A school district inclusive of only high school (either the ninth through the twelfth grades or the tenth through the twelfth grades).		Admin
	Unified District – A school district inclusive of kindergarten through twelfth grade		Admin
State or Equivalent Entity (State)	A type of governmental unit that is the primary legal subdivision of the United States.	YES	Legal
	State Equivalent - A type of governmental unit treated by the Census Bureau as if it were a State for the purposes of data presentation. For the 1990 decennial census, the State equivalents included the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands of the United States, American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and Palau.		StatEquiv

Census Bureau, Geography Division Recognized GU	Description	FGDC framework GU	Entity Type(s)
Sub-Minor Civil Division (Sub-MCD)	A primary legal division of an MCD, found only in Puerto Rico.	No	Legal
	Subbarrio – A legally defined nonfunctioning subdivision of a barrio-pueblo or barrio in Puerto Rico, which serves as an electoral and representational entity.		Admin
????? Traffic Analysis Zone (TAZ)	An area for the analysis of transportation data delineated in accordance with Census Bureau criteria and used for the presentation of data from the decennial census.	No	Admin
Unorganized Borough	A legal entity in Alaska, covering the portion of the State not within any legally established, organized borough; it is administered by the state of Alaska.		
Voting District (VTD)	Any variety of areas, such as election precincts, precincts, legislative districts, or wards, established by States and local governments for voting purpose. The 1990 census term voting district replaces the 1980 term election precinct.	No	Admin
	Election Precinct (EP) – A nonfunctioning class of MCDs in Illinois and Nebraska that represent a voting area.		Admin
	Legislative District -- An are from which a person is elected to serve in a State legislative body.		Admin
	Precinct -- One of several types of small geographic entities created by State and local governments for the purpose of administering elections, and for which the Census Bureau tabulated data in 1980 and 1990 as prescribed by Public law 94-171.		Admin
	Ward – A type of local electoral subdivision of an incorporated place or MCD; <i>a type of MCD formally recognized by the Census Bureau in Louisiana; officially called a police jury ward.</i>		Admin
????? ZIP Code Area		No	Admin

339 **Appendix B (Normative) GU Boundary Description Component Characteristics**
340

341 This appendix includes:

- 342 • A graphic overview of the GU Boundary Description Component required sections,
- 343 • A graphic of each required section and its GU Boundary Description Components,
344 and
- 345 • Definitions of each GU Boundary Description Component

346 **Appendix C (Informative) Describing Governmental Units**

347
348 Upon initial scrutiny of the GU Boundary Components required by the Standard to describe a
349 GU boundary it may appear many are more closely tied to a description of the governmental
350 unit rather than to a description of its boundary. In developing the Standard, it was
351 discovered it is extremely difficult to describe a GU boundary without first concentrating on
352 describing a GU. This appendix reviews the information considered essential to describing a
353 GU.

354
355 Figure 1 is a generalized model of information to consider in describing GUs.

356
357 Information about GUs may be presented at two levels: the *Type Level* (pertaining to
358 categories of GUs), and the *Instance Level* (pertaining to single occurrences of GUs).

359
360 Identification is essential for describing GUs. Identification can be at both the *Type Level*
361 and the *Instance Level*. Examples of *Type Identification* information are the name of the
362 standard that standardizes the identification information (if applicable), the type name, and
363 the type definition. Examples of *Instance Identification* information are a reference to the
364 type level identifier and the instance name.

365
366 Equally important for describing GUs is knowledge of their *Relationships*. Three categories
367 of relationships are relevant: topologic, maintenance, and list relationships. The categories
368 are applicable at either: (1) the *Type Level*, (2) the *Instance Level*, or (3) both the *Type and*
369 *Instance Levels*.

370
371 Topologic relationships are conditional or characteristic relationships that apply to GUs and
372 may include relationships required for the internal topology of a database. Specifics of
373 *Topological Relationships* are provided at the instance level. The topologic relationships or
374 conditions applicable to GUs are:

- 375
- 376 • *Bounded* - the condition relationship representing a GU contained within a delimiting
377 line.
 - 378 • *Non-bounded* – the condition relationship representing a GU lacking a delimiting line
379 (the absence of bounded).
 - 380 • *Composes* – the condition relationship where the GU always forms a part of another
381 feature object.
 - 382 • *Composed Of* – the condition relationship where one or more topological or feature
383 objects always are the ingredients of the GU.

384
385 Guidelines for applying topologic relationships are at the *Type Level* using *Topologic Rules*.
386 That is, the topologic relationships applicable to a GU type are specified; for example, a type
387 of GU must consist only of *Bounded* geographic areas.

388
389 Maintenance relationships, required for GU maintenance, provide some common areal
390 information between one or more GUs or geographic area features. Maintenance

391 relationships are not general and cannot generalized at the *Type Level*. Maintenance
392 relationships are specific to instances of GUs and linking particular GUs to other GUs or
393 geographic area features. *Maintenance* is provided at the *Instance Level*. An example of a
394 maintenance relationship is “Arlington County Coextensive with Arlington Minor Civil
395 Division Coextensive with Arlington Census Statistical Place.” Coincidental relationships or
396 relationships which do not require maintenance are excluded. The following are examples
397 of maintenance relationships, their properties, and the required maintenance actions.
398

399 **Coextensive With** – A one-to-one areal maintenance relationship between two different
400 governmental units.

