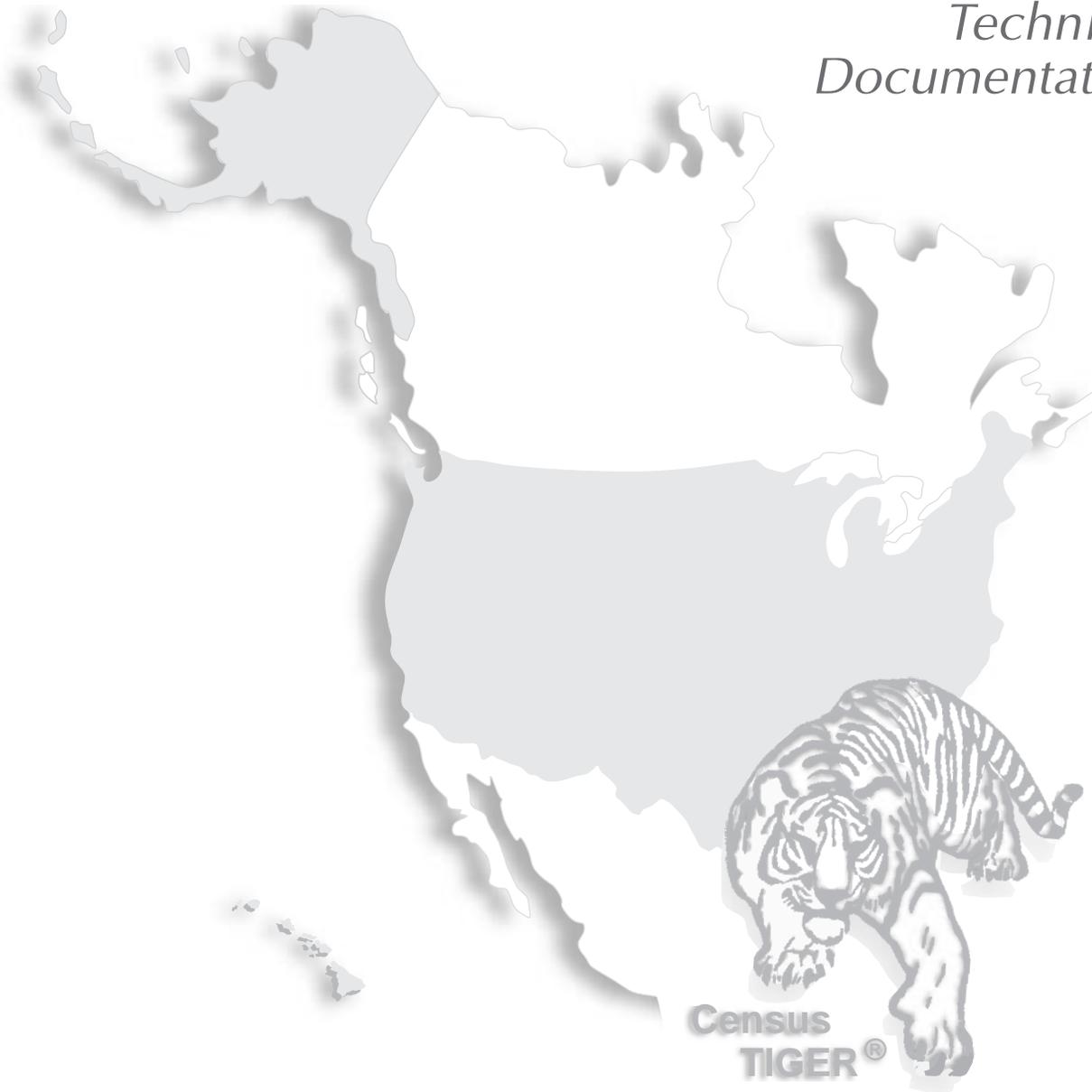


TIGER/Line[®] Files, 1998

*Technical
Documentation*



**US Department of Commerce
Economics and Statistics Administration
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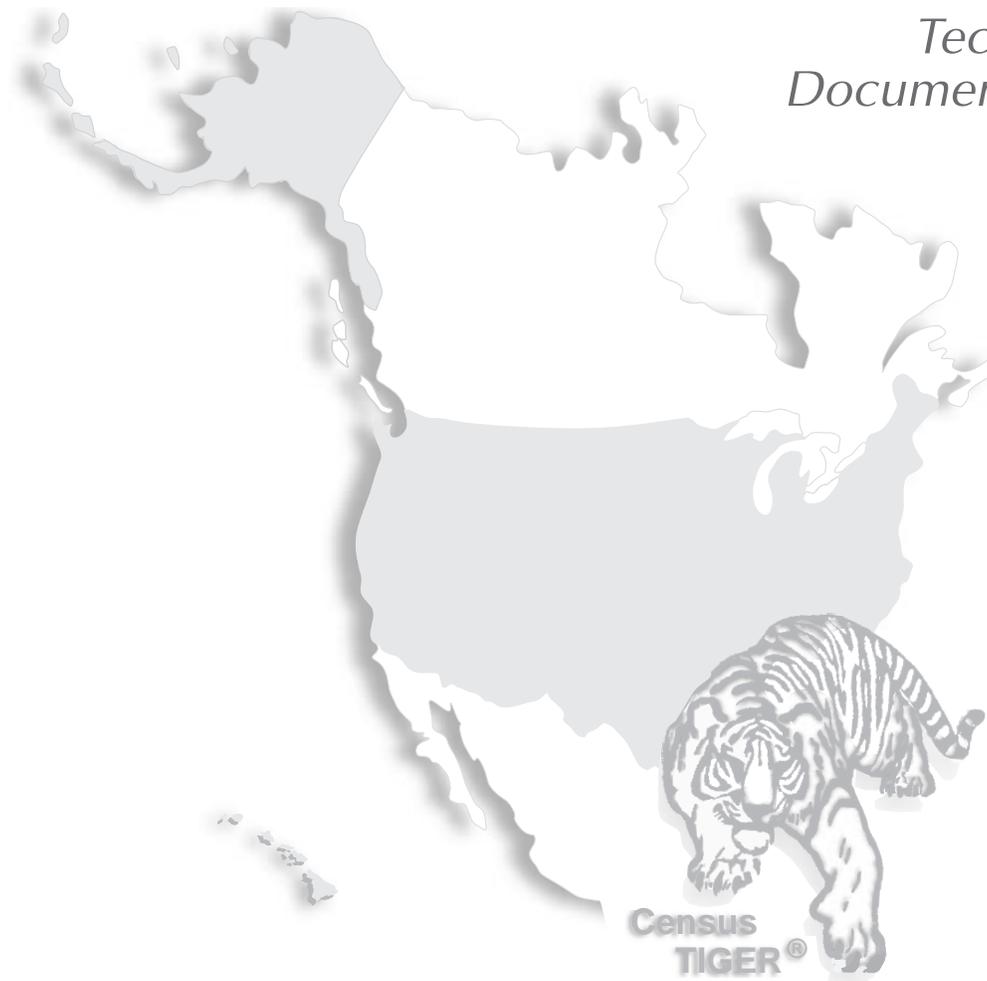
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Introduction

The TIGER/Line® files are extracts, from the Census TIGER® (Topologically Integrated Geographic Encoding and Referencing) data base, of selected geographic and cartographic information. They include files for all counties and statistically equivalent entities in the United States, as well as files for Puerto Rico and the Island Territories.

The TIGER/Line® files are released by county or statistically equivalent entity based on the latest available governmental unit boundaries. Since the 1990 Census, there have been several changes to the universe of county or statistically equivalent entities. In Alaska the Skagway-Yukutat-Angoon Census Area has become Skagway-Hoonah-Angoon Census Area and Yukutat Borough. Also in Alaska, Denali Borough was created from parts of Yukon-Koyukuk Census Area and Southeast Fairbanks Census Area. Dade County, Florida officially changed its legal name to Miami-Dade County, Florida. The portion of Yellowstone National Park in Montana that the Census Bureau has been showing as a statistical equivalent of a county legally is contained within Gallatin and Park Counties, Montana. The City of South Boston, VA no longer is an independent city (statistical equivalent of a county) and is now part of Halifax County, VA.

The TIGER/Line® files contain *data only* and do not include display or mapping software. The TIGER/Line® files are typically used in conjunction with geographic information system, or similar, software.

Census TIGER®, TIGER®, TIGER/Line®, TIGER/SDTS®, TIGER/Census Tract Street Index®, TIGER/CTSI®, CTSI®, TIGER/Census Tract Comparability®, and TIGER/GICS® are registered trademarks of the U.S. Bureau of the Census; ZCTA™ is a trademark of the U.S. Bureau of the Census. As such, these names cannot be used as or within the proprietary product names of any commercial product including or otherwise relevant to Census Bureau data, and may only be used to refer to the nature of such product. The Census Bureau requests that any repackaging of the TIGER/Line® data (and documentation) and other files accompanying it for distribution include a conspicuously-placed statement to this effect on the product's cover, the first page of the website, or elsewhere of comparable visibility. Further, Census Bureau trademarks, when used in reference to the nature of the product, should be accompanied by the ® (registered) symbol or ™ symbol, where convenient.

The US Bureau of the Census first released the TIGER/Line® files in 1988. Since that time, it has released several versions of the files, with each successive version being improved through increased editing and updating of address ranges and features. A brief discussion of the changes that occurred in the 1994, 1995 and 1997 TIGER/Line® files, and the 1998 TIGER/Line® files are summarized below.

Changes in the Post 1994 TIGER/Line® File Versions

1994 TIGER/Line® Files

The format and structure of the TIGER/Line® files changed between the 1992 and the 1994 versions. In the 1994 TIGER/Line® files, there were field definition changes and additional record types that accommodated new information or information that was previously supplied separately in other Census Bureau products.

New Record Types The 1994 TIGER/Line® files included five new record types—9, C, H, S, and Z. Record Type 9 contained key geographic locations (KGLs). A KGL was a particular type of point landmark with residential or economic significance. Record Type 9 provided the linkage between a building (KGL) with a unique identity and ZIP+4® Code, and the building's address that used its number and street name.

Record Type C replaced information that was supplied separately in the TIGER/Geographic Name™ files. Record Type C provided a unique list of all geographic entities with their code, name, and status. The FIPS Year field had three values, *90* for geographic names and codes valid for the 1990 census, *94* for geographic names and codes valid for the current year, and *blank* when the geographic names and codes were the same for 1990 and 1994. Multiple records for the same geographic entity showed its change or correction over time.

Record Type H described the history of TIGER/Line® IDs when complete chains were split or merged. Two fields (HIST and SOURCE) on Record Type H were not yet maintained in the Census TIGER® data base and were blank.

Record Type S had geographic area codes for polygons. It was similar to Record Type A (which also had geographic area codes for polygons) and was linked to Record Type P. There was a Record Type S for every polygon in Record Type P. Several fields were reserved for use by participants in Census Bureau programs. The WATER field had two values, 0 for land or 1 for water.

The Congressional District codes for the current Congress (in this case, the 103rd) were moved to Record Type S. The current Congressional District code, when combined with the 1990 state codes, created valid geographic areas. When only current state geographic codes were combined, nonexistent geographic areas may have resulted. The fields for the 101st and 103rd Congressional District codes in Record Type A were replaced with those designated for the 106th and 108th. However, these fields were blank in the 1994 TIGER/Line[®] files.

Record Type Z linked a Postal +4 Add-On code to an address range in either Record Type 1 or Record Type 6. TLID fields were matched on these records. If the RTSQ field on Record Type 6 contained a 0, the Postal +4 Add-On codes applied to the address ranges in Record Type 1. If the RTSQ field contained a number greater than 0, the Postal +4 Add-On codes applied to the address ranges in the Record Type 6 that had the identical RTSQ value.

Deleted Record Types In the 1994 TIGER/Line[®] files, Record Types F and G were deleted because they were no longer used. Record Type F showed geographic codes as of January 1, 1990 that were corrected to resolve questions raised by local officials about the 1990 census data tabulations. Record Type G showed geographic codes (generally as of January 1, 1992) for those situations where geographic entities reported boundary changes during the Census Bureau's annual survey of governmental units. In the 1994 TIGER/Line[®] files, information previously reported in Record Type G became implicit in the current geographic codes in Record Types 1 and S.

Field Definition Changes The geographic area codes on Record Type 1 represented current geography rather than the 1990 census tabulation geography. The census tract and block remained as 1990 geography. In a few Type 1 records, the current state and county, when combined

with the 1990 census tract and block, created nonexistent geographic areas. To avoid nonexistent geographic areas, it was important not to mix the 1990 geographic codes with the current geographic codes. The 1990 state, county, place, census tract, and census block codes all were found on Record Type 3.

Record Type 3 no longer identified 1980 geographic area codes or contained census codes for places, minor civil divisions, and sub-minor civil divisions. These fields were replaced with the 1990 geographic areas that previously appeared in Record Type 1. Current geographic areas included on Record Type 3 were the Alaska Native Regional Corporations and the American Indian/Alaska Native Areas (AIANAs).

Census Alaska Native Regional Corporation codes were eliminated from Record Type 1 and replaced by four fields. Two fields were reserved for census use. Two fields carried American Indian Trust Land Flags and contained two values, an "I" for individual trust land or a "T" for tribal trust land. The trust land flag more accurately portrayed the American Indian areas.

Record Type 7 excluded key geographic locations (KGLs). These appeared in the new Record Type 9.

Address Ranges and ZIP Codes® The 1994 TIGER/Line® files contained improvements in address information. Address ranges were edited for overlaps or other inconsistencies and ZIP Codes® were updated in selected areas.

Coordinates In the 1994 TIGER/Line® files, NAD27 was the coordinate datum used for the 48 contiguous states, the District of Columbia, Alaska, Puerto Rico, and the Virgin Islands. Regional datums were used for Hawaii and the Island Territories in the Pacific. The accuracy of the feature coordinates in Alaska was improved by shifting them in relation to a sample of points of known higher accuracy.

1995 TIGER/Line® Files

No records types were added or deleted between the 1994 and 1995 versions of the TIGER/Line® files. However, there were field definition and coordinate datum changes, as well as address information improvements, in the 1995 TIGER/Line® files.

Field Definition Changes The CENID field was changed from numeric to alphanumeric in the 1995 TIGER/Line® files to permit a wider range of entries within the same field length.

Address Ranges and ZIP Codes® Address ranges were edited for overlaps or other inconsistencies and ZIP Codes® were updated in selected areas. The street names and address ranges in the Census TIGER® data base were compared to those in the ZIP+4® file of the US Postal Service. If a street name and address range did not have a ZIP+4® code, the code was copied from the ZIP+4® file to the Census TIGER® data base. The consistency of highway names and feature identifiers also was improved.

Boundary and Area Changes The 1994 TIGER/Line® files were included for American Samoa because the Census Bureau received no updates for this area. Since the 1990 census, the Bureau shifted and reshaped some line features, including boundary lines. This realignment of features could have been associated with corporate boundary corrections and changes. The shape and area of the geographic entities depicted in the 1995 TIGER/Line® files may have differed from earlier versions of the TIGER/Line® files, but represented the entities as they existed for the 1990 census. The inventory of census tabulation entities remained the same as it was in 1990.

With the exception of Hawaii, Record Type 1 no longer contained census designated place (CDP) information. Since CDPs are defined at the time of each decennial census and are valid only for the presentation of decennial census data, the CDP complete chain information was removed from Record Type 1 which contained only current geography, but retained on Record Type 3 which had 1990 geography. Because Hawaii did not have independently-defined incorporated place boundaries, it used CDP boundaries as substitutes for these legal boundaries. Thus, its CDP complete chain information was retained on Record Type 1.

Coordinates For the 48 contiguous states, the District of Columbia, Alaska, Puerto Rico, and the Virgin Islands, the coordinates in the 1995 TIGER/Line® files were in the North American Datum of 1983 (NAD83). In all previous versions, the coordinate datum for the above areas was NAD27. Regional datums were used for Hawaii and the Island Territories in the Pacific.

1997 TIGER/Line® Files

The 1997 TIGER/Line® files had the same structure as the 1995 TIGER/Line® files; there were no record additions or deletions. However, there were some field name, file name, and content changes.

Field Definition Changes The Census Bureau redefined the concept of *version*. The four-digit version code no longer is a number that represents a fixed version that can be referenced nationwide. The version code is a four-digit number that represents the month and year (*mmyy*) the file is extracted from the Census TIGER® data base. Adjacent counties in a state may have different version codes if they were extracted at different points in time.

There were several changes to the fields on Record Type 3. The reserved spaces one through four in the 1995 TIGER/Line® files contain four 1990 American Indian and Alaska Native area census code and American Indian trust land flag fields in the 1997 TIGER/Line® files. These four fields are: Census American Indian/Alaska Native Area Code, 1990 Left (column positions 58 through 61); Census American Indian/Alaska Native Area Code, 1990 Right (column positions 62 through 65); American Indian Trust Land Flag, 1990 Left (column position 66); and American Indian Trust Land Flag, 1990 Right (column position 67).

Deleted from Record Type 3 in the 1997 TIGER/Line® files were the Census Alaska Native Regional Corporation Codes, Current Left and Census Alaska Native Regional Corporation Codes, Current Right. As a result of these deletions, reserved space filled columns 86 through 107 of the 1997 TIGER/Line® files and the reserved space fields on the record were renumbered and reconfigured.

Two changes occurred on Record Type A. The School District Code, Middle School field, in columns 60 through 64 of the 1995 TIGER/Line® files were eliminated and replaced with *Reserved Space 1* in the 1997 TIGER/Line® files. *Reserved Space 9* in the 1995 TIGER/Line® files (columns 95 through 98) was replaced with the Census American Indian/Alaska Native Area Code, 1990 in the 1997 TIGER/Line® files.

The length of the RS 9 field in Record Type A was changed from nine characters to four characters. The five characters freed by this change were used for the 1990 state and county codes and are the source for determining the 1990 census tabulation codes.

There were changes to Record Type C in the 1997 TIGER/Line® files. The 1995 TIGER/Line® files had ten characters in columns 23 through 32 which contained the Census Alaska Native Regional Corporation Code, FIPS Consolidated Metropolitan Statistical Area/Metropolitan Statistical Area Code, and the FIPS Primary Metropolitan Statistical Area Code. The 1997 TIGER/Line® files allocated these columns to Entity Type Code, Metropolitan Area Code, and School District Code.

We standardized the file suffix names that appear inside the zipped archive. This suffix now consistently be *.rtn* where *n* is the record type. In examining the record layouts in Chapter 6, we corrected information concerning the valid existence of blank values and data formats.

Address Ranges and ZIP Codes® Address ranges were edited for overlaps or other inconsistencies and ZIP Codes® were updated in selected areas. Because of time constraints during the various operations needed to create the 1997 TIGER/Line® files, the Census Bureau did not add new ZIP+4® information.

Boundary and Area Changes Since the 1990 census, the Census Bureau shifted and reshaped some line features, including boundary lines. The shape and area of the geographic entities depicted in the 1997 TIGER/Line® files may differ from earlier versions of the TIGER/Line® files, but continue to represent the entities as they existed for the 1990 census. The inventory of census tabulation entities remains the same as it was in 1990.

Change in Naming Standards for Record Type 1 The Census Bureau changed its naming standards in Record Type 1 affecting the data in the Feature Direction, Prefix (FEDIRP), Feature Name (FENAME), Feature Type (FETYPE), and Feature Direction, Suffix (FEDIRS) fields. In previous TIGER/Line[®] products, directional prefixes and suffixes could appear for any type of line feature. For the TIGER/Line[®] 1997, only road features, those features with a Census Feature Class Code (CFCC) in the A class, should have feature directional data in the directional fields. Other types of chains representing other types of features (for example, hydrologic features in CFCC class H) no longer are standardized to show directional information.

The Census Bureau also modified the extraction of feature directional, name, and type information to improve the standardization of road feature information. The improvement parses a greater number of road chains into the correct feature identifier fields.

Known Problems and Anomalies in TIGER/Line[®] 1997

Missing ZIP+4[®] Records Data users may note a significant reduction in the number of ZIP+4[®] Add On Codes in Record Type Z (ZIP4L and ZIP4R fields) for the 1997 TIGER/Line[®] files in some areas. This reduction occurred as a result of operations to update the TIGER[®] data base in preparation for Census 2000. These operations may have replaced address ranges or changed the 5-digit ZIP Code[®], but did not automatically update or transfer the ZIP+4[®] codes to the new ranges. Because the Add On codes are valid for specific 5-digit ZIP Codes[®] and address ranges, the previous Add On codes may no longer apply to the new address ranges and thus were not retained.

In nearly all situations, an automated match between the Census TIGER[®] data base and the USPS ZIP+4[®] file was the source of ZIP+4[®] Add On Codes in TIGER[®] products. With update operations for Census 2000 underway for large portions of the nation, we had not yet performed this automated match to refresh these codes. Future public sale releases of TIGER/Line[®] files will contain refreshed codes that will reflect a more current USPS ZIP+4[®] file for the address range improvements that we are now making.

Address Anomalies in Puerto Rico and Queens County, N.Y. The TIGER/Line® files contain some address range coverage for Puerto Rico. However, use of this information for geocoding purposes may be problematic and the data user should proceed with caution. These address ranges are preliminary attempts at using Puerto Rico address ranges in Census Bureau files. Due to the lack of software or resources to handle some of the more unique aspects of addressing in Puerto Rico, the address ranges were entered without the standard edits and quality checks used in other parts of the United States. Improvements in software and address standardization for Puerto Rico are expected in the future. At present, there are inconsistencies, overlaps, and duplication of address ranges. Address ranges may lack alpha character prefixes or have hyphenated prefixes. The files also lack the community names used in a four-line address that the U.S. Postal Service requires to avoid duplicate addresses. Errors in the reference files, and other factors may limit the usefulness of this product for geocoding purposes.

Address range data for Queens County, NY in TIGER/Line® 1997 did not show a consistent use of hyphenated and non-hyphenated addressing. The Census Bureau intends to correct this in future public sale versions of TIGER® products.

Road Feature Anomalies The Census Bureau extracts TIGER/Line® files from the TIGER® data base which is continually updated. During the update process for some 1997 TIGER/Line® files errors caused anomalies to be introduced into some chains represented in Record Types 1 and 2. For these cases road features may appear in the 1997 TIGER/Line® files unconnected to other road features (so-called floating features) or severely skewed in relation to surrounding line features of any type. This problem was not discovered during the normal Census Bureau correction operations. The Census Bureau will fix these disconnected or skewed features before the release of future public sale versions of TIGER® products.

The following county files have the greatest likelihood of road feature anomalies:

<i>FIPS</i>	<i>County name, State</i>	<i>FIPS</i>	<i>County name, State</i>
01073	Jefferson, AL	04013	Maricopa, AZ
06071	San Bernardino, CA	06073	San Diego, CA
08069	Larimer, CO	13089	DeKalb, GA
13121	Fulton, GA	13135	Gwinnett, GA
17077	Jackson, IL	18097	Marion, IN
21001	Adair, KY	21011	Bath, KY
21065	Estill, KY	21067	Fayette, KY
21095	Harlan, KY	21109	Jackson, KY
21131	Leslie, KY	21165	Menifee, KY
21175	Morgan, KY	21189	Owsley, KY
21203	Rockcastle, KY	22017	Caddo, LA
24003	Anne Arundel, MD	24035	Queen Anne's, MD
26093	Livingston, MI	26115	Monroe, MI
26125	Oakland, MI	26147	St. Clair, MI
26161	Washtenaw, MI	26163	Wayne, MI
34003	Bergen, NJ	36029	Erie, NY
36055	Monroe, NY	37119	Mecklenburg, NC
42003	Allegheny, PA	42007	Beaver, PA
42019	Butler, PA	42071	Lancaster, PA
42125	Washington, PA	42129	Westmoreland, PA
45031	Darlington, SC	45057	Lancaster, SC
45071	Newberry, SC	46099	Minnehaha, SD
47037	Davidson, TN	48229	Hudspeth, TX
48453	Travis, TX	50003	Bennington, VT
50007	Essex, VT	50015	Lamoille, VT
50021	Rutland, VT	55025	Dane, WI

1998 TIGER/Line® Files

The 1998 TIGER/Line® files have the same structure as the 1997 TIGER/Line® files; there were no record additions or deletions. However, there were some field name, file name, and content changes including corrections to the data format information appearing in *Chapter 6*.

Field Definition Changes There are two field name changes on Record Type 1. The Census Bureau renamed the CTBNAL and CTBNAR field names as CTL and CTR.

There have been several changes to the fields on Record Type 3. The reserved spaces two and three in the 1998 TIGER/Line® files contain the FIPS 55 Code (ANRC), Current Left and FIPS 55 Code (ANRC), Current Right. Reserved spaces four and five have been converted to Census Use fields and reserved space 6 renumbered. The Census Bureau has renamed the VTDL and VTDR field names as VTD90L and VTD90R.

Two changes have occurred on Record Type A. The Reserved Space 1 field has been replaced by Census Urbanized Area Code, 2000 with a field name of UA. This field is blank in the 1998 TIGER/Line® files. The Census Urbanized Area Code, 1990 field name has been changed from UA to UA90.

The length of the Name of Geographic Area field on Record Type C has been changed from 66 characters to 58 characters and now comprises columns 55 through 112. The FIPS Code and Name Relationship Applicable Year field has been expanded from two characters to four characters, using columns 11 through 14. As a result, the FIPS 55 Code now occupies columns 15 through 19, the FIPS Class Code occupies columns 20 through 21, the Census Place Description Code appears in column 22, the Legal/Administrative Statistical Area Description Code occupies columns 23 through 24, the Entity Type Code appears in column 25, the Metropolitan Area Code occupies columns 26 through 29, the School District Code occupies columns 30 through 34, the Census American Indian/Alaska Native Area Code occupies columns 35 through 38, and the Census Voting District Code occupies columns 39 through 44. The Census Urbanized Area Code has been expanded from four characters to five characters, using columns 45 through 49. The Census Bureau has added a two character Census Alaska Native Regional Corporation Code in columns 50 and 51 and the remaining characters freed by the change to the Name of Geographic Area field have been replaced with Census Use 5 in columns 50 through 52.

The Census Bureau has made a number of field name changes on Record Type S for the 1998 TIGER/Line® files. The field names CMSAMSA and PMSA have been changed to CMSA and MA. The field names STATECU and COUNTYCU have been renamed STATE and COUNTY. The BLK00 field name has been renamed BLK and VTD00 has been renamed VTD. The Census Tract/BNA Code, 2000 on the 1997 TIGER/Line® files has become Census Tract Code, 1990 on the 1998 TIGER/Line® files with a field name change from CTBNA00 to CT. Reserved Space 10 has become Census Use 6.

The length of the State Senate District Code and State House District Code fields in Record Type S have been changed from six characters to three characters. The six characters freed by this change have become Census Use 7 and Reserved Space 7 fields.

On Record Type S, reserved spaces 11 through 14 and the filler occupying columns 103 through 120 have been restructured. The 1998 TIGER/Line® files allocate these columns to FIPS collection State Code, 2000; FIPS Collection County Code, 2000; Collection Block Number, 2000; Collection Block Number Suffix, 2000; Zip Code Tabulation Area, 2000; and Reserved Space 8.

Boundary and Area Changes Since the 1990 census, the Census Bureau shifted and reshaped some line features, including boundary lines. The shape and area of the geographic entities depicted in the 1998 TIGER/Line® files may differ from earlier versions of the TIGER/Line® files, but continue to represent the entities as they existed for the 1990 census. The inventory of census tabulation entities remains the same as it was in 1990.

How to Use This Documentation

The structure of this documentation is based on data content rather than record type content. For instance, information on addresses may appear in one section, but cross-references to other related sections also are included. In order to make the document easier to use as a reference, the text contains some repetition from section to section.

Chapter 1

Chapter 1 describes the basic concepts about the Census TIGER® data base and the TIGER/Line® products. It discusses the topology in the Census TIGER® data base, the terminology used to describe the geographic data, and the record types that make up the TIGER/Line® files. Chapter 1 also describes the Federal Information Processing Standard (FIPS) Spatial Data Transfer Standard (SDTS) nomenclature for geographic objects.

Chapter 2

Chapter 2 discusses the principle identification numbers forming the basis for record linkage discussed throughout the documentation.

Chapter 3

Chapter 3 discusses the attributes for the line, polygon, and landmark geographic objects.

Chapter 4

Chapter 4 defines the types of geographic entities and entity codes that appear in the TIGER/Line® files. It also identifies the fundamental relationships among the different types of geographic entities.

Chapter 5

Chapter 5 summarizes the data quality aspects of the information in the Census TIGER® data base using the SDTS quality modules.

Chapter 6

Chapter 6 lists the contents of the TIGER/Line® file record types and provides a detailed description of the data fields in each. Use Chapter 6 in conjunction with Chapters 3 and 4 to locate the positions of specific data fields in the TIGER/Line® files.

How to Obtain Other Products and Information

If you purchased the TIGER/Line® files directly from the U.S. Bureau of the Census and need further information concerning the subject matter of the 1998 TIGER/Line® files, contact the Products and Services Staff, Geography Division, Bureau of the Census, Washington, DC 20233-7400. The telephone number is (301) 457-1128. The e-mail address is tiger@census.gov. Please have your customer service number (shown on the invoice) available when calling and be prepared to provide it along with the name of the person (or company) that made the purchase. For information concerning the subject matter and contents of TIGER/Line® files obtained from a source other than the Bureau of the Census, contact that source.

Chapter 1: Overview and Geographic Concepts

Overview

What Is TIGER®?

The Bureau's Census TIGER® System automates the mapping and related geographic activities required to support the decennial census and sample survey programs of the Census Bureau starting with the 1990 decennial census. The Census TIGER® System provides support for the following:

- Creation and maintenance of a digital geographic data base that includes complete coverage of the United States, Puerto Rico, the Virgin Islands of the United States, and the Pacific Island Territories
- Production of maps from the Census TIGER® data base for all Census Bureau enumeration and publication programs
- Ability to assign individual addresses to geographic entities and census blocks based on polygons formed by features such as roads and streams

The design of the Census TIGER® data base adapts the theories of topology, graph theory, and associated fields of mathematics to provide a disciplined, mathematical description for the geographic structure of the United States and its territories. The topological structure of the Census TIGER® data base defines the location and relationship of streets, rivers, railroads, and other features to each other and to the numerous geographic entities for which the Census Bureau tabulates data from its censuses and sample surveys. It is designed to ensure that there is no duplication of features or areas.

The building of the Census TIGER® data base involved a variety of encoding techniques such as automated map scanning, manual map digitizing, standard data keying, and sophisticated computer file matching. The goal was to provide automated access to, and retrieval of, relevant geographic information about the United States and its territories.

TIGER® Data Base Extracts

In order for others to use the information in the Census TIGER® data base in a geographic information system (GIS) or for other geographic

applications, the Census Bureau releases periodic extracts of the data base, including the TIGER/Line® files, to the public. Various versions of the TIGER/Line® files have been released; previous versions include the 1990 Census TIGER/Line® files, and the 1992, 1994, 1995 and 1997 TIGER/Line® files. The 1992 TIGER/Line® files were produced to satisfy a requirement of the US Department of Education and incorporated all of the updates and revisions since the production of the 1990 TIGER/Line® files. The 1994 TIGER/Line® files were produced to support the programs of the US Department of Transportation, Bureau of Transportation Statistics. The 1995 TIGER/Line® files were originally produced to support Phase I of the Census 2000 Redistricting Data Program. The 1997 TIGER/Line® files were originally produced to support the Phase I Verification of the Census 2000 Redistricting Data Program and the Census 2000 Participant Statistical Areas Program Delineation.

Relationship of TIGER/Line® to 1990 Census Statistical Data

What makes the TIGER® extract products particularly valuable in the GIS environment and to the data user community is the direct linkage between the 1990 decennial census data products and the Census TIGER® data base extracts. The digital description in the TIGER® data base of the Nation's legal and statistical entities includes Federal Information Processing Standards (FIPS) codes and, for American Indian/Alaska Native Areas only, Census Bureau codes so entities can be easily matched with the 1990 census data. Please refer to the Census Bureau Publication, *1990 Census of Population and Housing Tabulation and Publication Program*, for a description of the Public Law (PL) 94-171 data files, Summary Tape Files (STFs), and other sources of data from the 1990 census.

1998 TIGER/Line® Files

The 1998 TIGER/Line® files include files for all counties and statistically equivalent entities in the United States, Puerto Rico, and the Island Areas.

The 1998 TIGER/Line® files consist of line segments that represent physical features, and legal and statistical boundaries. The files consist of 17 separate record types, including the basic data record, the shape coordinate points (feature shape records), and geographic area codes that can be used with appropriate software to prepare maps.

Related Files

Summary Tape Files (STFs) provide 1990 statistical data for a wide range of subject headings and geographic entities compatible with the TIGER/Line[®] files. These files are available on tape and CD-ROM.

PL 94-171 Program data files provide selected population data for small area geography (state, county, county subdivision, place, census tract/block numbering area, block group, and block) and are compatible with the TIGER/Line[®] files. These files are available on tape and CD-ROM.

The TIGER/Line[®] 103rd Congressional District File contains just the features that form the boundaries of the districts of the 103rd Congress. The file follows the format of Record Types 1 and 2 of the 1992 TIGER/Line[®] files. This is a national data set, by state, on one CD-ROM.

TIGER/Line[®] 1990 County Files provide the coordinates for the boundaries of all counties and statistically equivalent entities. This is a national data set, by state, on one CD-ROM. The files follow the format of Record Types 1 and 2 of the 1992 TIGER/Line[®] files. The boundaries for the states and statistically equivalent areas are for the legal limits. As such, coastal states show a boundary that is three miles offshore and do not contain additional records that depict the shoreline. The same holds true for interior water; a boundary in the Chesapeake Bay will be shown, but the shore-line will not.

TIGER/Line[®] 1990 Census Tract/Block Numbering Area Files provide the coordinates and associated feature attributes for the boundaries of all census tract/block numbering areas (CT/BNAs). This is a national data set, by state, on one CD-ROM. The files follow the format of Record Types 1 and 2 of the 1992 TIGER/Line[®] files.

North American Statistical Areas Boundary Files (Prototype), were produced by a joint research initiative between the Geography Divisions of Statistics Canada and the United States Bureau of the Census. The goal of the files is to provide data users with a convenient, unified, geographical framework that will help facilitate cross-border spatial studies. The files are in TIGER/Line[®] format and contain geographic

coordinates, various attribute information, and most importantly, geographic identification codes that can be used as links to census data from Canada and the United States.

TIGER/Line® American Indian/Alaska Native Areas File provides the coordinates for the boundaries of all American Indian and Alaska Native areas (AIANAs) shown in the 1990 census. This file follows the format of Record Types 1 and 2 of the 1992 TIGER/Line® files and covers the Nation.

TIGER/Line® 1990 County Subdivision Files provide the coordinates for the boundaries of all county subdivisions (such as minor civil divisions, census county divisions, and unorganized territory). This is a national data set, by state, on one CD-ROM. The files follow the format of Record Types 1 and 2 of the 1992 TIGER/Line® files.

TIGER/Line® 1990 Place Files provide the coordinates for the boundaries of all incorporated places (including consolidated cities) and census designated places (CDPs). This is a national data set, by state, on one CD-ROM. The files follow the format of Record Types 1 and 2 of the 1992 TIGER/Line® files.

County-Based Files

The geographic coverage for a TIGER/Line® file is a county or statistically equivalent entity. See Appendix A for a list of state and county codes and Chapter 4 for a description of county equivalent entities. The county files have a coverage area based on the latest legal boundaries obtained in response to the Census Bureau's Boundary and Annexation Survey (BAS). Even though the Census TIGER® data base represents a seamless national file with no overlaps or gaps between parts, the county-based TIGER/Line® files are designed to stand alone as an independent data set. The files can be combined to cover the whole Nation and its territories (see the *Single-Side Flags and County Boundaries* section in Chapter 3).

The Data Content of the TIGER/Line® Files

The TIGER/Line® files contain data describing three major types of features:

- Line features
 - 1) Roads
 - 2) Railroads
 - 3) Hydrography
 - 4) Miscellaneous transportation features and selected power lines and pipe lines
 - 5) Boundaries
- Landmark features
 - 1) Point landmarks such as schools and churches
 - 2) Area landmarks such as parks and cemeteries
 - 3) Key geographic locations (KGLs) such as apartment buildings and factories
- Polygon features
 - 1) Geographic entity codes for areas used to tabulate the 1990 census statistical data and current geographic areas
 - 2) Locations of area landmarks
 - 3) Locations of KGLs

The line feature and polygon information form the majority of data in the TIGER/Line® files. Some of the data describing the lines include coordinates, feature identifiers (names), feature classification codes, address ranges, and geographic entity codes. Chapter 3 details these data items; Chapter 4 defines the geographic entities and codes. The TIGER/Line® files contain point and area labels that describe landmark features. These features provide locational references for field staff and map users.

Area landmarks consist of a feature name or label and feature type assigned to a polygon or group of polygons. Landmarks may overlap or refer to the same set of polygons. See Chapter 3 for more information on landmark data.

Topology and Spatial Objects in the TIGER/Line® Files

Spatial Objects in the TIGER/Line® Files

The Census TIGER® data base uses a collection of spatial objects, *points*, *lines*, and *polygons*, to model or describe real-world geography. The Census Bureau uses these spatial objects to represent features such as streets, and assigns attributes to these features to identify and describe specific features such as the 500 block of Market Street in Philadelphia, Pennsylvania.

The TIGER/Line® files contain information about the spatial objects distributed over a series of record types. Users of the TIGER/Line® files may need to link information from several record types to find all the attributes of interest that belong to one spatial object. The final section of this chapter includes a description of the record types.

Topology

Topology explains how points, lines, and areas relate to each other and is used as the foundation for organizing spatial objects in the Census TIGER® data base. The Census TIGER® data base uses points, lines, and areas to provide a disciplined, mathematical description of the features of the earth's surface. Spatial objects in the Census TIGER® data base are interrelated. A sequence of points define line segments, and line segments connect to define polygons.

Topology provides a basic language for describing geographic features. The Census TIGER® data base relates information to points or *0-cells*, lines or *1-cells*, and polygons or *2-cells*. The number preceding the cell identifies the dimensionality of the object; for instance, a line segment has a single dimension, length. Each of these objects builds on the others to form higher-level objects. The 0-cells form the end points of 1-cells. The 1-cells connect at 0-cells and form closed figures that partition space into polygons or 2-cells.

Terminology

The terms point, line segment, and polygon are familiar, but general terms that may have different meanings to data users working with a variety of different applications and data sets. The TIGER/Line[®] file documentation uses the terminology from the Spatial Data Transfer Standard (SDTS).

Since the first release of the TIGER/Line[®] files, the US Geological Survey (USGS) has coordinated the development and release of the SDTS, now a Federal Information Processing Standard (FIPS). The SDTS specifies a series of terms and definitions for spatial objects.

Why use the SDTS terminology? Even though the TIGER/Line[®] files do not follow the SDTS format, the TIGER/Line[®] documentation will use these terms and definitions in order to promote a common language for describing geographic data and to facilitate the transition to the SDTS.

The spatial objects in TIGER/Line[®] belong to the "Geometry and Topology" (GT) class of objects in SDTS. The definitions are from FIPS Publication 173, *Spatial Data Transfer Standard* (SDTS) (August 28, 1992) Section 2-2, "Classification and Intended Use of Objects," pp. 11-20.

Node "A zero-dimensional object that is a topological junction of two or more links or chains, or an end point of a link or chain," is a *node*.

Entity Point "A point used for identifying the location of point features (or areal features collapsed to a point), such as towers, buoys, buildings, places, etc."

Complete Chain "A chain [a sequence of non-intersecting line segments] that explicitly references left and right polygons and start and end nodes." The shape points combine with the nodes to form the segments that make a *complete chain*.

Network Chains “A chain that explicitly references start and end nodes and not left and right polygons.”

GT-Polygon “An area that is an atomic two-dimensional component of a *two-dimensional manifold*, [which is defined as] one and only one planar graph and its two-dimensional objects.” *GT-polygons* are elementary polygons that are mutually exclusive and completely exhaust the surface.

Spatial Objects

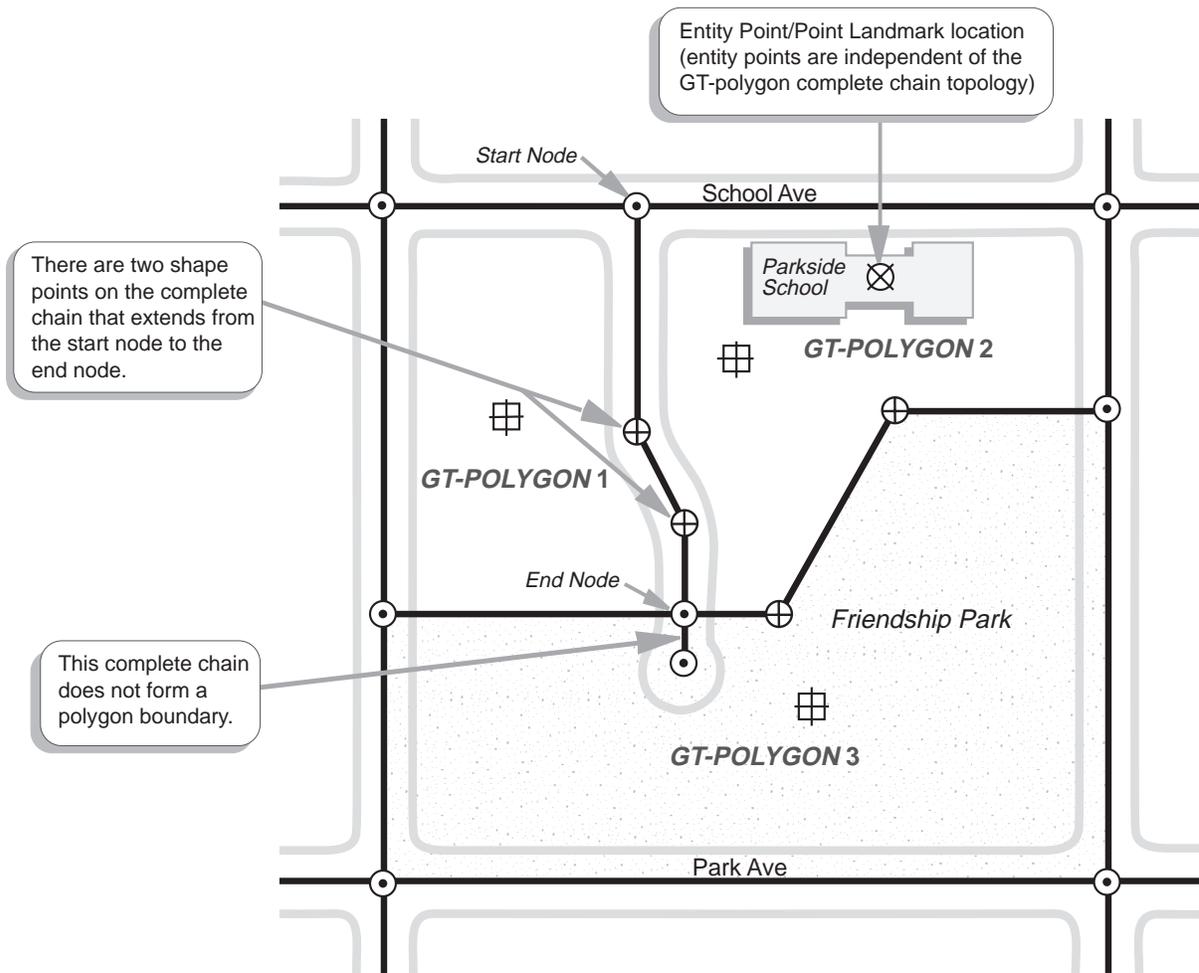
The spatial objects in the TIGER/Line[®] files embody both geometry (coordinate location and shape) and topology (the relationship between points, line objects, and polygons) and therefore belong to the geometry and topology (GT) class of objects in the SDTS. In the SDTS, *nodes* represent point objects (0-cells) that identify the start and end position of lines or 1-dimensional objects (1-cells) called *chains*. The chains in the TIGER/Line[®] files are *complete chains* because they form polygon boundaries and intersect other chains only at nodes. Topological chains that do not contain polygon information are *network chains*. Data users may choose not to use the polygon or geographic entity codes and consider the TIGER/Line[®] files a source of network chain data.