401 Properties

402 If A is Coextensive with B,
403 Then B is Coextensive with A.

404
405 If A is Coextensive with B and B is Coextensive with C,
406 Then A is Coextensive with C.

407 Maintenance

408 If A is Coextensive with B,
409 Then any change to A results in an equal change to B.

410
411 **Contains Nested** – A one-to-many areal maintenance relationship between different
412 feature objects.

413 Properties

414 If A contains Nested B and C,
415 Then B Nests Within A and C Nests Within A.

416 Maintenance

417 If A Contains Nested B and C,
418 Then any change to A results in an equal change to B or C or both.

419
420 **Nests Within** – A many-to-one areal maintenance relationship between different feature
421 objects.

422 Properties

423 If B Nests Within A,
424 Then A Contains Nested B and at least one other of the same type feature
425 feature object.

426 Maintenance

427 If B Nests Within A,
428 Then any areal change to B adding territory from or deleting territory
429 to another feature object that does NOT Nest Within A, results in an
430 equal change to A.

431
432 List relationships are an optional separately maintained list of areal links between feature
433 objects, maintained independently of the geographic and feature coverage within a database.
434 The function of list relationships include the easy retrieval of lists of related entities from a
435 database and the easy creation of data headings for publication. *List* relationships are
436 maintained at the *Type Level*, including a listing of all instances of a type.

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Additional information pertinent to the interchange of GUs is included as *Metadata*. Relevant metadata elements include those about the GU's originator, publication information, data quality, etc.

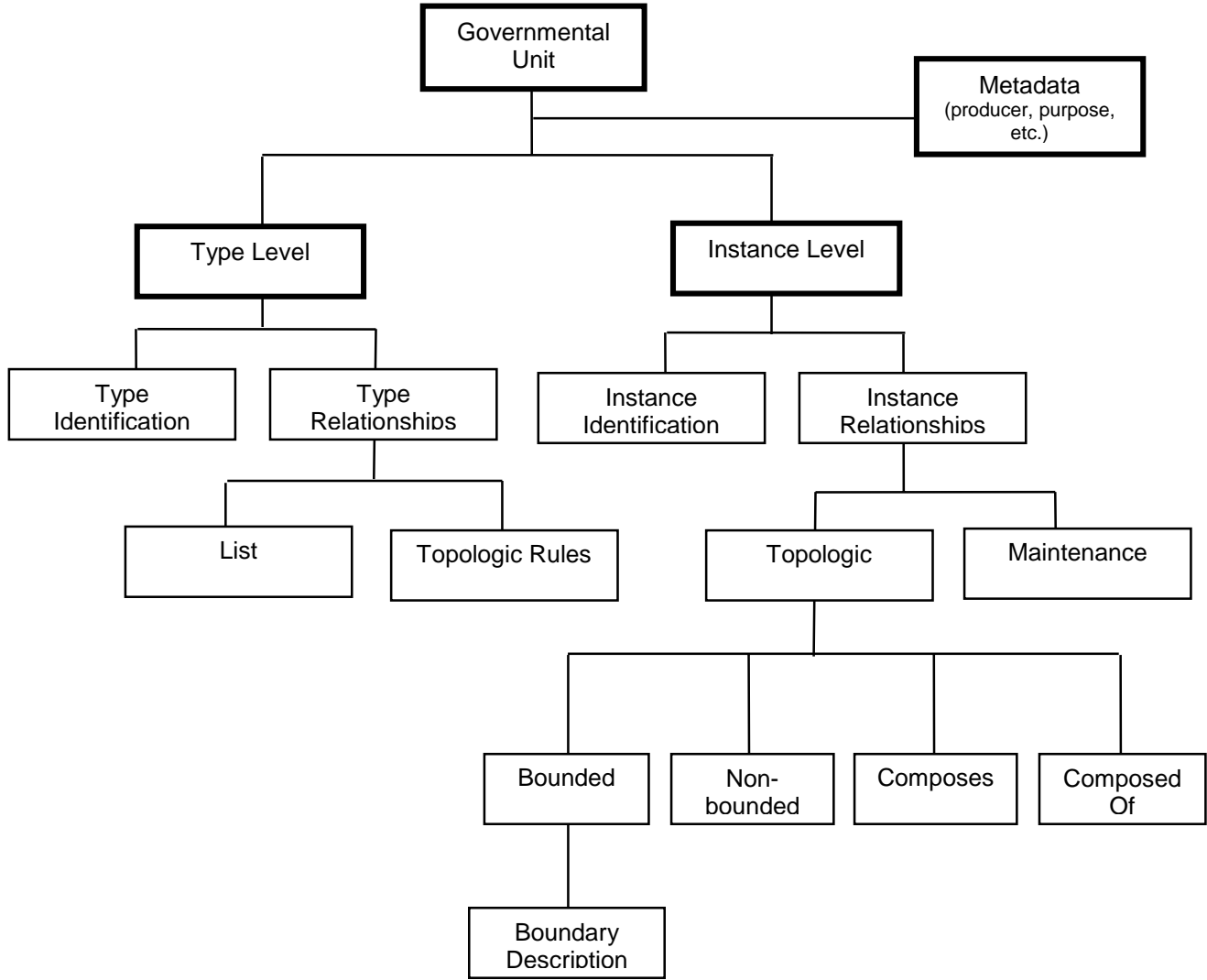


Figure 1. A generalized model of information describing GUs.