Figure 1-1 illustrates the relationship between nodes and complete chains. The figure shows two complete chains forming a central road; a start and end node define each complete chain. Complete chains that meet at an intersection share the same node. As the figure suggests, complete chains may consist of one or more line segments that describe the shape and position of the complete chain. *Shape points* define the line segments and are not part of the topology of the TIGER/Line[®] files. *Shape points* and the resulting *line segments* are attributes of the complete chains.

When complete chains link node to node and form a closed figure (a 2-cell), a *GT-polygon* results. The GT-polygon containing Friendship Park in Figure 1-1 is bounded by five complete chains that share five nodes. GT-polygons are elementary units; they are not subdivided into smaller polygons. The polygons completely encompass the area

Figure 1-1 **Basic TIGER/Line[®] File Topology**

The illustration below shows a generalized block that consists of three GT-polygons (GT stands for geometry and topology). The block contains a point landmark (Parkside School) inside GT-polygon 2 and an area landmark (Friendship Park) that is coextensive with GT-polygon 3.



-  **Actual Street Curb Location**
-  **Node**—A zero-dimensional object that incorporates topology and geometry. Each marks the intersection or end point of a complete chain.
-  **Shape Point**—A zero-dimensional object that defines the curvature of a complete chain, but is not required to describe the topology of the complete chain (unlike nodes at intersections or end points).
-  **Point Landmark**—An entity point that identifies the location of a point landmark.
-  **Polygon Interior Points**—A point associated with, and inside of, a polygon.
-  **Complete Chain**—A one-dimensional object having topological and geometric characteristics.

they represent and there is no gap or overlap between adjacent polygons. The geographic entities and area landmarks in the TIGER/Line[®] files are associated with one, or a set of GT-polygons.

The TIGER/Line[®] files contain point landmark data that are not included in the Census TIGER[®] data base topology. Point landmarks are *entity points* that mark the location of points of interest and are not connected to complete chains or GT-polygons.

The following table summarizes the terms for spatial objects in the TIGER/Line[®] files:

	Point (0-cell)	Line (1-cell)	Polygon (2-cell)
Topology	Node	Complete Chain or Network Chain	GT-polygon
Non-topology	Entity Point		
Attribute	Shape Point		

Features

The Census TIGER[®] data base uses the term *feature* to informally describe spatial objects more complex than nodes, complete chains, or GT-polygons. For instance, Main Street is a feature that may consist of a series of complete chains with the same name. The Census TIGER[®] data base contains complete chains, but does not contain features or link complete chains to features.

Left- and Right-Side Data Fields

If one is standing on a complete chain at the *start node* facing the *end node*, data listed in the fields carrying a right qualifier would be found to the right of the complete chain. Notice the position of the start and end nodes for the road in the central section of Figure 1-1; the right-side of the complete chain corresponds to GT-polygon 1 and the left-side corresponds to GT-polygon 2. From the information contained in this basic record, data users can collect the complete chains necessary to construct intersecting polygons and features.

Single-Layer Topology

All spatial objects in the TIGER/Line[®] files exist in a single data layer that includes roads, hydrography, railroads, boundary lines, and miscellaneous features; they are topologically linked. For instance, nodes mark the intersections of roads and rivers. Subsurface features such as tunnels or above surface features such as bridges also create nodes when they cross surface features even though there is no direct real-world connection.

Introduction to the TIGER/Line[®] File Structure

The 1998 TIGER/Line[®] files are extracts of selected information from the Census TIGER[®] data base, organized as topologically consistent networks. The records in these TIGER/Line[®] files represent features traditionally found on a paper map. Each complete chain is classified by codes that describe the type of feature it represents.

The 1998 TIGER/Line[®] files consist of 17 record types that collectively contain geographic information (attributes) such as address ranges and ZIP Codes[®] and their Add-On codes for street complete chains, names, feature classification codes, codes for legal and statistical entities, latitude/longitude coordinates of linear and point features, landmark features, area landmarks, key geographic features, and area and polygon boundaries. Up to 17 separate files exist for each county or county equivalent; one for each of the 1998 TIGER/Line record types that exist for a county or county equivalent. Some counties or county equivalents do not require all of the 17 record types and therefore have less than 17 files. If the types of data contained in Record Types 4, 6, 7, 8, 9, and Z are not appropriate for a given county or county equivalent, then the Census Bureau does not include files for those record types.

The file for each county (or equivalent) is identified by the state and county FIPS code after the “tgr” in the file name (for example, tgr42107.rt1). The suffixes used for the record type files have been changed to make it easier to identify each record type file (when working with uncompressed versions of the county files). The suffix consistently is .rt*n* where *n* is the record type.

The TIGER/Line® data dictionary in Chapter 6 contains a complete list of all the fields in the 17 record types. Separate chapters cross-list the fields by feature attribute and geographic entity type. The next section provides a summary of 1998 TIGER/Line® file record types.

1998 TIGER/Line® File Record Types

Record Type 1 — Complete Chain Basic Data Record

Record Type 1 provides a single record for each unique complete chain in the TIGER/Line® files. The basic data record contains the end nodes for the complete chain. This record also contains address ranges and ZIP Codes® (for most areas of the country where a street name/house numbering system existed at the time of data extraction from the Census TIGER® data base) and the current census geographic entity codes for each side of the complete chain. Additional feature identifier, address range, and ZIP Code® data related to Record Type 1 are found on Record Types 4, 5, 6, and Z. Additional current and 1990 geographic entity codes related to Record Type 1 are found on Record Type 3.

Record Type 2 — Complete Chain Shape Coordinates

Record Type 2 provides an additional series of latitude and longitude coordinate values describing the shape of each complete chain in Record Type 1 that is not a straight line segment. That is, not all complete chains in Record Type 1 have shape points and therefore not all have an associated Record Type 2. Where a complete chain in Record Type 1 is not a straight line, Record Type 2 may have a many-to-one relationship with Record Type 1.

Record Type 3 — Complete Chain Geographic Entity Codes

Record Type 3 includes the 1990 voting district (VTD) codes provided to the Census Bureau for the 1990 Census Redistricting Data Program. It also includes the current Census Bureau geographic area codes for the American Indian/TJSA/TDSA/ANVSA areas, and the Alaska Native Regional Corporations. It also includes 1990 geographic codes for a variety of geographic area types.

In the 1994 and later TIGER/Line® files, all references to the 1980 geographic area codes have been eliminated. In addition, many fields have been replaced with the geographic area codes that were used to tabulate the 1990 census. These codes were previously in Record Type 1. Record Type 3 has a one-to-one relationship with Record Type 1. To identify the 1990 census state and county codes for a complete chain, one must use Record Type 3.

Record Type 4 — Index to Alternate Feature Identifiers

Record Type 4 provides an index to alternate feature names associated with the complete chain (Record Type 1). A Record Type 4 will not exist for a Record Type 1 that has only one name. A complete chain can have more than one alternate name. Record Type 4 has a many-to-one relationship with Record Type 1 and a many-to-one relationship with Record Type 5.

Record Type 5 — Complete Chain Feature Identifiers

Record Type 5 contains a list of all unique feature names for complete chains in the TIGER/Line® files. Each name (or feature identifier) has an identification code number (FEAT). Record Type 5 has a one-to-many relationship with Record Type 4 and a one-to-many relationship with Record Type 9.

Record Type 6 — Additional Address Range and ZIP Code® Data

Record Type 6 provides additional address range information for a street complete chain when the information cannot be presented as a single address range (for example, the house/building numbers are not uniformly arranged to form an address range). Record Type 6 appears only for those counties that have address ranges and ZIP Code® information in the Census TIGER® data base. There is no assurance that the address ranges provided on Record Type 6 will cover fewer addresses than the address ranges appearing on Record Type 1. Data users must use Record Type 6 to obtain the entire picture of the potential address ranges along a complete chain. The address ranges used for geocoding along corporate corridors and corporate offset limits appear only in Record Type 6. Record Type 6 has a many-to-one relationship with Record Type 1 and a one-to-one relationship with Record Type Z.

Record Type 7 — Landmark Features

Record Type 7 contains the area and point landmarks from the Census TIGER® data base. If Record Type 7 represents an area landmark rather than a point landmark, then a one-to-one relationship exists with Record Type 8. If a county file has no landmarks, empty files for Record Types 7 or 8 will exist for that county. Record Type 7 now *excludes* all key geographic locations (KGLs) that contain an actual or imputed address and have a ZIP+4® Add-On code. These will now appear in Record Type 9.

Record Type 8 — Polygons Linked to Area Landmarks

Record Type 8 links the polygon identification codes with the area landmark identification codes. If a county file does not have any area landmarks in Record Type 7, there will be no Type 8 records. Record Type 8 has a many-to-many relationship with Record Type P.

Record Type 9 — Key Geographic Location Features

Record Type 9 consists only of KGLs in the Census TIGER® data base that have an actual or imputed address and a ZIP+4® Add-On code. This record type lists the names and structure numbers of special geocoding addresses such as named apartment buildings, shopping centers, and airports. If the structure number of the special geocoding address is a street address, then the FEAT field links Record Type 9 to Record Type 5 where the street name associated with the address is listed. The KGLs contained in this record type are not included in Record Types 7 or 8, and have no LAND (landmark identification number). Record Type 9 has a many-to-one relationship with Record Type P.

Record Type A — Polygon Geographic Entity Codes

Record Type A contains a record for each polygon represented by Record Type P in the TIGER/Line® files. The Census Bureau provides the basic 1990 census geographic entity codes—state, county, county subdivision, place, American Indian/Alaska Native Areas, census tract/BNA, block—on this record type to assist data users who are interested only in polygon information. Record Type A also includes the Census Transportation Planning Package Area code, school district codes, and urban/rural classification information, as well as fields for the 106th and 108th Congressional Districts (the 108th field is blank for this release).

Record Type C — Geographic Entity Names

Record Type C provides information previously supplied in the TIGER/Geographic Name™ files. A unique list of all geographic codes, their associated name, and some entity attributes is supplied for data users in a flat (nonhierarchical) file. It contains a *FIPS Year* field that may have three values: *1990* for geographic names and codes valid for the 1990 census, *199n* (where *199n* is the year of extraction from the Census TIGER® data base) for geographic names and codes valid for the current year, or *blank* when the geographic names and codes are the same as for 1990 and *199n*. Multiple records for the same geographic entity show its change or correction over time. Record Type C is linked to other record types (1, 3, A, S) through geographic area codes.

Record Type H — TIGER/Line® ID History

Record Type H provides the history of each TIGER/Line® ID when complete chains (Record Type 1) are split or merged, but the source of the change will be blank for this version. Record Type H shows the TLIDs of the complete chains in existence after the split or prior to the merge.

Record Type I — Link Between Complete Chains and Polygons

Record Type I links Record Type 1, the complete chain basic data, to Record Type P, the polygon internal point. The Record Type I to Record Type 1 link (TLID) may be used to link complete chain attributes and other data record types (2, 3, 4, 6, H, and Z) to each other. The Record I to Record Type P link (CENID and POLYID) may be used to link polygon attributes and other data record types (8, 9, A, and S) to each other. Record Type I has a one-to-one relationship with Record Type 1, but a many-to-one relationship with Record Type P. When Record Type I is linked to a single-sided Record Type 1 (county boundary), it will provide only the left- or the right-polygon identifier.

Record Type P — Polygon Internal Point

There is a Record Type P for every polygon in the TIGER/Line® files. Record Type P has a one-to-many relationship with Record Type I and identifies the internal point coordinates for each polygon. See the *Internal Points* section in Chapter 3.

The TIGER/Line[®] files include all complete chains and polygons in the Census TIGER[®] data base. The topology of the Census TIGER[®] data base ensures that a one-to-one relationship exists between the polygons constructed from Record Types 1 and 2 and Record Type P.

Record Type R — TIGER/Line[®] ID Record Number Range

Record Type R contains the range of unique complete chain record numbers (TLIDs) assigned to a census file in a nationwide scheme. Record Type R has the lowest (minimum allowable), and the highest (maximum allowable) record numbers for the range. Numbers are assigned to complete chains beginning at the lowest value. The current number is the highest record number for the census file used.

Each TIGER/Line[®] file consists of an entire county or statistical equivalent. In the Census TIGER[®] data base, the county or statistical equivalent may be split into many partitions. The Census Bureau assigns permanent record numbers to each of these partitions. These record numbers are found in Record Type R. Record Type R is not directly linked to any other record type.

Record Type S — Polygon Additional Geographic Entity Codes

Record Type S contains a record for each polygon represented by Record Type P in the TIGER/Line[®] files. Record Type S contains geographic area codes that identify polygons. Most of the geographic area codes reflect current geography as of the time of extraction from the Census TIGER[®] data base. Except for Hawaii, Record Type S contains no CDP information since CDPs are considered part of the 1990 census geography, not current geography.

Record Type Z — ZIP+4[®] Codes

Record Type Z provides Postal +4 Add-On codes that make ZIP+4[®] codes out of the ZIP Codes[®] on Type 1 and Type 6 records. Record Type Z has a one-to-one relationship with Record Type 1 and a one-to-one relationship with Record Type 6.

The Relationship Between Spatial Objects and TIGER/Line® Record Types

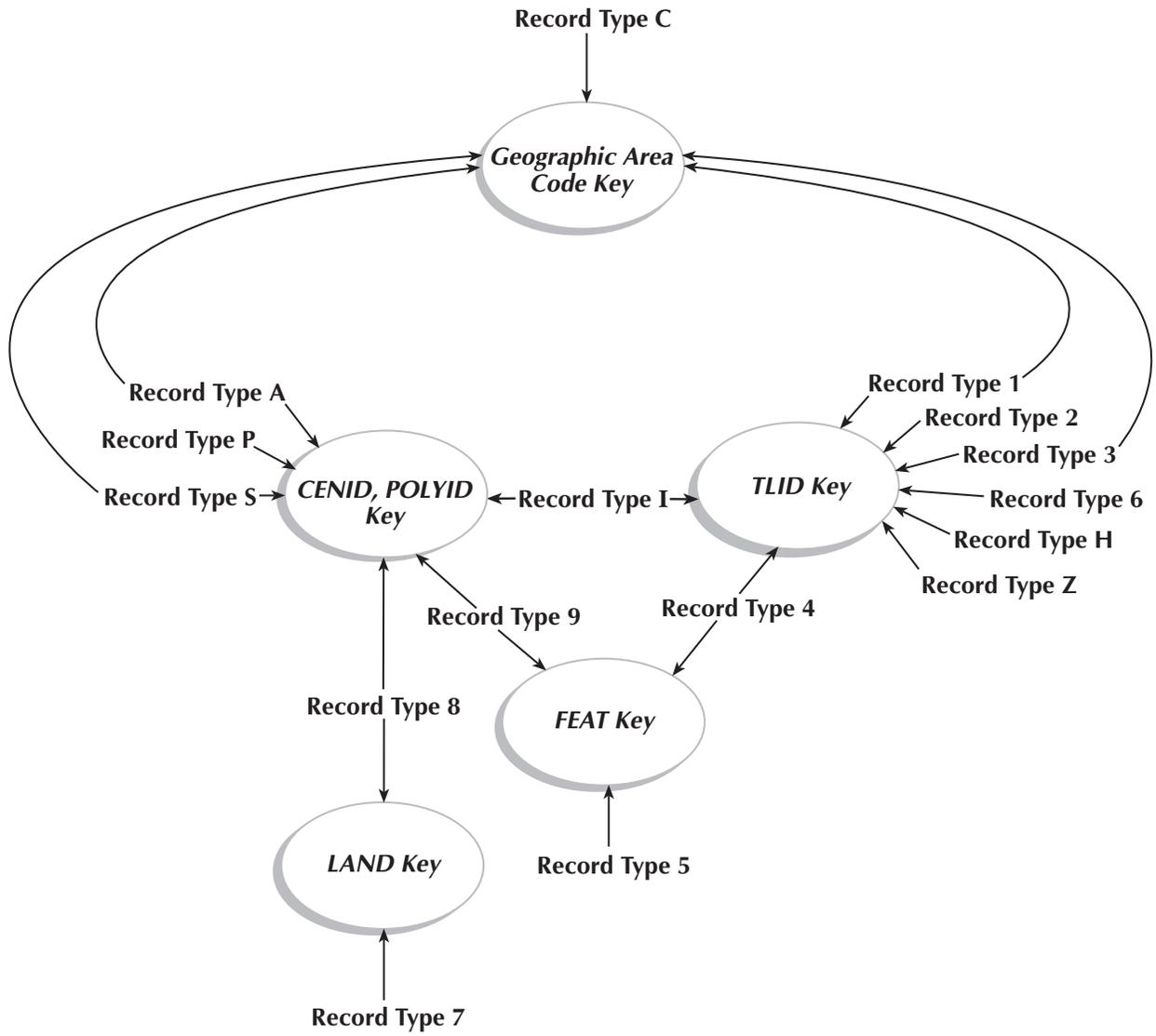
The TIGER/Line® files do not have specific record types for each spatial object. Nodes, for example, do not have a separate record type; node coordinates appear with other data in Record Type 1. Defining a complete chain requires information from Record Types 1, 2, and I. Record Types 1 and 2 alone describe the set of *network chains*. GT-polygons require the combined information of Record Types 1, 2, I, and P. See Chapter 3 for a discussion on how to link data using different types of spatial objects.

Linkages Between Record Types

All the record types except Record Type R contain fields (such as TLID, FEAT, CENID, POLYID, LAND, or a geographic area code) that are used to link together data from the record types. Chapter 2 discusses the TLID, CENID, POLYID, and LAND identification codes in detail. Figure 1-2 shows the record linkage keys. When different record types have a common key with the same data, a linkage can be made between the records. Some of the links are direct, while others are indirect and require a connection through an intermediate record type. An entire TIGER/Line® file can be navigated using the record linkage keys.

Linkages may be made to data external to a TIGER/Line® file. Record Types 1, 3, A, and S contain geographic area code keys—the current or 1990 census geographic entity codes—that may be linked to the Census Bureau’s statistical data (the PL 94-171 data and the several Summary Tape Files or STFs). For the PL 94-171 data and STFs based on 1990 census data, one must use Record Type 3 or Record Type A. With geographic information systems for processing and display, data users can use the geographic area codes to link data tabulations with the geographic data.

Figure 1-2 TIGER/Line® File Record Linkage Keys



Chapter 2: Version Code and Identification Numbers

Version Code

The version code is a numeric code that uniquely identifies a record with a specific release version of the TIGER/Line® files. All record types have a 4-character field for the version code.

For releases after TIGER/Line® 1995, including this release, the version code is assigned as “MMYY” which represents the month and year that the file was created. The month and year are currently extracted from the system date as each county file is created. This means that county files created for the same program are likely to have different version codes. Adjacent counties in a state may have different version codes if they were extracted at different points in time. This will make it easier for users to determine the latest version of the data if they have several versions of the TIGER/Line® files for a county. The version codes for earlier releases of the TIGER/Line® files are as follows:

- 0000 — TIGER/Line® Precensus File, 1990
- 0002 — TIGER/Line® Initial Voting District Codes File, 1990
- 0003 — TIGER/Line® Census File, 1990
- 0005 — TIGER/Line® File, 1992
- 0021 — TIGER/Line® File, 1994
- 0024 — TIGER/Line® File, 1995

TIGER/Line® Identification Number (TLID)

The TIGER/Line® files use a permanent 10-digit TIGER/Line® record identification number (TLID) to uniquely identify a complete chain for the Nation.

TLID Codes

The 10-digit TLID will not exceed the value $2^{31} - 1$ (2,147,483,647) and will represent the same complete chain in all versions of this file, beginning with the TIGER/Line® Precensus Files, 1990. The minimum value is 100,001. Topological changes to the complete chain will cause the TLIDs to change. For instance, when updates split an existing complete chain, each of the new parts receives a new TLID; the old TLID is not reused.

As distributed, TIGER/Line[®] files are grouped by county (or equivalent). A complete chain representing a segment of the boundary between two neighboring counties will have different TLID codes even though the complete chain represents the exact same feature on the ground. See the section, *User-Defined Changes to the TIGER/Line[®] Files*, in this chapter.

Record Type R contains the range of unique complete chain record numbers assigned to a census file in a nationwide scheme. Record Type R has the lowest (minimum) and the highest (maximum) record numbers for the range. Permanent record numbers are assigned within each partition of the Census TIGER[®] data base. Numbers are assigned to complete chains beginning at the minimum value and increasing the current value by one until it reaches the maximum value. Record Type H, which first appeared in the 1994 version, shows the history of a particular TLID, whether combined or split, and its predecessors or successors.

TLID Record Locations

The TLID field appears in columns 6 through 15 of the following record types:

- Record Type 1
- Record Type 2
- Record Type 3
- Record Type 4
- Record Type 6
- Record Type I
- Record Type Z

The TLID field appears in columns 11 through 20 in Record Type H.

TLID Record Linkages

The TLID field provides a key for linking records containing primary attributes describing the complete chain or the geographic entity codes associated with the left and the right sides of the complete chain. Record Type I contains the key fields required to link the TLID and the GT-polygon identification fields, CENID and POLYID. See Figure 1-2 in Chapter 1.

TLID Sort Sequence

Each record type is a separate file. The records in each record type do not have an overall sort sequence. Data users may wish to sort the file by TLID in order to facilitate record linkages.

User-Defined Changes to the TIGER/Line® Files

TLID as a Standard Identification Number

Users should store the record number and the version code associated with each complete chain in their local systems to ensure their ability to match records with earlier or later versions of the TIGER/Line® files. The record and version numbers of each complete chain provide an important link to the corresponding complete chain in the Census TIGER® data base. This key will allow users to transfer new information from later Census Bureau TIGER/Line® releases into their data base, and to provide the Census Bureau with readily usable updates, should they wish to do so.

Feature Changes

Users should assign a new record number (TLID) and a version number with a value greater than 5000 to each new complete chain they create in order to avoid duplicating a Census Bureau-assigned record number that may appear elsewhere in the national file. Users should create a new record for each new complete chain, including those formed when a new intersection splits an existing complete chain. If a complete chain has been assigned different feature identifiers, attributes, and/or coordinate positions without being merged with or split from another complete chain, it is a modified complete chain and does not need a new TLID. Users may wish to mark these changes; the Census Bureau will use this information to identify changes more quickly and accurately.

Users should assign a version code equal to 4999 for all deleted complete chain and landmark records. This version code will allow the Census Bureau to positively identify all user deletions. Users may assign or reassign polygon and landmark identification numbers in any manner that uniquely identifies each within a file.

TIGER/Line[®] Polygon Identification Numbers (CENID, POLYID)

The Census Bureau uses two fields, the census file identification code (CENID) and the polygon identification code (POLYID), to uniquely identify GT-polygons.

The CENID is a Census Bureau alphanumeric identifier used to uniquely number the GT-polygons within its TIGER partitions. CENIDs are a recode of the FIPS state and county codes for the partitions (files) that form the national Census TIGER[®] data base. Since the partitions may include only a portion of a county, the TIGER/Line[®] files may contain multiple CENIDs.

The polygon identification number (POLYID) is a temporary number assigned to every polygon in the Census TIGER[®] data base. Although this number is part of the data base design, it is a dynamic number and can change between different versions of the TIGER/Line[®] files. The Census TIGER[®] data base does not contain permanent identifiers for GT-polygons as it does for complete chains. POLYID is unique only within CENID; in cases where a TIGER/Line[®] file contains more than one CENID, the POLYID may not be unique within that file. Within each CENID, the value for the POLYID starts with "1" and increments sequentially until all polygons are numbered.

CENID and POLYID Codes

In the 1992 and 1994 versions of the TIGER/Line[®] files, the CENID is a 5-digit numeric code. In the 1995, 1997 TIGER/Line[®] files and the 1998 TIGER/Line[®] files, the CENID is a 5-character alpha-numeric code to allow for a wider range of codes without increasing field length. Record Type R contains a list of all valid CENIDs used in each county TIGER/Line[®] file.

The POLYID code is an integer identification number, without leading zeros, applied to each GT-polygon. The POLYID with a value of 1 refers to the *universal polygon*, the polygon that refers to all space outside a county coverage area and is excluded from Record Types A, I, P, and S.

The range of POLYID numbers in a county file may contain gaps or skipped numbers resulting from the use of one partition (CENID) for more than one TIGER/Line[®] county file. POLYID numbers also may duplicate in a single TIGER/Line[®] file as they are unique only within CENID. A single TIGER/Line[®] file may contain CENID information from many other census files.

Either the CENIDL and POLYIDL, or CENIDR and POLYIDR fields in Record Type I will have a blank value where the complete chain is a county boundary.

CENID and POLYID Record Locations

The CENID and POLYID fields appear in the following record types:

- Record Type 8 — Records exist only for area landmark GT-polygons
- Record Type 9 — Records exist for all KGLs
- Record Type A — Records exist for all GT-polygons
- Record Type I — Contains left- and right-side CENIDs and POLYIDs associated with each complete chain
- Record Type P — Records exist for all GT-polygons
- Record Type R — Contains only CENID; Record Type R lists the minimum and maximum possible TLIDs, and the highest TLID from each census file (CENID) used to generate the current version of the TIGER/Line[®] files.
- Record Type S — Records exist for all GT-polygons

CENID and POLYID Record Linkages

The TIGER/Line[®] files use both the CENID and POLYID fields to link all of the polygon record types together (Record Types A, P, and S), to link the GT-polygons to the associated complete chains, and to link area landmarks to GT-polygons (see Figure 1-2, in Chapter 1).

The CENID and POLYID fields link the geographic area codes in Record Types A and S to Record Type P which contains the coordinates for an internal point in the GT-polygon. The TIGER/Line[®] files include a Type A and a Type S record for each Type P record.

Record Type I provides a link between the GT-polygon records and the record types containing complete chain attributes (Record Types 1, 2, 3, 4, and 6). Each Type I record identifies a complete chain by TLID with a left- and right-side GT-polygon. Here CENIDL and POLYIDL contain the CENID and POLYID codes for the GT-polygon on the left side of the line. Likewise, CENIDR and POLYIDR contain the CENID and POLYID codes for the GT-polygon on the right side of the line. There is a Type I record for each Type 1 record. All CENID and POLYID codes appear in Record Type I.

To find all of the complete chains that form the boundary of a specific GT-polygon, search Record Type I for a match with either the left or the right CENID and POLYID. Where the left and the right CENID and POLYID codes are the same, the complete chain is internal to the GT-polygon (e.g., a dead-end street).

Record Type 8 provides a link between the GT-polygons and the landmark feature records. See the section, *TIGER/Line® Landmark Identification Numbers*, in this chapter.

CENID and POLYID Sort Sequence

The POLYID codes appear in numeric sequence by alphanumeric CENID in Record Types 9, A, P, and S. There is no systematic CENID or POLYID sequence in Record Type I.

TIGER/Line® Landmark Identification Numbers (LAND)

The landmark feature identification number (LAND) is a 10-digit number that uniquely identifies both point and area landmarks within each county file. LAND is not a permanent number; the Census Bureau assigns LANDs each time a new version of the TIGER/Line® files is produced. Within each county, LANDs are assigned beginning with "1" and are incremented sequentially until all features are numbered.

In rare situations, Record Type 7 may list the same LAND number more than once if the landmark has more than one feature name.

Each name appears as a separate data record in Record Type 7. These data records describe the same landmark and have the same LAND.

Overlapping landmarks (e.g., a pond located in a park) may cause more than one name to be assigned to a GT-polygon. However, overlapping landmarks are separate features with different LANDs.

LAND Codes

The LAND is an integer number that does not contain leading zeros. It is assigned during the extraction of the data and is not a permanent number. There may be gaps in the sequence of the LANDs in Record Type 7 because of the way this information is extracted.

LAND Record Locations

The LAND field appears in the following record types:

- Record Type 7 — Landmark attributes
- Record Type 8 — Linkage record containing the LAND and the CENID and POLYID fields

LAND Record Linkages

Record Type 8 links each area landmark's LAND with a CENID and POLYID. Each area landmark will have one or more Type 8 records that together identify all of the GT-polygons that make up the landmark.

LAND Sort Sequence

Record Type 7 and 8 contain records sorted in ascending order by LAND. In Record Type 8, each LAND is repeated for each GT-polygon covered by the area landmark.

Chapter 3: Attributes of Geographic Objects

Line Features

Line features consist of one or more complete chains that share common attributes such as feature identifiers, address ranges, and census feature class descriptions.

Feature Identifiers

The feature identification fields contain either a general type label or a specific proper name assigned to a complete chain that identifies the feature. Each complete chain that is a part of a named feature, such as US Highway 1, has the same feature identifier.

The TIGER/Line[®] files use several related data fields to provide a structured description of the feature identifier:

- Feature Direction Prefix (e.g., **N** Adams Ave)
- Feature Name (e.g., **US Highway 1**, **Jefferson** St)
- Feature Type (Roosevelt **Blvd**, Mangosteen **River**)
- Feature Direction Suffix (e.g., Providence St **NE**)

Most named street/highway features have a feature type. Numerous exceptions exist; for example, *Broadway* consists of a feature name with no type specified. Do not confuse feature types that form proper names with the census feature classification scheme. In the Census TIGER[®] data base, feature names are assigned to line features independently of the census feature class codes (CFCCs) of the line features. For example, major airports usually have an express highway leading to the terminal area. This highway does not have an interstate highway name such as I-95, but may have the CFCC of an interstate highway (A11) because it has the same characteristics as an interstate highway (limited access with separated, multiple lanes).

The feature identifiers of line features that are roads may include either a direction prefix or suffix. Some may have both a direction prefix and suffix.

The feature name fields for line features that are roads may contain both a name and a feature type. For all hydrography and non-road features, the feature type will follow the feature name in the feature name field. In some instances, the feature type is commonly considered part of the name and is combined with the feature name in the TIGER/Line® files to avoid confusion; for example, US Hwy 1. The Census TIGER® System identifies *US Hwy* as a feature type used as a prefix to the name and *1* as the feature name. The feature types, such as US Highway, State Highway, and Interstate that normally precede the name appear in the name field.

Generic feature identifiers have a name listed in the names field, but do not have a feature type or direction. Some examples of generic names include ramp, power line, and reservoir. Generic feature identifiers are selectively added to features that do not have proper names. In most cases, complete chains without proper names have no feature identifier.

The TIGER/Line® files do not support a data level above the complete chain that allows the construction of higher level objects (features). Complete chains with the same name may represent separate features; for example, a county may contain several Main Streets located in different geographic entities (e.g., towns or cities) scattered throughout the county.

The ability to group chains together to include the entire length of a street feature, such as US Route 66, depends on the uniqueness of the identifiers and the consistency of the feature identifiers along the length of the feature. The Census Bureau makes no guarantee that the complete chains have uniform names or contain all of the known feature identifiers. The Census Bureau has taken steps to improve the consistency of feature identifiers and to add feature identifiers to fill in gaps along street features. The Census Bureau also has eliminated some alternate spellings in favor of the spelling confirmed by the ZIP+4® file of the US Postal Service.

The census feature class codes (CFCCs) may vary for chains with the same feature identifier. For example, the most frequent CFCC for a state highway is A21, but the complete chains marking the location of State Highway 32 may have a CFCC of A01, A21, or A31 (see the *Census Feature Class Codes* section in this chapter).

The TIGER/Line® file structure allows up to 4,996 feature identifiers for a complete chain. The primary feature identifier appears in Record Type 1. For street features, the primary feature identifier is usually the name most commonly associated with the address range. Up to five alternate feature identifiers are cross-referenced in each Type 4 record, and a single complete chain can have up to 999 Type 4 records. Alternate feature identifiers include highway designation numbers for named streets, former names, and alternate spellings where source material provided conflicting data.

Where the complete chain represents a limited access highway, the highway type and route designator, such as I-95, should ideally become the primary name, and the local designation, such as Cross County Expressway or Capital Beltway, should become the alternate name. However, this is not always true in the TIGER/Line® files.

The primary and alternate feature identifiers can be independent of each other. There is no assurance that the same combination of primary and alternate feature identifiers will appear together in a sequence of complete chains. There also is no assurance that a feature identifier will consistently appear as the primary identifier; it might be recorded as an alternate feature identifier for some complete chains and a primary feature identifier for others. During TIGER® improvement operations, the Census Bureau has taken steps to make the Interstate highway route designator the primary feature identifier for Interstate highways, and the common street name used in mail delivery the primary name on all other roads. The order of identifiers follows this hierarchy: Interstate highway, common name, US highway, county highway, with town and township road at the bottom of the list.

Record Type 5 contains a record for each feature identifier used as either a primary or an alternate name. The TIGER/Line® files link the alternate names in Record Type 5 to Record Type 1 through the use of the alternate feature identification code index that forms Record Type 4. See the *Feature Identifier Record Linkage* section in this chapter.

Feature Identifier Record Locations

<i>Record Type</i>	<i>Field Name</i>	<i>Description</i>
1	FEDIRP	Feature Direction, Prefix
1	FENAME	Feature Name
1	FETYPE	Feature Type
1	FEDIRS	Feature Direction, Suffix
5	FEDIRP	Feature Direction, Prefix
5	FENAME	Feature Name
5	FETYPE	Feature Type
5	FEDIRS	Feature Direction, Suffix

Feature Identifier Codes

- *Direction (Prefix and Suffix)*

Direction consists of a 2-character abbreviation, left-justified in the data fields, and is used for road features only.

<i>Abbreviation</i>	<i>Explanation</i>
(blank)	No Direction
N	North, Norte
S	South, Sur
E	East, Este
W	West, Oeste
NE	Northeast, Norte Este, Nordeste
NW	Northwest, Norte Oeste, Noroeste
SE	Southeast, Sur Este, Sudeste
SW	Southwest, Sur Oeste, Sudoeste
EX	Extended, Extension

- *Feature Names*

Feature names consist of a 30-character text string with words separated by blanks. Feature names contain upper- and lower-case characters. The feature name is truncated if it is over 30 characters long. For Puerto Rico, the TIGER/Line[®] file contains the following codes to represent diacritical marks:

-] Preceding character has an acute accent (´)
- [Preceding character has a dieresis (¨)
- # Preceding character has a tilde (~)

The feature name field may contain abbreviations to represent some feature types. See *Appendix D—Standard Abbreviations*.

- *Feature Types*

The feature type field for road features consists of a 4-character text string. For all hydrography and non-road features, the feature type *will follow* the feature name in the feature name field. The abbreviations in *Appendix D—Standard Abbreviations* may appear in the feature type field or the feature name field.

Data Limitations and Notes In earlier versions of the TIGER/Line[®] files, users did not find many roads with alternate names in the GBF/DIME-File coverage areas; if an alternate name was provided, it usually represented another local name and not a route number. TIGER[®] improvement operations have since added route identifiers to many of these areas.

Corporate Corridors and Corporate Offset Boundaries A corporate corridor is a narrow, linear part of an incorporated place (or in a few instances, another legal entity). The corporate corridor includes the street and/or right-of-way, or a portion of the street and/or right-of-way within the incorporated place. It excludes from the incorporated place those structures such as houses, apartments, or businesses that front along the street or road.

A corporate limit offset boundary exists where the incorporated place lies on one side of the street and may include all or part of the street or right-of-way, but excludes from the incorporated place, the structures located along that side of the street. See Figure 4-4 in Chapter 4.

To facilitate address coding, the Census TIGER[®] data base contains duplicate street name and address ranges on complete chains with a CFCC of F11 (nonvisible offset boundary) or F12 (nonvisible corporate corridor). The duplicate street names for the F11 and F12 features are on Record Type 5; the duplicate address ranges are on Record Type 6. Record Type 1 will not contain feature identifiers for complete chains with CFCCs of F11 or F12.

Feature Identifier Record Linkage

Record Type 4 provides the link required to find any alternate feature identifiers belonging to a complete chain. Record Type 4 cross-references each TLID with an Alternate Feature ID code (FEAT) assigned to each record in Record Type 5. Record Type 5 contains all feature identifiers including those that are used only as primary identifiers. However, only the FEATs for complete chains that have alternate feature identifiers appear in Record Type 4. Complete chains that have no alternate feature identifier will have no Type 4 record.

To find the alternate feature identifiers for a complete chain, begin by determining the TLID for the complete chain. Then search for this TLID in Record Type 4. If the complete chain has any alternate feature identifiers, Record Type 4 should provide at least one record.

Once found, the Record Type 4 entries will each contain from one to five FEAT numbers. The FEAT fields are blank when no further alternative identifiers exist. The first FEAT field (FEAT1) should always have a valid FEAT number. Finally, find the records in the Record Type 5 file that match the FEAT codes from Record Type 4. The TIGER/Line[®] file provides a record sequence number to identify multiple Type 4 records that might exist for one TLID.

Even though Record Type 5 contains all feature identifiers, Record Type 4 contains only references for alternate feature identifiers. Data users cannot link all of the names in Record Type 5 to all of the associated complete chains in Record Type 1 by using Record Type 4.

Feature Identification Numbers Record Locations

<i>Record Type</i>	<i>Field Name</i>	<i>Description</i>
1	TLID	TIGER/Line [®] ID, Permanent Record Number
4	TLID	TIGER/Line [®] ID, Permanent Record Number
4	RTSQ	Record Sequence Number
4	FEAT1	Line Additional Name Identification Number, First
4	FEAT2	Line Additional Name Identification Number, Second
4	FEAT3	Line Additional Name Identification Number, Third

Feature Identification Numbers Record Locations (*cont.*)

<i>Record Type</i>	<i>Field Name</i>	<i>Description</i>
4	FEAT4	Line Additional Name Identification Number, Fourth
4	FEAT5	Line Additional Name Identification Number, Fifth
5	FEAT	Line Name Identification Number
9	FEAT	Line Name Identification Number

Feature Identification Code The FEAT and sequenced FEAT data fields contain an 8-digit integer number (without leading zeros). A FEAT is assigned sequentially, beginning with 1, to each feature identifier in Record Type 5. The FEAT *is not* a permanent identification number.

TLID is the record identifier for the complete chain. See Chapter 2 for a full discussion of TLIDs.

RTSQ is a 3-digit integer that uniquely identifies multiple Type 4 records with the same TLID. RTSQ equals 1 for the first occurrence of a TLID in Record Type 4 and can reach a maximum of 999 for subsequent occurrences.

Address Ranges and ZIP Codes®

The TIGER/Line® files contain address ranges, not individual addresses. The term *address range* refers to the first possible structure number and the last possible structure number along a complete chain side relative to the direction in which the complete chain is coded. The address ranges in the TIGER/Line® files are predominantly potential ranges that include the full range of possible structure numbers even though the actual structures might not exist.

The address numbers used to create the address ranges are commonly known as city-style addresses. A city-style address minimally consists of a structure number, street name, and a 5-digit ZIP Code®; for example, 213 Main St 90210. In the TIGER/Line® files, the ZIP Codes® usually appear only on those complete chains that have address ranges identified. However, they may appear on some road features without the address ranges.

An address range also may have the full 9-digit ZIP Code[®] that includes the USPS's 4-digit ZIP+4[®] Add-On code. The Census Bureau has added the Postal Add-On code to the Census TIGER[®] data base using an automated match to the USPS's AMS II ZIP+4[®] file. The codes in the TIGER/Line[®] files are the street-level codes the USPS has assigned to address ranges. The USPS may assign more specific codes to companies and buildings, and to apartments, floors, or suites within buildings. Some address coding software that uses the AMS II ZIP+4[®] file may provide the more specific codes. However, the TIGER/Line[®] files contain only the more general codes.

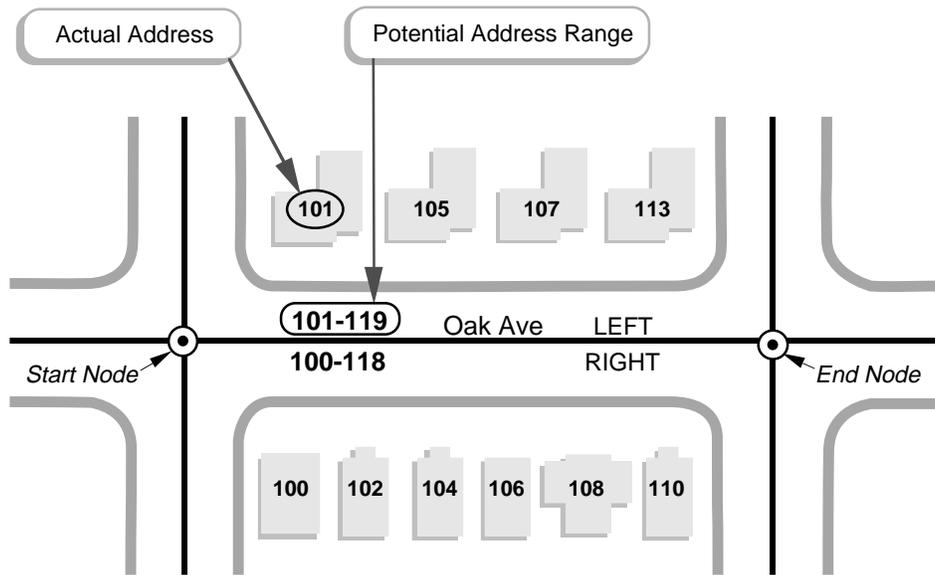
Usually the ZIP+4[®] Add-On code is not required to uniquely identify an address range. There are a few situations where a street name and address range legitimately appear more than once in the same 5-digit ZIP Code[®]. Usually the USPS distinguishes these duplicates by using different postal station names. However, the Postal Add-On code will uniquely identify these cases. Puerto Rico is a special case because many addresses were uniquely assigned within an *urbanizacion* (a community or development) and could duplicate another address in a different *urbanizacion* with the same 5-digit ZIP Code[®]. To resolve this problem, the USPS added an additional line to the address to identify the *urbanizacion*. The 9-digit ZIP Code[®] also may serve to uniquely identify these address ranges. We do not yet have all of these 9-digit ZIP Codes[®] in the Census TIGER[®] data base.

Address Ranges

Complete chains in the TIGER/Line[®] files have one end point labeled as the *start node* and the other end point labeled as the *end node*. The start and end nodes also are referred to as *from* and *to*. The start node always corresponds to the beginning of the complete chain identified by the start node coordinates FRLAT and FRLONG. The order of the addresses follows the sequence of the nodes on the complete chain; the nodes may not be related to the low to high orientation of the address range. The *start address* may be higher or lower than the *end address* for a complete chain. Structure numbers usually, but not always, systematically increase or decrease while moving along a street in a set direction from one complete chain to the next (see Figure 3-1).

Figure 3-1 **TIGER/Line® Address Range Basics**

The TIGER/Line® files contain potential address ranges for city-style addresses. The complete chain (between the start node and the end node) in the diagram below has two address ranges; the left side has odd-numbered addresses and the right side has the complementary even-numbered addresses. Potential address ranges along a complete chain have values that encompass the addresses of existing structures, as well as those not yet built.



Record Type 1 contains separate data fields for both the start and end of each address range.

<i>Record Type 1</i>				<i>Address Range</i>			
				<i>Left side</i>		<i>Right Side</i>	
				<i>Start</i>	<i>End</i>	<i>Start</i>	<i>End</i>
RT	TLID	FENAME	FETYPE	FRADDL	TOADDL	FRADDR	TOADDR
1	0007654320	Oak	Ave	101	119	100	118

Record Type 1 contains the initial address ranges for the left and the right sides of a complete chain. A complete chain side may have multiple address ranges. Often this occurs when address ranges are split to accommodate different 9-digit ZIP Codes[®]. The TIGER/Line[®] files use Record Type 6 to store any additional ranges as required. The Type 1 record will hold the ranges with the largest sequence of numbers. However, Record Type 6 may hold a significant number of additional ranges. Data users must use Record Type 6 to obtain the entire picture of the possible address ranges along a complete chain.

In Record Types 1 and 6, both the left- and the right-side address ranges have a start and an end address range field that can contain a maximum of 11-alphanumeric characters. The address range fields are right-justified. Each address range in the TIGER/Line[®] files has only one parity. Only odd-numbered addresses are contained within an address range with odd start and end structure numbers. Likewise, only even-numbered addresses belong to an address range with even start and end structure numbers. The value zero is not used as a valid address range end value. Generally, the left and the right sides of a complete chain have opposite parities. If both odd and even addresses exist on the same side of a complete chain, the TIGER/Line[®] files provide both an even and an odd parity range for that side of the complete chain. One of the ranges appears in Record Type 1, while the other range appears separately in Record Type 6.

Some address ranges may include single value ranges, such as 16-16, referred to as *include addresses*. These include addresses are anomalies; they may have a parity different than the prevailing address range on the complete chain side, or appear as an outlier from an adjoining range that does not fit within the range belonging to the complete chain where it is located. For example, the location of 16 Osage St falls on the predominantly odd-numbered left side of the complete chain with the address range 1-99. The range 16-16 will appear as an additional include range on the left side of the street. The even address range 2-98 on the right side of the street must exclude the number 16 structure number; the right address range becomes two ranges, 2-14 and 18-98. Outliers follow the same pattern. For example, 10 Persimmon St may appear on the side of the complete chain with the range 100-198 and not on the complete chain with the

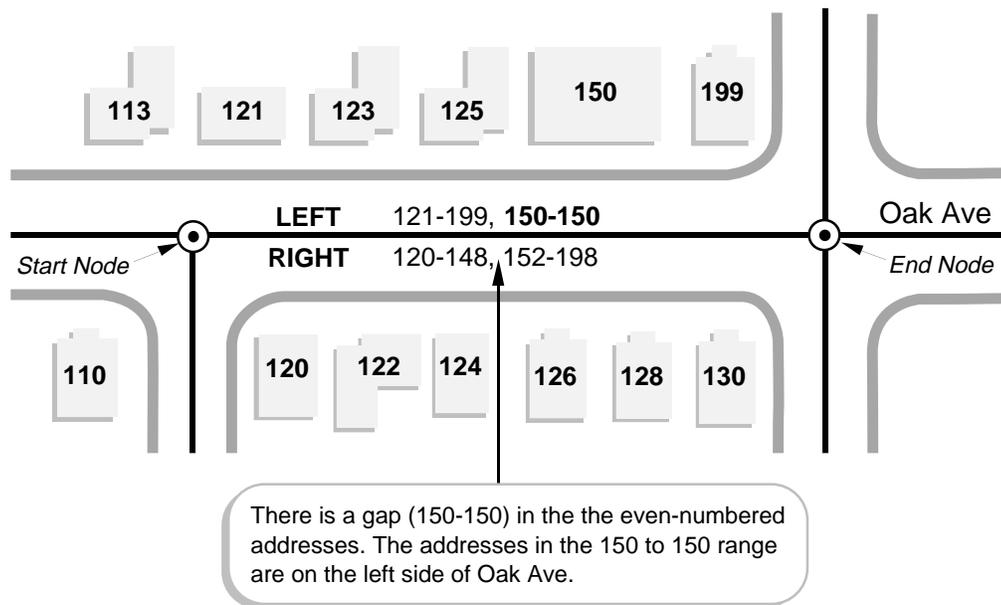
range 2-98. As before, 10-10 would become an additional range added to the complete chain with the range 100-198, and the address range 2-98 would become two ranges, 2-8 and 12-98. Because *include address* ranges require complex edits that may involve several complete chains, the Census Bureau cannot guarantee that all address duplication has been identified and eliminated.

Some basic characteristics of address ranges are as follows:

- The TIGER/Line[®] files generally contain only those city-style address ranges used for mail delivery. They do not show rural route and post office box addresses. They may contain structure numbers assigned in select areas for use by local emergency services, but not for mail delivery. The TIGER/Line[®] files do include address ranges and ZIP Codes[®] in some small places where the USPS provides only post office box service, not street delivery. These address ranges represent the structure numbers collected during the 1990 census field operations, while the ZIP Codes[®] represent the post office boxes. The address ranges in these areas do not have Postal Add-On codes since the USPS does not use them for street delivery.
- Gaps may exist between multiple ranges for a single complete chain. A gap may be significant, since any numbers missing from one complete chain may actually appear on another complete chain in the case of address anomalies such as *out-of-parity* or *out-of-sequence* addresses (see Figure 3-2).
- In a few rare cases, address ranges can include numbers with alphabetic characters. These characters help uniquely identify addresses within a county. For instance, certain unincorporated areas of Genesee County, Michigan add a letter G prefix to the address number. The characters are consistently placed within the address range field; for example, the letter G maintains a consistent column placement in the range G1 to G99 (see Figure 3-3).
- Address ranges exist only for street features, and in some cases, corporate corridor and corporate offset boundary features.

Figure 3-2 **TIGER/Line® Multiple and Out-of-Sequence Address Ranges**

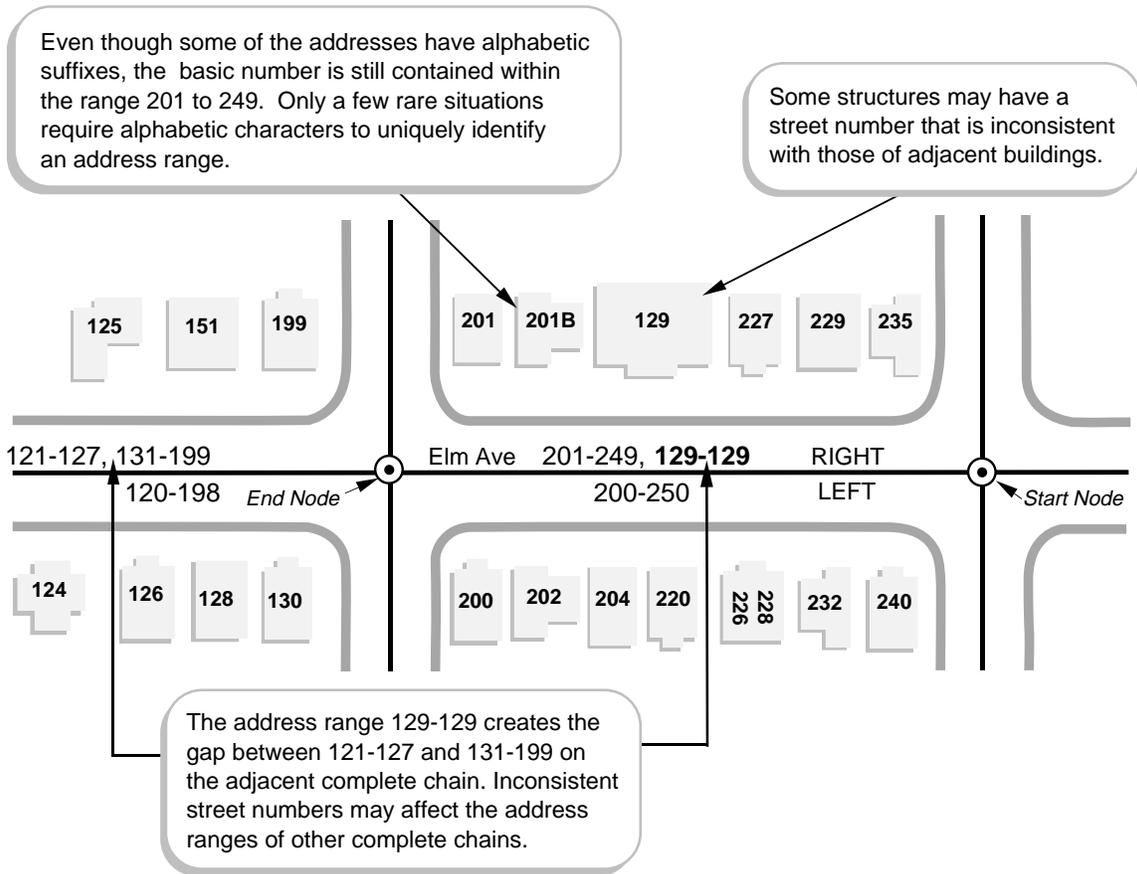
The TIGER/Line® files can accommodate complex address situations by using more than one address range. A complete chain may contain both odd and even ranges, provided the ranges are not duplicated elsewhere. Whenever there is more than one address range per side for a complete chain, the additional address ranges go into Record Type 6. The TLID field links the two record types. Record Type 6 has a sequence field (RTSQ) that allows more than one Record Type 6 to have the same TLID. The largest address ranges are put on Record Type 1 and the smaller ranges on Record Type 6. The complete chain in the diagram below has two address ranges on each side. This situation results when a structure with an even-numbered address (150-150) is built on the odd-numbered side of the street.



<i>Record Type 1</i>				<i>Address Range</i>			
				<u>Left side</u>		<u>Right Side</u>	
RT	TLID	FENAME	FETYPE	Start	End	Start	End
1	0007654321	Oak	Ave	121	199	120	148

<i>Record Type 6</i>				<i>Address Range</i>			
				<u>Left side</u>		<u>Right Side</u>	
RT	TLID	RTSQ		Start	End	Start	End
1	0007654321	1		150	150	152	198

Figure 3-3 **Address Range Special Cases**



The start-end orientation of address ranges follows the start-end node orientation of the complete chain. Address ranges run from high to low or low to high to be consistent with the actual orientation of address ranges along the street. Single number street addresses appear as a range.

Record Type 1				Address Range			
				<u>Left side</u>		<u>Right Side</u>	
RT	TLID	FENAME	FETYPE	FRADDL	TOADDL	FRADDR	TOADDR
1	0007654322	Elm	Ave	250	200	249	201

Record Type 6				Address Range			
				<u>Left side</u>		<u>Right Side</u>	
RT	TLID		RTSQ	FRADDL	TOADDL	FRADDR	TOADDR
1	0007654322		1			129	129

- Address ranges (consisting of a unique combination of structure number, ZIP Code[®], feature name, feature type, and directional) should not overlap; addresses should belong to only one range. The Census Bureau edits the address ranges to locate possible overlaps, but cannot guarantee that all possible overlap situations have been identified.
- Address ranges in the TIGER/Line[®] files are usually associated with both the primary and alternate feature identifiers. *Caution:* Address range overlaps may occur if primary address ranges are linked to alternate feature identifiers that identify route numbers.

Some address systems use a hyphen to separate avenue numbers, private road designators, and grid cell numbers from the structure numbers; for example, *10-01 Reynolds St* uses a hyphen to separate the avenue number from the structure number. See the *Introduction* chapter for more information on known anomalies.

Imputed Address Ranges

Imputed address ranges occur during the process of updating the Census TIGER[®] data base when a new complete chain intersects an existing complete chain with address ranges. The intersection splits the existing complete chain and produces two new complete chains connected by a new node located at the intersection point. The update program divides the old address ranges among the two new complete chains and *imputes* the address range ends at the new node.

The impute process allocates either all or part of each original address range to each of the new complete chains in proportion to their lengths (see Figures 3-4 and 3-5). For each side of the original complete chain, the process considers all address ranges appearing on each side and determines the overall low and high address. The process assumes the addresses are evenly distributed over the length of the complete chain, and applies the proportion of complete chain lengths to the overall address ranges to calculate a split point address for each side. Address ranges that fall entirely above or below the split point address are moved intact to one of the new complete chains. The process divides any address ranges that contain the split point address and allocates each part to one of the new complete chains.

The new address range ends created from the split are imputed values and have an impute flag.

Some intermediate address range ends also may carry the impute flag. These address range ends fall between the overall high and low address for complete chain sides that have more than one address range. The impute flags on these range ends often mark splits created by adding different nine-digit ZIP Codes[®] to parts of the original address range. These impute flags are not significant and should be disregarded.

The impute flags identify address ranges that have been through the impute process. Each record in the TIGER/Line[®] files contains four separate 1-character impute flag fields, one for each address range end.

ZIP Codes[®]

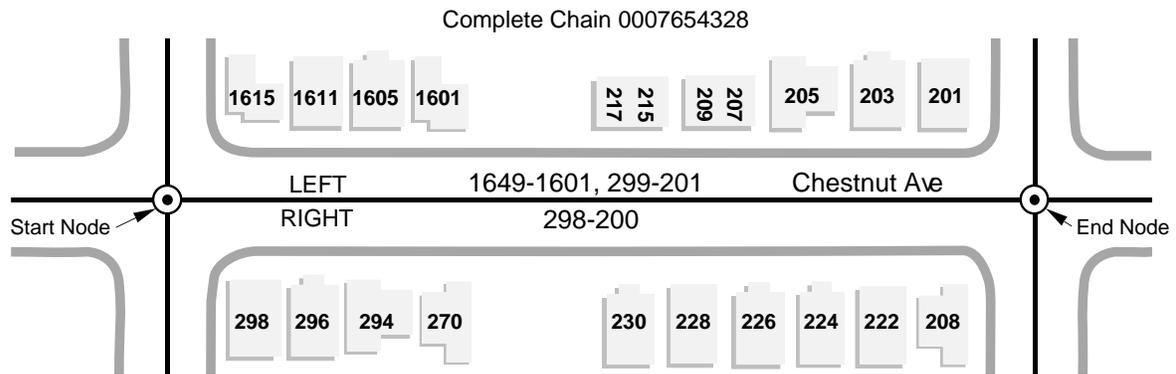
The ZIP Code[®] is an attribute of the address ranges. The TIGER/Line[®] files have a five-character ZIP Code[®] field containing a numeric code with leading zeros. Both the left- and right-side address ranges share the ZIP Code[®] that appears in the same Type 1 or Type 6 record. Each address range belonging to a complete chain can have a different ZIP Code[®].

Where ZIP Code[®] boundaries follow a street, the complete chain may have different left- and right-side ZIP Codes[®], or different ZIP Codes[®] along its length. Because the Census TIGER[®] data base identifies only one ZIP Code[®] for each address range record, address ranges with different ZIP Codes[®] must appear in separate records. The address range(s) with one ZIP Code[®] will appear in Record Type 1, and the address range(s) with the other ZIP Code(s)[®] will appear in Record Type 6. For example, one complete chain making up Duke Street is a ZIP Code[®] boundary; the left-side range 1-99 has a ZIP Code[®] of 12345, and the right-side range 2-98 has a ZIP Code[®] of 54321. The range 1-99 with a ZIP Code[®] of 12345 will appear in Record Type 1, and the right-side range fields will be blank. The range 2-98 with a ZIP Code[®] of 54321 will appear in Record Type 6, and the left-side range fields will be blank.

If the complete chain had additional address ranges with a ZIP Code[®] of either 12345 or 54321, these additional address ranges would appear with

Figure 3-4 **TIGER/Line® Address Range Imputes—Before Split**

The Census TIGER® data base uses impute flags to indicate that the one or both ends of an address range are based on calculations rather than known values. Imputed address situations generally occur when a complete chain with existing address ranges becomes split by a new complete chain. The illustration below shows the address ranges on Chestnut Ave before a split. All impute flags for this complete chain are set at zero. Figure 3-5 shows the address ranges after the split.

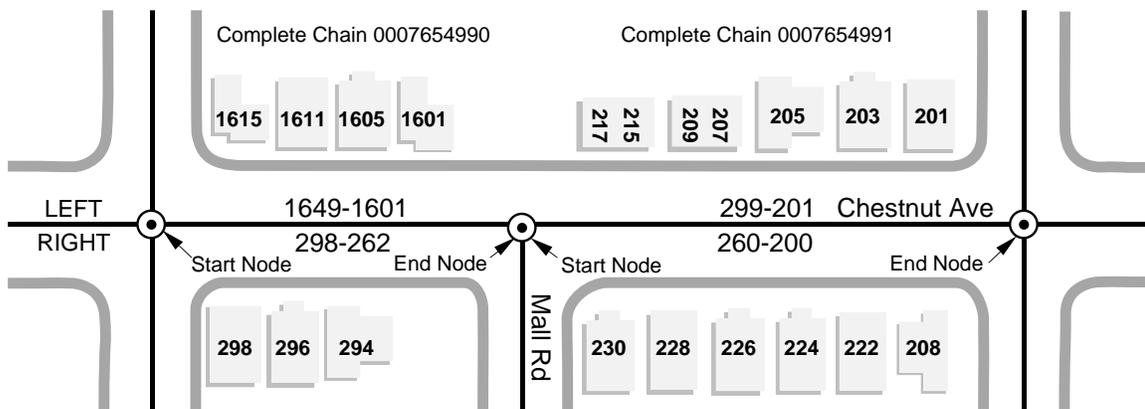


Record Type 1			Address Range				Impute Flags			
			Left side		Right side		Left side		Right side	
RT	TLID	FENAME	FRADDL	TOADDL	FRADDR	TOADDR	FRIADDL	TOIADDL	FRIADDR	TOIADDR
1	0007654328	Chestnut Ave	299	201	298	200	0	0	0	0

Record Type 6			Address Range				Impute Flags			
			Left side		Right side		Left side		Right side	
RT	TLID	RTSQ	FRADDL	TOADDL	FRADDR	TOADDR	FRIADDL	TOIADDL	FRIADDR	TOIADDR
6	0007654328	1	1649	1601			0	0		

Figure 3-5 **TIGER/Line® Address Range Imputes—After Split**

In the diagram below, Mall Rd has split the complete chain into two parts. Each part is assigned a new TIGER/Line® identification number (TLID) and the old number is deleted. The overall address range for each complete chain side (1649 to 201 on the left side and 298 to 200 on the right side) and the split points for each of these address ranges (approximately 1088 on the left side and 261 on the right side) are determined by the TIGER System. Address ranges that fall entirely above or below the split point belong to one of the two new complete chains and do not get an impute flag. The TIGER System divides those address ranges that contain the split point and assigns a part to each of the new complete chains.



Record Type 1			Address Range				Impute Flags			
Complete Chain 0007654990			Left side		Right side		Left side		Right side	
RT	TLID	FENAME	FRADDL	TOADDL	FRADDR	TOADDR	FRIADDL	TOIADDL	FRIADDR	TOIADDR
1	0007654990	Chestnut Ave	1649	1601	298	262	0	0	0	1

Record Type 1			Address Range				Impute Flags			
Complete Chain 0007654991			Left side		Right side		Left side		Right side	
RT	TLID	FENAME	FRADDL	TOADDL	FRADDR	TOADDR	FRIADDL	TOIADDL	FRIADDR	TOIADDR
1	0007654991	Chestnut Ave	299	201	260	200	0	0	1	0

one of the existing ranges or as additional Type 6 records. For example, a right-side range of 150-198 with a ZIP Code® of 12345 could appear on the Type 1 record with the left-side range of 1-99. However, a right-side range of 150-198 with a ZIP Code® of 54321 could not appear on the Type 6 record with the range 2-98. Instead, the range would have to appear in a second Type 6 record. Since the ZIP Codes® in the TIGER/Line® file relate to mail delivery along addressed streets, they are not true area features. It is possible that a polygon may contain addresses associated with more than one delivery ZIP Code®.

Postal Add-On Code

The TIGER/Line® files have a 4-character Postal ZIP+4® Add-On code which is located on Record Type Z. Record Type Z may link to a left- or right-side address range in Record Type 1 or in Record Type 6. By using the TLID fields, data users can match the Postal +4 Add-On codes on Record Type Z to an address range in either Record Type 1 or Record Type 6. If the RTSQ field on Record Type 6 contains a 0, the postal +4 Add-On codes apply to the address ranges in Record Type 1. If the RTSQ field contains a number greater than 0, the Postal +4 Add-On codes apply to the address ranges in the Record Type 6 that have the identical RTSQ value. The first two characters of the Postal +4 Add-On code indicate the USPS sector code; the last two characters represent the USPS segment code.

As stated earlier, the Census Bureau used an automated match process to assign the Add-On codes to the address ranges in the Census TIGER® data base. The match utilized only the street type records from the AMS II ZIP+4® file. These records identify a single Add-On code for a range of addresses. The ZIP+4® file also contains company and high-rise building records that supply specific codes to companies, buildings, and floors or suites within buildings. The Census Bureau did not match these codes to the Census TIGER® data base because it was not practical to add all of the building features to the Census TIGER® data base. Also, it was not feasible to split the address ranges for individual building-level codes.

The match process attempted to relate the 5-digit ZIP Code®, street name identifier, and address ranges for each feature in the Census TIGER® data base to the corresponding street type record in the AMS II ZIP+4® file of

the USPS. A match was not always possible because the process could not identify a single match between features with a high degree of confidence.

Where successful, the process added the Postal Add-On codes to the address ranges in the Census TIGER® data base. The process split these ranges if the Add-On codes covered only part of the range. Splits of this type occurred because the potential address ranges used by the Census Bureau differed from those used by the USPS. The USPS assigned different Add-On codes for each range of addresses along a block side. For example the 100, 200, and 300 numbered addresses received different Add-On codes even though they appeared on the same block side. The Add-On codes also may appear on more than one complete chain. This results because of differences in potential address ranges, and because the Census Bureau recognizes complete chain breaks and intersections not recognized by the USPS.

Address Information and Key Geographic Locations (KGLs)

KGLs represent a special class of address information. They provide a geocoding tool like address ranges, but also identify a spatial object similar to a landmark. The Census Bureau uses KGLs to identify named buildings where the use of the feature name enhances the ability to geocode addresses. These cases include airports, shopping centers, schools, condominiums, hotels, and apartment complexes. The Census Bureau uses KGLs in situations where the address range along a street does not geocode to the correct block. Thus, greater accuracy in geocoding is provided when the KGL address is used than when the address range on the complete chain is used.

In the TIGER/Line® files, each KGL usually has a street address, CFCC, KGL feature name, and ZIP Code®. The street feature identifier associated with the address of the KGL is obtained by linking the FEAT field to Record Type 5 which contains the list of all street name identifiers. The KGLs are independent of the address range on the complete chain; the geocoding link for the KGL is the GT-polygon. In most cases, one of the complete chains that forms the boundary of the GT-polygon will contain the KGL address. However, this relationship is not true for all KGLs. In order to locate the street segment with the KGL address, use

the previously linked street name identifier from Record Type 5. The ZIP Codes® may not be the same.

Even though the KGLs appear to identify specific structures, the KGL descriptions do not include location coordinates. In most cases, the Census Bureau can determine the general location of the KGL, but cannot provide a specific location with any certainty.

Address Information Methodology

Pre-1992 Address Ranges

Before the 1990 census, the Census TIGER® data base contained address ranges only for the area covered by 1980 Geographic Base File/Dual Independent Map Encoding (GBF/DIME) files and a few file extension areas prepared in conjunction with 1980 census activities. These ranges were used to geocode a list of addresses to geographic areas for use in the 1990 questionnaire mail-out.

For the 1990 census, the Bureau purchased the list of addresses from commercial vendors for the geographic areas where the Census TIGER® data base included address ranges. To verify the accuracy of the addresses, the Census Bureau began with an initial assignment of residential addresses to the 1990 census tracts and blocks. Clerical review of the results of the assignment process provided additional address range updates.

If an address range in the TIGER/Line® file prepared for the 1990 census was incorrect, the Census Bureau implemented procedures to ensure that the error did not adversely affect the accuracy or the quality of the 1990 census. Later, in field operations, enumerators verified, corrected, and updated the list of addresses assigned to each block. They walked the perimeter and all interior streets of each block and checked the address list against their observations.

1992 TIGER/Line® Expanded Addresses

In the 1992 TIGER/Line® Files, the Census Bureau expanded the address range coverage for the entire United States by creating new ranges based on the Address Control File (ACF) used in the 1990 decennial census. The ACF was a master list of addresses geocoded to the census block level. For each block, the individual structure addresses were grouped by feature

identifier and sorted into numerical order to extract an actual range. The order of the addresses along the complete chains bordering the block, relative to the start and end nodes of the complete chains, came from the order of addresses for the street feature as a whole (i.e., the collection of linked complete chains with the same feature identifier). Likewise, the overall parity of the street feature set the standard for identifying and editing anomalies along the complete chains.

To maintain confidentiality of individual addresses, the Census Bureau converted the actual range to a potential range. This was accomplished by expanding the actual range to complete a hundred range, splitting the difference between coverage gaps, and in some cases disguising the range by the random addition or subtraction of addresses.

Where a complete chain in the Census TIGER® data base contained both an ACF-derived address range and a pre-existing address range, only the pre-existing address range was extracted for the 1992 TIGER/Line® files. This extraction process was followed on each side of a complete chain. No attempt was made to resolve differences between the two sources (the pre-existing or the ACF-derived). The ACF-derived address range may have created overlaps with pre-existing address ranges on the adjoining complete chains.

Post-1992 Expanded Addresses

What had been true for addresses in the 1992 TIGER/Line® files was modified for the 1994, 1995, 1997 and the 1998 versions of the files. The preexisting address ranges in the Census TIGER® data base and the ACF address ranges were matched to determine their comparability. Then, a rematch process was performed similar to the process used for the 1992 TIGER/Line® files. Using more sophisticated processing, the address ranges were merged to create better address range coverage. In the merge process, the ACF range became the base address range, and the pre-existing address range in the Census TIGER® data base was used to make the address range coverage more complete. The merged range is the address range in the 1998 TIGER/Line® files.

In addition to the address merge process, the Census Bureau ran an address range edit. The edits fixed some orientation and parity reversals

along a street feature. They also identified overlapping address ranges of different complete chains that had the same street identifier and ZIP Code®. Where all of the overlapping addresses were geocoded to the same 1990 census block, only one instance of the address was retained in the TIGER/Line® files. If overlapping addresses were geocoded to a different census block, none of these overlapping addresses were entered into the TIGER/Line® files. For this reason, street features that had address ranges in the past may show no ranges or incomplete ranges in the latest versions of the TIGER/Line® files.

Both primary and alternate feature identifiers can be used in geocoding, but great care should be used with the alternate identifiers. In the case of corporate corridors and corporate limit offset boundaries, the alternate address linked to the boundary should be used for geocoding rather than the primary range linked to the street (see the *Corporate Corridors and Corporate Limit Offset Boundaries* section in this chapter).

Orientation edits attempted to standardize the low to high orientation of address ranges along a chain of street feature complete chains with the same feature identifier. Complete chains with address ranges that were specifically identified as orientation anomalies were automatically excluded. The edit determined the majority orientation for the street feature chain and reversed the low and high values on any range that deviated from the majority. The edit only created street feature chains that included adjacent complete chains; discontinuous street feature chains were edited as separate pieces. Therefore, the from-to orientation of the complete chains may be inconsistent along a feature chain.

The parity edits attempted to place the even- and odd-parity ranges consistently on the same side of a feature chain. Chains with address ranges that were specifically identified as known anomalies were automatically excluded. Because address geocoding could be affected, the parity fix required a feature chain with a minimum of four complete chains and a majority parity representing 70 percent of the address ranges. As a result, smaller feature chains remained unaltered.

For the 1994 TIGER/Line® files, the Census Bureau conducted a general ZIP Code® clean-up and staff added new ZIP Codes® created since the

1990 census. These updates had a significant impact on parts of Michigan, California, and central Florida. Nationwide, automated processes eliminated illegal codes not recognized by the USPS as ZIP Codes[®], and clerical operations began eliminating the scatter of incorrectly applied ZIP Codes[®]. Nearly all 3-digit ZIP Code[®] anomalies have been corrected.

The Census Bureau, for the 1995 TIGER/Line[®] files, edited address ranges for overlaps or other inconsistencies and ZIP Codes[®] were updated in selected areas. The street names and address ranges in the Census TIGER[®] data base were compared to those in the ZIP+4[®] file of the US Postal Service. If a street name and address range did not have a ZIP+4[®] code, the code was copied from the ZIP+4[®] file to the Census TIGER[®] data base. The consistency of highway names and feature identifiers also was improved.

Address Range Record Locations

<i>Record Type</i>	<i>Field Name</i>	<i>Description</i>
1	FRADDL	Start Address, Left
1	TOADDL	End Address, Left
1	FRADDR	Start Address, Right
1	TOADDR	End Address, Right
6	FRADDL	Start Address, Left
6	TOADDL	End Address, Left
6	FRADDR	Start Address, Right
6	TOADDR	End Address, Right
9	KGLADD	Key Geographic Location Address

Impute Flag Record Locations

<i>Record Type</i>	<i>Field Name</i>	<i>Description</i>
1	FRIADDL	Start Imputed Address Flag, Left
1	TOIADDL	End Imputed Address Flag, Left
1	FRIADDR	Start Imputed Address Flag, Right
1	TOIADDR	End Imputed Address Flag, Right
6	FRIADDL	Start Imputed Address Flag, Left
6	TOIADDL	End Imputed Address Flag, Left
6	FRIADDR	Start Imputed Address Flag, Right
6	TOIADDR	End Imputed Address Flag, Right

ZIP Code® Record Locations

<i>Record Type</i>	<i>Field Name</i>	<i>Description</i>
1	ZIPL	ZIP Code®, Left
1	ZIPR	ZIP Code®, Right
6	ZIPL	ZIP Code®, Left
6	ZIPR	ZIP Code®, Right
Z	ZIP4L	+4 Postal Add-On Code, Left
Z	ZIP4R	+4 Postal Add-On Code, Right
9	KGLZIP	Key Geographic Location ZIP Code®
9	KGLZIP4	+4 Postal Add-On Code for KGL

Address Ranges and Impute Flag Codes

Address Ranges

- Numeric characters or a mixture of numeric and alphabetic characters (maximum of 11 characters)
- Ranges beginning or ending with zero (0) are not valid
- Address range fields are blank when no address range is available. **Both the start and end address range fields are blank, or both have non-zero values.**
- The KGLADD field on Record Type 9 contains a “0” when KGLs do not have a valid address.

Impute Flags *(1-character numeric code)*

- *blank*— No address range available
- 0— Not imputed
- 1— Imputed

ZIP Codes®

See the US Postal Service (USPS) Publication 65, *National Five-Digit ZIP Code® and Post Office Directory* for a list of valid 5-digit ZIP Codes®. The 1998 TIGER/Line® files may not contain all delivery ZIP Codes® and contain few non-delivery ZIP Codes®. The distribution of ZIP Codes® in the TIGER/Line® files may not reflect the exact USPS ZIP Code® service area.

Limitations

Users of the address ranges in the TIGER/Line® files should check for address range overlaps, gaps, odd/even reversals, and other situations

that may be incorrect. While the Census Bureau continues to edit for, and correct these situations, it is possible that some still exist.

Corporate Corridors and Corporate Limit Offset Boundaries

A corporate corridor is a narrow, linear part of an incorporated place (or in a few instances, another legal entity). The corporate corridor includes the street and/or right-of-way, or a portion of the street and/or right-of-way within the incorporated place. It excludes from the incorporated place those structures such as houses, apartments, or businesses that front along the street or road.

A corporate limit offset boundary exists where the incorporated place lies on one side of the street and may include all or part of the street and/or right-of-way, but not the structures located on that side of the street. See the *Places* section in Chapter 4.

To facilitate the coding of addresses to the correct geographic entity, the Census TIGER® data base contains duplicate street name and address ranges on complete chains with a CFCC of F11 (nonvisible offset boundary) or F12 (nonvisible corporate corridor). The duplicate street names for the F11 and F12 features are on Record Type 5; the duplicate address ranges are on Record Type 6. Complete chains with CFCCs of F11 or F12 will not contain the duplicate names or address ranges in Record Type 1. Record Type 1 does not indicate that the street or right-of-way lies within a corporate corridor or offset boundary. Therefore, the address ranges lie outside the corporate corridor or offset boundary and are encoded on either side of these lines. Data users planning to geocode addresses in areas with these boundary types must identify the duplicate feature identifiers and ranges from Record Types 5 and 6 (the names and address ranges for CFCC F11 and F12 features), locate the street feature with those ranges, and remove the street feature's address ranges and geographic codes from the geocoding process.

Record Linkages

The TIGER/Line® files store address range information in two record types. Record Type 1 contains the basic complete chain attributes, including one basic address range. Record Type 6 stores the

additional ranges when the complete chain has more than one range on one or both sides.

The TLID field links Record Types 1 and 6. Since a complete chain can have more than one set of address ranges, multiple Type 6 records can exist with the same TLID. The TIGER/Line[®] files distinguish these records with a record sequence number (RTSQ). All Type 6 records that have the same TLID appear sequentially in the file even though the records are not sorted by TLID. The TIGER/Line[®] files do not contain a field indicating whether a Type 6 record exists for a specific TLID; the user must scan any existing records in Record Type 6 for a TLID match.

Boundaries of Geographic Entities

The TIGER/Line[®] files store geographic codes as either a polygon or complete chain attribute. In the case of state and county level geography, and some other areas, the codes appear in both complete chain and polygon record types. Refer to Chapter 4 for descriptions of geographic areas, and to Chapter 6 for the data dictionary that describes the record type fields.

Record Linkages and Boundary Extraction

The codes assigned to the complete chain belong to the areas referenced by the left and the right sides of a complete chain. Only those features that have different geographic codes on the left and the right sides of a line become boundary features. Information from multiple TIGER/Line[®] data fields is required to uniquely identify the boundary of some geographic entities. For instance, both the census block and census tract/BNA codes are required to identify a block boundary. Block 101 in census tract 2101 could neighbor block 101 in census tract 2998. Be sure to use both the basic number and the suffix when extracting either census tract or block boundaries. Data users who have combined TIGER/Line[®] files should include the 1990 state/statistical equivalent and 1990 county/statistical equivalent codes to extract 1990 census tract/BNA boundaries.

The extraction of boundary features from polygon attribute codes requires making a link between the polygon and the complete chain data records, then identifying the features with different left- and right-side geographic

codes. For a description of the record linkage process, see the *Polygon Features* section in this chapter.

Boundary rings consist of multiple complete chains that are sequentially linked together and connected to form a closed ring. The process of linking all of the boundary complete chains that outline the same geographic entity requires the extraction of all complete chains that have that entity's code on either the left or the right side (but not both). Linking the chains together will form a polygon; each polygon may represent one of the GT-polygons described in Record Types A, P, and S, or a collection of these GT-polygons.

Caution: Some types of geographic areas must end at a county/file boundary while others can continue into adjoining counties/files. For example, MCDs stop at a county boundary, whereas incorporated places can exist in several counties (See the *Record Linkages/Feature Chaining* section in this chapter).

Single-Side Flags and County Boundaries

The 1998 TIGER/Line[®] files use current counties/statistical equivalents as the basis for the file coverage area, not the boundaries as they existed for the 1990 census. This means that a county or county-equivalent file may not cover the exact same area as it did in 1990. Any legal changes or boundary corrections that occurred since 1990 could have resulted in a piece of land moving from one county, or county equivalent, to another.

County boundary features are duplicated between adjoining pairs of counties so that each file is complete. However, the complete chains that constitute the boundary features contain only the geographic entity codes and address ranges relevant to each county-based TIGER/Line[®] file. The geographic entity codes are blanked out on the outside edge of the county, even though some of these fields must normally have a non-blank code. The TIGER/Line[®] file identifies these complete chains with a 1-character, single-side segment flag in the SIDE1 field of Record Type 1.

When combining several TIGER/Line[®] files to form a state or regional data set, the data user will need to eliminate duplicate boundary lines. Because each one of the duplicate boundary complete chains has either the left- or right-side geographic entity codes and address ranges, the elimination process will need to combine the codes and address ranges from both lines.

The same situation applies to the polygon identification codes. Record Type I contains CENIDs and POLYIDs for GT-polygons within the county. If the GT-polygon is in the adjacent county, the CENID and POLYID fields are blank.

Single-Side Flag Record Location

<i>Record Type</i>	<i>Field Name</i>	<i>Description</i>
1	SIDE1	Single-Side Complete Chain Code (flag)

Single-Side Flag Codes

1— The complete chain is a county boundary; either the left or the right side is blank
blank— The complete chain is not a county boundary; neither left nor right side is blank

Census Feature Class Codes (CFCCs)

A census feature class code (CFCC) is used to identify the most noticeable characteristic of a feature. The CFCC is applied only once to a chain or landmark with preference given to classifications that cover features that are visible to an observer and a part of the ground transportation network. Thus, a road that also is the boundary of a town would have a CFCC describing its road characteristics, not its boundary characteristics.

The CFCC, as used in the TIGER/Line[®] files, is a three-character code. The first character is a letter describing the feature class; the second character is a number describing the major category; and the third character is a number describing the minor category.

Feature Class A, Road

The definition of a divided highway has been the source of considerable discussion. Earlier specifications have defined a divided road as having

“... opposing traffic lanes that are physically separated by a median strip no less than 70 feet wide in former GBF/DIME areas or no less than 200 feet wide in non-GBF/DIME areas.” This definition caused confusion in the proper coding of interstates having narrow medians. To clarify the situation, the Census Bureau now uses the term *divided* to refer to a road with opposing traffic lanes separated by any size median, and *separated* to refer to lanes that are represented in the Census TIGER® data base as two distinct complete chains. Earlier operations may have depicted widely separated lanes as a single line in the data base or created separate lines when the median was small, depending on the available source used during the update. See the list of anomalies in the *Introduction* chapter.

The term, *rail line in center*, indicates that a rail line shares the road right-of-way. The rail line may follow the center of the road or be directly next to the road; representation is dependent upon the available source used during the update. The rail line can represent a railroad, a street carline, or other carline.

Primary Highway With Limited Access Interstate highways and some toll highways are in this category (A1) and are distinguished by the presence of interchanges. These highways are accessed by way of ramps and have multiple lanes of traffic. The opposing traffic lanes are divided by a median strip. The TIGER/Line® files may depict these opposing traffic lanes as two distinct lines in which case, the road is called *separated*.

CFCC	Description
A11	Primary road with limited access or interstate highway, unseparated
A12	Primary road with limited access or interstate highway, unseparated, in tunnel
A13	Primary road with limited access or interstate highway, unseparated, underpassing
A14	Primary road with limited access or interstate highway, unseparated, with rail line in center
A15	Primary road with limited access or interstate highway, separated
A16	Primary road with limited access or interstate highway, separated, in tunnel
A17	Primary road with limited access or interstate highway, separated, underpassing
A18	Primary road with limited access or interstate highway, separated, with rail line in center

Primary Road Without Limited Access This category (A2) includes nationally and regionally important highways that do not have limited access as required by category A1. It consists mainly of US highways, but may include some state highways and county highways that connect cities and larger towns. A road in this category must be hard-surface (concrete or asphalt). It has intersections with other roads, may be divided or undivided, and have multi-lane or single-lane characteristics.

CFCC	Description
A21	Primary road without limited access, US highways, unseparated
A22	Primary road without limited access, US highways, unseparated, in tunnel
A23	Primary road without limited access, US highways, unseparated, underpassing
A24	Primary road without limited access, US highways, unseparated, with rail line in center
A25	Primary road without limited access, US highways, separated
A26	Primary road without limited access, US highways, separated, in tunnel
A27	Primary road without limited access, US highways, separated, underpassing
A28	Primary road without limited access, US highways, separated, with rail line in center

Secondary and Connecting Road This category (A3) includes mostly state highways, but may include some county highways that connect smaller towns, subdivisions, and neighborhoods. The roads in this category generally are smaller than roads in Category A2, must be hard-surface (concrete or asphalt), and are usually undivided with single-lane characteristics. These roads usually have a local name along with a route number and intersect with many other roads and driveways.

CFCC	Description
A31	Secondary and connecting road, state highways, unseparated
A32	Secondary and connecting road, state highways, unseparated, in tunnel
A33	Secondary and connecting road, state highways, unseparated, underpassing
A34	Secondary and connecting road, state highways, unseparated, with rail line in center
A35	Secondary and connecting road, state highways, separated
A36	Secondary and connecting road, state highways, separated, in tunnel
A37	Secondary and connecting road, state and county highways, separated, underpassing
A38	Secondary and connecting road, state and county highway, separated, with rail line in center

Local, Neighborhood, and Rural Road A road in this category (A4) is used for local traffic and usually has a single lane of traffic in each direction. In an urban area, this is a neighborhood road and street that is not a thoroughfare belonging in categories A2 or A3. In a rural area, this is a short-distance road connecting the smallest towns; the road may or may not have a state or county route number. Scenic park roads, unimproved or unpaved roads, and industrial roads are included in this category. Most roads in the Nation are classified as A4 roads.

CFCC	Description
A41	Local, neighborhood, and rural road, city street, unseparated
A42	Local, neighborhood, and rural road, city street, unseparated, in tunnel
A43	Local, neighborhood, and rural road, city street, unseparated, underpassing
A44	Local, neighborhood, and rural road, city street, unseparated, with rail line in center
A45	Local, neighborhood, and rural road, city street, separated
A46	Local, neighborhood, and rural road, city street, separated, in tunnel
A47	Local, neighborhood, and rural road, city street, separated, underpassing
A48	Local, neighborhood, and rural road, city street, separated, with rail line in center

Vehicular Trail A road in this category(A5) is usable only by four-wheel drive vehicles, is usually a one-lane dirt trail, and is found almost exclusively in very rural areas. Sometimes the road is called a fire road or logging road and may include an abandoned railroad grade where the tracks have been removed. Minor, unpaved roads usable by ordinary cars and trucks belong in category A4, not A5.

CFCC	Description
A51	Vehicular trail, road passable only by 4WD vehicle, unseparated
A52	Vehicular trail, road passable only by 4WD vehicle, unseparated, in tunnel
A53	Vehicular trail, road passable only by 4WD vehicle, unseparated, underpassing

Road with Special Characteristics This category (A6) includes roads, portions of a road, intersections of a road, or the ends of a road that are parts of the vehicular highway system and have separately identifiable characteristics.

CFCC	Description
A60	Special road feature, major category used when the minor category could not be determined
A61	Cul-de-sac, the closed end of a road that forms a loop or turn-around

Road with Special Characteristics (*cont.*)

CFCC	Description
A62	Traffic circle, the portion of a road or intersection of roads forming a roundabout
A63	Access ramp, the portion of a road that forms a cloverleaf or limited-access interchange
A64	Service drive, the road or portion of a road that provides access to businesses, facilities, and rest areas along a limited-access highway; this frontage road may intersect other roads and be named
A65	Ferry crossing, the representation of a route over water that connects roads on opposite shores; used by ships carrying automobiles or people

Road as Other Thoroughfare A road in this category (A7) is not part of the vehicular highway system. It is used by bicyclists or pedestrians, and is typically inaccessible to mainstream motor traffic except for private-owner and service vehicles. This category includes foot and hiking trails located on park and forest land, as well as stairs or walkways that follow a road right-of-way and have names similar to road names.

CFCC	Description
A70	Other thoroughfare, major category used when the minor category could not be determined
A71	Walkway or trail for pedestrians, usually unnamed
A72	Stairway, stepped road for pedestrians, usually unnamed
A73	Alley, road for service vehicles, usually unnamed, located at the rear of buildings and property
A74	Driveway or service road, usually privately owned and unnamed, used as access to residences, trailer parks, and apartment complexes, or as access to logging areas, oil rigs, ranches, farms, and park lands

Feature Class B, Railroad

Railroad With Major Category Unknown Source materials do not allow determination of the major railroad category. Major Category Unknown should not, under most circumstances, be used since the source materials usually provide enough information to determine the major category.

CFCC	Description
B01	Railroad track, not in tunnel or underpassing; major category used alone when the minor category could not be determined
B02	Railroad track, in tunnel
B03	Railroad track, underpassing

Railroad Main Line A railroad in this category is the primary track that provides service between destinations. A main line track often carries the name of the owning and operating railroad company.

CFCC	Description
B11	Railroad main track, not in tunnel or underpassing
B12	Railroad main track, in tunnel
B13	Railroad main track, underpassing

Railroad Spur A railroad in this category is the track that leaves the main track, ending in an industrial park, factory, or warehouse area, or forming a siding along the main track.

CFCC	Description
B21	Railroad spur track, not in tunnel or underpassing
B22	Railroad spur track, in tunnel
B23	Railroad spur track, underpassing

Railroad Yard A railroad yard track has parallel tracks that form a working area for the railroad company. Train cars and engines are repaired, switched, and dispatched from a yard.

CFCC	Description
B31	Railroad yard track, not in tunnel or underpassing
B32	Railroad yard track, in tunnel
B33	Railroad yard track, underpassing

Railroad with Special Characteristics A railroad or portions of a railroad track that are parts of the railroad system and have separately identifiable characteristics.

CFCC	Description
B40	Railroad ferry crossing, the representation of a route over water used by ships carrying train cars to connecting railroads on opposite shores. These are primarily located on the Great Lakes.

Railroad as Other Thoroughfare A railroad that is not part of the railroad system. This category is for a specialized rail line or railway that is typically inaccessible to mainstream railroad traffic.

CFCC	Description
B50	Other rail line; major category used alone when the minor category could not be determined
B51	Carline, a track for street cars, trolleys, and other mass transit rail systems; used when the carline is not part of the road right-of-way

Railroad as Other Thoroughfare (cont.)

CFCC	Description
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B52	Cog railroad, incline railway, or logging tram
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Feature Class C, Miscellaneous Ground Transportation

Miscellaneous Ground Transportation With Category Unknown Source materials do not allow determination of the miscellaneous ground transportation category. Category Unknown should not, under most circumstances, be used since the source materials usually provide enough information to determine the major category.

CFCC	Description
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C00	Miscellaneous ground transportation, not road or railroad; major and minor categories unknown
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Pipeline Enclosed pipe, carrying fluid or slurry, situated above ground, or in special conditions, below ground when marked by a cleared right-of-way and signage.

CFCC	Description
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C10	Pipeline; major category used alone
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Power Transmission Line High voltage electrical line, on towers, situated on cleared right-of-way.

CFCC	Description
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C20	Power transmission line; major category used alone
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Miscellaneous Ground Transportation With Special Characteristics

A portion of a ground transportation system that has separately identifiable characteristics. This category is for specialized transportation, usually confined to a local area, that is separate from other ground transportation.

CFCC	Description
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C30	Other ground transportation that is not a pipeline or a power transmission line; major category used alone when minor category could not be determined
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C31	Aerial tramway, monorail, or ski lift
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Feature Class D, Landmark

Landmark is the general name given to a cartographic (or locational) landmark, a land-use area, and a key geographic location. A cartographic landmark is identified for use by an enumerator while working in the

field. A land-use area is identified in order to minimize enumeration efforts in uninhabited areas or areas where human access is restricted. A key geographic location is identified in order to more accurately geocode and enumerate a place of work or residence.

Landmark With Category Unknown Source materials do not allow determination of the landmark category. Category Unknown should not, under most circumstances, be used since the source materials usually provide enough information to determine the major category.

CFCC	Description
D00	Landmark; major and minor categories unknown

Military Installation Base, yard, or depot used by any of the armed forces or the Coast Guard

CFCC	Description
D10	Military installation or reservation; major category used alone

Multihousehold or Transient Quarters

CFCC	Description
D20	Multihousehold or transient quarters; major category used alone when the minor category could not be determined
D21	Apartment building or complex
D22	Rooming or boarding house
D23	Trailer court or mobile home park
D24	Marina
D25	Crew-of-vessel area
D26	Housing facility for workers
D27	Hotel, motel, resort, spa, YMCA, or YWCA
D28	Campground
D29	Shelter or mission

Custodial Facility This category includes institutions that have personnel such as guards, nurses, and caretakers to preserve the welfare of those individuals resident in the facility.

CFCC	Description
D30	Custodial facility; major category used alone when the minor category could not be determined
D31	Hospital
D32	Halfway house
D33	Nursing home, retirement home, or home for the aged

Educational or Religious Institution

CFCC	Description
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D34	County home or poor farm
D35	Orphanage
D36	Jail or detention center
D37	Federal penitentiary, state prison, or prison farm
D40	Educational or religious institution; major category used alone when the minor category could not be determined
D41	Sorority or fraternity
D42	Convent or monastery
D43	Educational institution, including academy, school, college, and university
D44	Religious institution, including church, synagogue, seminary, temple, and mosque

Transportation Terminal The facility where transportation equipment is stored, the destination for travel on the transportation system, or the intermodal connection facility between transportation systems.

CFCC	Description
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D50	Transportation terminal; major category used alone when the minor category could not be determined
D51	Airport or airfield
D52	Train station
D53	Bus terminal
D54	Marine terminal
D55	Seaplane anchorage

Employment Center This category includes locations with high-density employment.

CFCC	Description
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D60	Employment center; major category used alone when the minor category could not be determined
D61	Shopping center or major retail center
D62	Industrial building or industrial park
D63	Office building or office park
D64	Amusement center
D65	Government center
D66	Other employment center

Tower

CFCC	Description
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D70	Tower; major category used alone when minor category could not be determined
D71	Lookout tower

Open Space This category contains areas of open space with no inhabitants, or with inhabitants restricted to known sites within the area.

CFCC Description

D80	Open space; major category used alone when the minor category could not be determined
D81	Golf course
D82	Cemetery
D83	National Park Service land
D84	National forest or other Federal land
D85	State or local park or forest

Special Purpose Landmark This category includes landmarks not otherwise classified.

CFCC Description

D90	Special purpose landmark; major category used alone when the minor category could not be determined
D91	Post office box-only ZIP Code® location (for these ZIP Codes®, the USPS provides only post office box service, not street delivery)
D92	Urbanizacion, an identifiable community development in Puerto Rico

Feature Class E, Physical Feature

Physical Feature With Category Unknown Source materials do not allow determination of the physical feature category. Major Category Unknown should not, under most circumstances, be used since the source materials usually provide enough information to determine the major category.

CFCC Description

E00	Physical feature, tangible but not transportation or hydrographic; major and minor categories unknown
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Fence This category describes a fence that separates property. For example, a fence around a military reservation or prison separates the reservation from civilian land. Thus, a fence line is a property line marked by a fence.

CFCC Description

E10	Fence line locating a visible and permanent fence between separately identified property
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Topographic Feature This category refers to topographical features that may be used as boundaries or as a reference for an area. The Census TIGER® data base contains topographic features used to define the

limits of statistical entities in locations where no other visible feature can be identified.

CFCC	Description
E20	Topographic feature; major category used when the minor category could not be determined
E21	Ridge line, the line of highest elevation of a linear mountain
E22	Mountain peak, the point of highest elevation of a mountain
E23	Island, identified by name

Feature Class F, Nonvisible Features

Nonvisible features are used to delimit tabulation entities, property areas, and legal and administrative entities. The Census Bureau separately identifies nonvisible boundaries only when they do not follow a visible feature such as a road, stream, or ridge line.

Nonvisible Boundary With Classification Unknown or Not Elsewhere Classified

CFCC	Description
F00	Nonvisible boundary; major and minor categories unknown

Nonvisible Legal or Administrative Boundary

CFCC	Description
F10	Nonvisible jurisdictional boundary of a legal or administrative entity; major category used when the minor category could not be determined
F11	Offset boundary of a legal or administrative entity
F12	Corridor boundary of a legal or administrative entity
F13	Interpolated boundary of a legal or administrative entity used for closure through hydrological areas
F14	Superseded legal or administrative boundary
F15	Superseded legal or administrative boundary, corrected through post census process
F16	Superseded legal or administrative boundary, current at the time of the 1992 Economic Census
F17	Nonvisible State Legislative District boundary
F18	Nonvisible Congressional District boundary

Nonvisible Features for Data Base Topology This category contains various types of nonvisible lines used to maintain the topology in the Census TIGER® data base.

CFCC	Description
F20	Nonvisible feature for data base topology; major category used when the minor category could not be determined

Nonvisible Features for Data Base Topology (cont.)

CFCC	Description
F21	Automated feature extension to lengthen existing physical feature
F22	Irregular feature extension, determined manually, to lengthen existing physical feature
F23	Closure extension to complete data base topological closure between extremely close features (used to close small gaps between complete chains and create polygons to improve block labeling on cartographic products)
F24	Nonvisible separation line used with offset and corridor boundaries
F25	Nonvisible centerline of area enclosed by corridor boundary

Point-to-Point Line

CFCC	Description
F30	Point-to-point line, follows a line of sight and should not cross any visible feature; for example, from the end of a road to a mountain peak.

Property Line

CFCC	Description
F40	Property line, nonvisible boundary of either public or private lands, e.g., a park boundary

ZIP Code® Boundary

CFCC	Description
F50	ZIP Code® boundary, reserved for future use in delineating ZIP Code® Tabulation Areas

Map Edge

CFCC	Description
F60	Map edge, now removed, used during data base creation

Nonvisible Statistical Boundary

CFCC	Description
F70	Statistical boundary; major category used when the minor category could not be determined
F71	1980 statistical boundary
F72	1990 statistical boundary; used to hold collection and tabulation census block boundaries not represented by existing physical features
F73	Internal Census Bureau use
F74	1990 statistical boundary; used to hold a tabulation census block boundary not represented by an existing physical feature

Nonvisible Other Tabulation Boundary

CFCC	Description
F80	Nonvisible other tabulation boundary; major category used when the minor category could not be determined
F81	School district boundary
F82	Internal Census Bureau use
F83	Census 2000 collection block boundary; used to hold Census 2000 collection block boundaries not represented by existing physical features
F84	Census 2000 statistical area boundary; used to hold Census 2000 statistical area boundary not represented by existing physical features
F85	Census 2000 tabulation block boundary; used to hold Census 2000 tabulation block boundaries not represented by existing physical features
F86	Internal Census Bureau use
F87	Internal Census Bureau use

Feature Class G, Census Bureau Usage

The Census Bureau uses this feature class for internal programs.

Feature Class H, Hydrography

Basic Hydrography This category includes shorelines of all water regardless of the classification of the water itself.

CFCC	Description
H00	Water feature, classification unknown or not elsewhere classified
H01	Shoreline of perennial water feature
H02	Shoreline of intermittent water feature

Naturally Flowing Water Features

CFCC	Description
H10	Stream; major category used when the minor category could not be determined
H11	Perennial stream or river
H12	Intermittent stream, river, or wash
H13	Braided stream or river

Man-Made Channel to Transport Water These features are used for purposes such as transportation, irrigation, or navigation.

CFCC	Description
H20	Canal, ditch, or aqueduct; major category used when the minor category could not be determined
H21	Perennial canal, ditch, or aqueduct

Man-Made Channel to Transport Water *(cont.)*

CFCC	Description
H22	Intermittent canal, ditch, or aqueduct

Inland Body of Water

CFCC	Description
H30	Lake or pond; major category used when the minor category could not be determined
H31	Perennial lake or pond
H32	Intermittent lake or pond

Man-Made Body of Water

CFCC	Description
H40	Reservoir; major category used when the minor category could not be determined
H41	Perennial reservoir
H42	Intermittent reservoir

Seaward Body of Water

CFCC	Description
H50	Bay, estuary, gulf, sound, sea, or ocean; major category used when the minor category could not be determined
H51	Bay, estuary, gulf, or sound
H53	Sea or ocean

Body of Water in a Man-Made Excavation

CFCC	Description
H60	Gravel pit or quarry filled with water

Nonvisible Definition Between Water Bodies

The Census Bureau digitizes nonvisible definition boundaries to separate named water areas; for instance, an artificial boundary is drawn to separate a named river from the connecting bay.

CFCC	Description
H70	Nonvisible water area definition boundary; used to separate named water areas and as the major category when the minor category could not be determined
H71	USGS closure line; used as a maritime shoreline
H72	Census water center line; computed to use as a median positional boundary
H73	Census water boundary, international in waterways or at 12-mile limit; used as an area measurement line

Nonvisible Definition Between Water Bodies (*cont.*)

CFCC	Description
H74	Census water boundary separating inland from coastal or Great Lakes; used as an area measurement line
H75	Census water boundary separating coastal from territorial at 3-mile limit; used as an area measurement line

Special Water Feature Includes area covered by glaciers or snow fields.

CFCC	Description
H80	Special water feature; major category used when the minor category could not be determined
H81	Glacier

Feature Class X, Not Yet Classified

Classification Unknown or Not Elsewhere Classified

CFCC	Description
X00	Feature not yet classified

All complete chains, landmarks, and key geographic locations have a code representing their census feature class. Only those GT-polygons associated with an area landmark have a CFCC. Most CFCCs in the feature classification scheme apply only to complete chains. In a few instances, the same feature code may apply to complete chains as well as to point and area landmarks.

Only those features required for census operational purposes are classified and inserted into the Census TIGER[®] data base. Therefore, not all features in a county will appear in the TIGER/Line[®] files. Since features are classified with only a single code, a road that also is a boundary will have only the CFCC of a road even though a CFCC for a boundary exists in the classification scheme.

CFCC Record Location

<i>Record Type</i>	<i>Field Name</i>	<i>Description</i>
1	CFCC	Code assigned to the complete chain
7	CFCC	Code assigned to a point or area landmark
9	CFCC	Code assigned to a key geographic location

Points Describing the Complete Chain

The TIGER/Line[®] files describe the spatial/geometric position and shape of a complete chain using shape points and nodes; see the section entitled *Topology* in Chapter 1. Latitude and longitude coordinate fields identify the shape points and nodes. The Census TIGER[®] data base does not support node identification numbers.

Nodes

Nodes are topological objects that mark the end location of each complete chain. Every chain has two nodes, a *start node* and an *end node* (using the Spatial Data Transfer Standard, or SDTS, terminology). Earlier releases of the TIGER/Line[®] files refer to these nodes as the *from node* and the *to node*. The order of the nodes establishes the left and the right sides of the line and sets the sequencing order for the shape points. The node coordinates are stored in Record Type 1.

Shape Points

The Census Bureau uses the term *shape points* to describe the non-topological points that describe the position and shape of a chain. Shape points exist only where required; straight-line complete chains require no shape points. Shape points are associated only with one complete chain and are listed in order from *start node* to *end node*. The TIGER/Line[®] files store shape points in Record Type 2 and link them to the nodes in Record Type 1 using the TLID. The shape points for a chain can fill several Type 2 records.

Coordinates for Nodes and Shape Points

Coordinates are expressed in Federal Information Processing Standard (FIPS) notation, where a positive latitude represents the Northern Hemisphere and a negative longitude represents the Western Hemisphere. All coordinates are expressed as a signed integer with six decimal places of precision implied (see the section, *Positional Accuracy*, in Chapter 5).

<i>Actual</i>	<i>TIGER/Line[®] File</i>
Latitude 15 Deg. S to 72 Deg. N	-15000000 to +72000000
Longitude 64 Deg. W to 131 Deg. E	-64000000 to -180000000 +179999999 to +131000000

For the 48 contiguous states, the District of Columbia, Alaska, Puerto Rico, and the Virgin Islands, the coordinates in the 1995 and 1997 versions of the TIGER/Line[®] files are in the North American Datum of 1983 (NAD83). The coordinate datum for the above areas was NAD27 in all previous versions of the files prior to 1995. Regional datums are used in all versions of the TIGER/Line[®] files for Hawaii and the Island Territories in the Pacific.

Coordinate Values

All nodes have non-zero coordinates within the range specified in the *Coordinates for Nodes and Shape Points* section on the previous page. Shape point coordinates are expressed in the same manner. However, unused Record Type 2 fields are zero-filled and begin with a “+” sign.

Record Locations for Nodes and Shape Point Coordinates

<i>Record Type</i>	<i>Field Name</i>	<i>Description</i>
1	FRLONG	Start Longitude
1	FRLAT	Start Latitude
1	TOLONG	End Longitude
1	TOLAT	End Latitude
2	LONG1	Point 1, Longitude
2	LAT1	Point 1, Latitude
2	LONG2	Point 2, Longitude
2	LAT2	Point 2, Latitude
2	LONG3	Point 3, Longitude
2	LAT3	Point 3, Latitude
⋮	⋮	⋮
2	LONG10	Point 10, Longitude
2	LAT10	Point 10, Latitude

Record Linkages/Feature Chaining

Plotting a complete chain requires using the nodes from Record Type 1 and all of the shape point records in Record Type 2 with the same TLID, if any. Plot the start node first, then search Record Type 2 for any matching records. If there is a match, the record will contain from 1 to 10 shape points. If all 10-point fields are filled with non-zero values, there may be an additional matching Type 2 record. Type 2 records are not sorted by TLID, but all records with the same TLID should appear together in

sequence by the record sequence number (RTSQ). Plot the shape points from all Type 2 records and end the complete chain by plotting the end node.

Street features may consist of multiple complete chains that are sequentially linked together. Linking all of the features with the same name requires the extraction of all Type 1 and Type 2 records with the same feature identifiers in Record Types 1 and 5.

Boundary generation requires the extraction of all features that have different left and right geographic codes. The placement of the complete chains into a boundary-ring sequence requires a procedure to match the end of one complete chain to the beginning or end of the next complete chain. The complete chains will probably not have the same *to-from* or *start-end* orientation down the length of the street or boundary. Therefore, the procedure must reverse the order of the nodes and shape points that form some complete chains to achieve a correct and consistent sequence of nodes and shape points. Since the nodes that identify the ends of the complete chains do not have an identification number, the procedure must match the nodes based on the latitude and longitude coordinates. This might facilitate the match by combining the coordinates into a single peano key code composed of alternating latitude and longitude digits. Sorting nodes using the peano key will cluster nodes that are spatially close together.

Polygon Features

The TIGER/Line[®] files contain identification and geographic codes for each GT-polygon in the Census TIGER[®] data base. These GT-polygons are the smallest areas identified in the TIGER/Line[®] files. Geographic entities and area landmarks have specific identification codes and form more complex polygons. The TIGER/Line[®] files link these features to GT-polygons, but do not directly identify the more complex polygons.

GT-polygons are building blocks that form features. They are not features and do not have their own feature name or CFCC. However, GT-polygons may be a part of many area landmark features that have their own feature name and CFCC.

GT-polygons have unique GT-polygon identification codes (CENID and POLYID), a set of geographic entity codes, and an internal point location. Refer to Chapter 2 for more information on GT-polygon identification codes and Chapter 4 for a description of the geographic entities in the TIGER/Line[®] files.

Information and record linkage keys for GT-polygons are distributed over several record types:

- Record Type P — provides the GT-polygon internal point location
- Record Type A — provides the 1990 census geographic entity codes and areas
- Record Type 8 — links GT-polygons to area landmarks
- Record Type 9 — links GT-polygons to key geographic location features
- Record Type I — links GT-polygons to complete chains
- Record Type S — provides current geographic entity codes and areas

Updates to the Census TIGER[®] data base include new street and boundary complete chains that create new GT-polygons. Thus, each version of the TIGER/Line[®] files will have a single, unique set of GT-polygons, each with a corresponding Record Type A, S, and P. The CENID and POLYID identification codes link records together, but are not permanent GT-polygon identification codes.

Geographic Entity Codes

Geographic entity codes can be attributes of a set of polygons, a complete chain, or both. Refer to Chapter 6 for the data dictionary that describes the record type fields and to Chapter 4 for descriptions of geographic areas.

Internal Points

The internal point is a point location within each GT-polygon that is unique to that GT-polygon. The TIGER/Line[®] files exclude the internal points from the node-complete chain-polygon topology; do not confuse the internal point with a centroid. In a polygon with an irregular shape, such as a doughnut or crescent shape, the true centroid could fall outside the polygon. Unlike true centroids, the internal points should always fall within the GT-polygon or on the GT-polygon boundary.

Some of the GT-polygons (approximately 400 nationwide) are so small that the internal point may be identical to a point on one of the lines bounding the GT-polygon, or identical to one of the nodes. Depending upon the precision of a particular software or hardware system, the data user may find the internal point outside the correct GT-polygon, or find that a GT-polygon may contain two internal points.

Changes to the shape and location of complete chains forming polygon boundaries will change the polygon internal point coordinates even though the topology of the polygon remains the same. Such changes complicate the matching, using internal point coordinates, of polygons from different versions of the TIGER/Line[®] files.

All internal points have non-zero coordinates. Coordinates are expressed in standard FIPS PUB 70 notation. See the *Coordinates for Nodes and Shape Points* section in this chapter.

GT-Polygon Internal Point Coordinates Record Locations

<i>Record Type</i>	<i>Field Name</i>	<i>Description</i>
P	POLYLONG	Internal point longitude
P	POLYLAT	Internal point latitude

Record Linkages

The topological network of complete chains divides the surface area of geographic entities into GT-polygons. There is a one-to-one relationship between the GT-polygons constructed from Record Types 1 and 2 and those appearing in Record Type P. In constructing the GT-polygons from Record Types 1 and 2, users are cautioned to be sure their software has the necessary coordinate precision and does not snap together complete chains that are merely close.

Record Type I provides a direct link from each complete chain in the TIGER/Line[®] file to its adjoining GT-polygons. It contains both the TLID and the polygon identification codes for each side of the GT-polygon. Record Type I facilitates the transfer of polygon geographic codes to the complete chain, but also provides the link back from polygon to complete chain. In this case, finding all complete chains associated with

a GT-polygon is more difficult. The procedure involves searching every Type I record to locate all instances where a CENID and POLYID appear on either the left or the right side of a complete chain.

Area landmarks also must link to the GT-polygons in order to establish their geographic location. Record Type 8 provides the link from GT-polygon to area landmark. See the *Area Landmark Locations* section in this chapter.

Landmark Features

The Census Bureau includes landmarks in the Census TIGER® data base for locating special features and to help enumerators during field operations. Some of the more common landmark types include airports, cemeteries, parks, and educational facilities.

The Census Bureau added landmark features on an as-needed-basis and made no attempt to ensure that all instances of a particular feature were included. The absence of a landmark does not mean that the living quarters, e.g., hospitals and group quarters associated with the landmark were excluded from the 1990 enumeration. The address list used for the census was maintained apart from the landmark data. Landmarks with a ZIP Code® and an address are called key geographic locations (KGLs).

A landmark can be either a point, line, or area type. In some cases, the Census TIGER® data base permits a choice of types. For instance, an airport or airfield might appear as a point, line, or area; the approach depends on the size of the feature and the depiction of the feature in the source document.

Line features such as airfields could appear as one or more complete chains; they are not identified in the landmark record types. See the *Point, Line, and Area Landmark CFCCs* section in this chapter to identify the possible codes that could appear as complete chains.

In addition to landmark data, the TIGER/Line® files contain the CFCCs and names for bodies of water including ponds, lakes, oceans, and the area covered by large streams represented as double-line drainage. These

water areas have 1990 census block numbers ending in 99. See Chapter 4 for a complete description of census blocks covering land and water.

Landmark and water features can overlap. The most common situation is a park or other special land-use feature that includes a lake or pond. In this case, the GT-polygon covered by the lake or pond belongs to a water landmark feature and a park landmark feature. Other kinds of landmarks can overlap as well. Area landmarks can contain point landmarks; these are not linked in the TIGER/Line® files.

Record Type 7 contains point and area landmarks. Most water areas are identified as an area landmark whether named or not. The other landmarks may be identified only by a census feature class code and may not have a name. During the extraction of this data, the Census Bureau assigned a temporary landmark identification number (LAND) to each landmark record. Record Type 8 uses the LAND to link the area landmark records in Record Type 7 to the GT-polygons. Record Type 7 and Record Type 8 exist only when the county file contains landmark features or water features. Record Type 9 contains the KGLs in the Census TIGER® data base. The KGLs are linked by the CENID and POLYID to the GT-polygons.

Point, Line, and Area Landmark CFCCs

All landmarks, including KGLs, have a CFCC. In the Census TIGER® data base the CFCCs of the complete chains forming the polygon boundary are independent of the CFCCs assigned to the area landmark or the water feature filling the polygon.

Landmark CFCC Record Locations

<i>Record Type</i>	<i>Field Name</i>	<i>Description</i>
7	CFCC	Code assigned to point and area landmarks
9	CFCC	Code assigned to key geographic location

Landmark CFCC Codes

<i>CFCC</i>	<i>Description</i>	<i>Point</i>	<i>Line</i>	<i>Area</i>
D00	Landmark feature, classification unknown, or not elsewhere classified	P	L	A

<i>CFCC</i>	<i>Description</i>	<i>Point</i>	<i>Line</i>	<i>Area</i>
D10	Military installation	P	-	A
D20	Multihousehold and transient quarters	P	-	A
D21	Apartment building or complex	P	-	A
D22	Rooming or boarding house	P	-	-
D23	Trailer court or mobile home park	P	-	A
D24	Marina	P	-	A
D25	Crew-of-vessel area		-	A
D26	Housing facility for workers	P	-	A
D27	Hotel, motel, resort, spa, YMCA, or YWCA	P	-	A
D28	Campground	P	-	A
D29	Shelter or mission	P	-	A
D30	Custodial facility	P	-	A
D31	Hospital	P	-	A
D32	Halfway house	P		
D33	Nursing home, retirement home, or home for the aged	P	-	A
D34	County home or poor farm	P	-	A
D35	Orphanage	P	-	A
D36	Jail or detention center	P	-	A
D37	Federal penitentiary, state prison, or prison farm	P	-	A
D40	Educational or religious institution	P	-	A
D41	Sorority or fraternity	P	-	-
D42	Convent or monastery	P	-	A
D43	Educational institution	P	-	A
D44	Religious institution	P	-	A
D50	Transportation terminal	P	L	A
D51	Airport or airfield	P	L	A
D52	Train station	P	-	A
D53	Bus terminal	P	-	A
D54	Marine terminal	P	-	A
D55	Seaplane anchorage	P	-	A
D60	Employment center	P	-	A
D61	Shopping center or major retail center	P	-	A
D62	Industrial building or industrial park	P	-	A
D63	Office building or office park	P	-	A
D64	Amusement center	P	-	A
D65	Government center	P	-	A
D66	Other employment center	P	-	A

<i>CFCC</i>	<i>Description</i>	<i>Point</i>	<i>Line</i>	<i>Area</i>
D70	Tower	P	–	–
D71	Lookout tower	P	–	–
D80	Open space	P	–	A
D81	Golf course	P	–	A
D82	Cemetery	P	–	A
D83	National Park Service area	P	–	A
D84	National forest or other federal land	P	–	A
D85	State or local park or forest	P	–	A
D90	Special purpose landmark	P	–	A
D91	Post office box ZIP Code [®]	P	–	A
D92	<i>Urbanizacion</i> , an identifiable community development in Puerto Rico	P	–	A
H00	Water feature, classification unknown, or not elsewhere classified	P	L	A
H10	Stream	–	L	A
H11	Perennial stream or river	–	L	A
H12	Intermittent stream, river, or wash	–	L	A
H13	Braided stream or river	–	L	A
H20	Canal, ditch, or aqueduct	–	L	A
H21	Perennial canal, ditch, or aqueduct	–	L	A
H22	Intermittent canal, ditch, or aqueduct	–	L	A
H30	Lake or pond	–	–	A
H31	Perennial lake or pond	–	–	A
H32	Intermittent lake or pond	–	–	A
H40	Reservoir	–	–	A
H41	Perennial reservoir	–	–	A
H42	Intermittent reservoir	–	–	A
H50	Bay, estuary gulf, sound, sea, or ocean	–	–	A
H51	Bay, estuary gulf, or sound	–	–	A
H53	Sea, or ocean	–	–	A
H60	Gravel pit or quarry filled with water	–	–	A
H80	Special water feature	–	–	A
H81	Glacier	–	–	A

Landmark Feature and KGL Names

The TIGER/Line® files contain an optional 30-character text string used to identify the proper name of the landmark feature or water area. The text string includes upper- and lower-case characters. The feature name may carry an imbedded feature type (e.g., River, Military Reservation, Garden, Park, and Lake). The Census Bureau has not standardized or edited the feature types or names for landmarks in the Census TIGER® data base in all areas.

The Census Bureau does not guarantee that the landmarks or water areas are consistently identified in the TIGER/Line® files. Area landmarks added to the Census TIGER® data base in different update actions with the same name and CFCC will produce separate landmark records in the TIGER/Line® files. The landmark records may contain variant spellings of the feature name or different CFCCs even though they refer to the same feature. These differences could result in the fragmentation of a large landmark. For instance, a water body could have the name Lake Redmond with a CFCC of H31, while another part could have the same name, but a CFCC of H30, and still a third part could have the name York County Reservoir. Because area landmarks can overlap, it is possible, although not likely, for one polygon to belong to several landmarks.

Area landmarks and water area labels can have alternate names. Each feature name will appear as a separate Type 7 record, but each record will have the same LAND. Type 7 Records with the same LAND will have the same landmark or water area label. Each unique combination of primary and alternate names becomes a separate landmark record even though the primary name and the CFCCs match the adjoining landmark features.

The TIGER/Line® files do not show all water bodies as landmark records. Using Record Type 7 (area landmarks) and Record Type 8 (polygons linked to area landmarks) will not necessarily provide all water areas. Record Type 5 contains a water flag (WATER) to identify polygons associated with water bodies. Water bodies are identified with a value of 1 in the WATER field.

Key geographic location names uniquely identify the landmark separately from its street address; for example, Springfield Towers instead of 1605 Main St.

Landmark Feature Record Locations

<i>Record Type</i>	<i>Field Name</i>	<i>Description</i>
7	LANAME	Landmark name
9	KGLNAME	Key geographic location name

Landmark Feature Name Codes The LANAME and KGLNAME field may include any ASCII text string. The fields can be blank where the feature is unnamed.

Point Landmark Locations

The TIGER/Line[®] files identify the location of point landmarks with a single coordinate point. The presence of coordinate data in Record Type 7 distinguishes point landmarks from area landmarks that have blank coordinate fields.

Coordinates Coordinates are expressed in standard FIPS PUB 70 notation. For additional information, see the *Coordinates for Nodes and Shape Points* section in this chapter.

Point Landmark Coordinate Record Locations

<i>Record Type</i>	<i>Field Name</i>	<i>Description</i>
7	LALONG	Longitude
7	LALAT	Latitude

Coordinate Values All point landmarks have non-zero coordinates within the range specified above. The coordinate fields for area landmarks are blank-filled.

Area Landmark Locations

To find the location of each area landmark, link the basic landmark description in Record Type 7 to all of the elementary polygons that belong to the landmark. Record Type 8 serves as a bridge between these two record types. The TIGER/Line[®] files provide a Type 8 record

for each polygon linked to a specific landmark. Polygons belonging to multiple landmarks appear once for each landmark. The TIGER/Line[®] files use the LAND and the polygon identification codes (CENID and POLYID) to actually make the link. See Chapter 2 for a description of the LAND, CENID, and POLYID codes and fields.

Locate the polygons for an area landmark by searching Record Type 8 for all of the CENIDs and POLYIDs with the specified LAND. Record Type 8 is in LAND sort sequence. Once the polygons are linked to the area landmark, use Record Type I to locate the complete chains that form the landmark's polygon boundaries. Record Type I contains a record for all complete chains and identifies the polygons located on either side of the complete chains.

The search procedure must look for all instances of Record Type I and evaluate the left- and right-side polygon identifiers for a possible match. Data users may need to eliminate complete chains that are internal to the polygon and landmark, depending on the application.

KGLs

To find the location of KGLs, link the description in Record Type 9 to the elementary polygon in which the KGL is found. Use the polygon identification codes (CENID and POLYID) to make the link. If the address of the KGL is a street address, use the FEAT field (alternate feature ID code) to link to the feature identifier in Record Type 5.

Chapter 4: Geographic Entities

Overview

The 1998 TIGER/Line[®] files contain the boundaries of legal, administrative, and statistical areas. Some boundaries are those that were in effect as of the tabulation of the 1990 census, while others are updated boundaries.

The legal areas shown in the files are:

- States and their statistical equivalents—1990 and current
- Counties and their statistical equivalents—1990 and current
- Minor civil divisions (MCDs) —1990 and current
- Sub-minor civil divisions (Puerto Rico only)—1990 and current
- Consolidated cities—current only
- Incorporated places—1990 and current
- American Indian reservations (both federally and state-recognized)—1990 and current
- American Indian trust lands—current only
- Alaska Native Regional Corporations—current only
- Congressional districts—current only

The administrative areas shown in the files are:

- Voting districts—1990 only
- School districts—current only
- Traffic analysis zones—current only

The statistical areas included in the files are:

- Census areas (statistical county equivalents in Alaska)—1990 and current
- Census county divisions and unorganized territories (statistical county subdivisions)—1990 and current
- Census designated places (statistical place equivalents)—1990 only
- Place (remainder) entities (statistical place equivalents within consolidated cities)—1990 and current
- American Indian/Alaska Native statistical areas—1990 and current
 - 1) Alaska Native village statistical areas
 - 2) Tribal designated statistical areas
 - 3) Tribal jurisdiction statistical areas
- Census tracts and block numbering areas—1990 only
- Urbanized areas—1990 only
- Census blocks—1990 and Census 2000 collection

- Metropolitan areas:
 - 1) Consolidated metropolitan statistical areas—current only
 - 2) Metropolitan statistical areas—current only
 - 3) Primary metropolitan statistical areas—current only

Geographic entities tabulated by the Census Bureau generally are hierarchical; Figure 4-1 shows the progression of geographic areas from the Nation to the block level. See Appendix F for a count of legal, administrative, and statistical entities.

The TIGER/Line[®] files identify geographic areas the Federal Information Processing Standard (FIPS) codes or, in American Indian/Alaska Native Areas only, Census Bureau-assigned codes. The TIGER/Line[®] files depict geographic areas in two ways:

- The assignment of codes to the left and the right sides of the complete chains (Record Types 1 and 3)
- The identification of codes that belong to each GT-polygon (Record Types A and S)

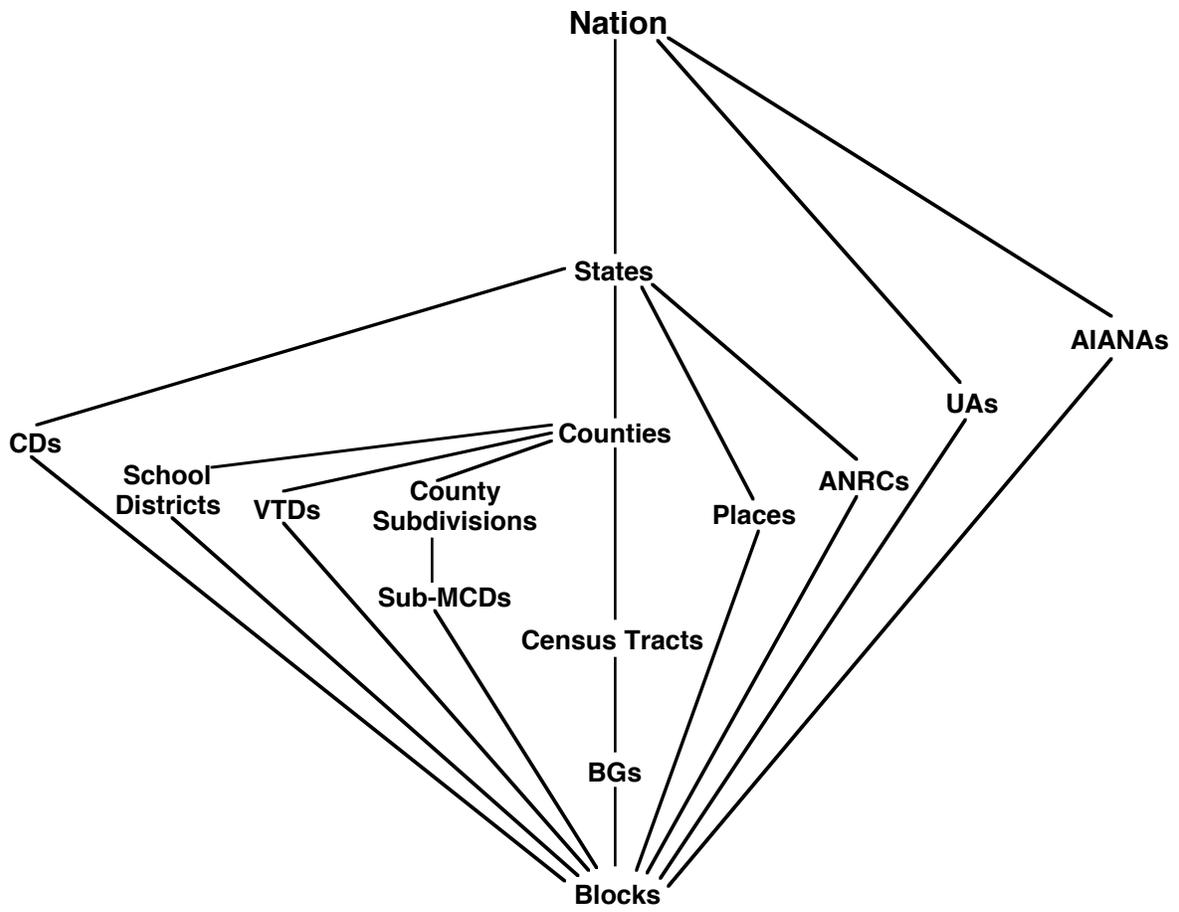
The TIGER/Line[®] files identify some geographic entities in both the complete chain and polygon records for certain boundary vintages. This chapter provides detailed information on the record types and fields for the geographic entities.

Boundary and Area Changes

The boundaries identified as current for some legal areas are updated boundaries collected since 1990 as part of the Census Bureau's Boundary and Annexation Survey, or as part of the 1990 County Quality Review correction process. The boundaries of all states, all counties and their statistical equivalents, all MCDs, and all incorporated places are those that were legally in effect as of the latest Boundary and Annexation Survey (BAS). This may vary by county record or the date of extraction from the Census TIGER[®] data base.

For all other legal areas and nearly all statistical areas, the boundaries shown were those in effect at the time of the 1990 census whether the data are identified as 1990 or current. Because unorganized territories and census designated places occupy the same level of geography as

Figure 4-1 *Hierarchical Relationship of Geographic Entities*



legal MCDs and incorporated places, updates to the legal boundaries may affect the current boundaries for some of these entities, including the elimination of some of the statistical entities. The metropolitan area data that appears on Record Type S are based on the latest available designations by the Office of Management and Budget, and are not the metropolitan areas for which the Census Bureau tabulated data in 1990. The metropolitan area information on Record Type C, however, shows both 1990 and current codes and names. In a few cases, the Census Bureau made statistical area boundary changes in order to correct errors.

Since the release of the 1990 Census TIGER/Line® files, the Census Bureau shifted and reshaped some line features including the lines forming some boundaries. These changes involved the realignment of complete chains associated with a legal or statistical area boundary. The shape and area of the 1990 geographic entities portrayed in the 1995, 1997 and 1998 TIGER/Line® files may differ from earlier TIGER/Line® versions, but the inventory of 1990 census tabulation entities remains the same. Changes in the shape and location of complete chains will change the polygon internal point locations. See the *Internal Points* section in Chapter 3.

Codes for Entities

Appendix A is a list of FIPS state and county codes. A list of valid codes and names for other legal entities does not appear in the documentation for the TIGER/Line® files.

The TIGER/Line® files include Record Type C which lists the geographic codes and names plus some attribute data (FIPS 55 class code, census place description code, and legal, administrative, or statistical area description code; and entity type) for certain entities. The codes and names are identified as 1990, current, or both. Record Type C contains the TIGER/Geographic Name™ files that the Census Bureau produced as a companion to the 1992 TIGER/Line® files. Record Type C also replaces the TIGER Geographic Reference File–Names (GRF-N), 1990.

The documentation and paper or file versions of the FIPS codes are available for sale from the National Technical Information Service (NTIS), US Department of Commerce, 5285 Port Royal Road, Springfield, VA 22161.

The telephone number is (703) 605-6000. The US Geological Survey (USGS) maintains the FIPS 55 codes. Information about FIPS codes is available from USGS's Geographic Names Section at (703) 648-4547. The National Institute of Standards and Technology (NIST) maintains an Internet World Wide Web site of FIPS codes and information. The URL for this site is <http://www.itl.nist.gov/div897/pubs/index.htm>.

The FIPS publications include:

- *FIPS PUB 5-2*, Codes for Identification of States, the District of Columbia and the Outlying Areas of the United States, and Associated Areas
- *FIPS PUB 6-4*, Counties and Equivalent Entities of the United States, Its Possessions, and Associated Areas
- *FIPS PUB 8-5*, Metropolitan Statistical Areas (MSAs)—including CMSAs, PMSAs, and NECMAs
- *FIPS PUB 55-3*, Codes for Named Populated Places, Primary County Divisions, and Other Locational Entities of the United States, Puerto Rico, the Virgin Islands, and the Pacific Island Territories

The Census Bureau uses the codes in FIPS PUB 55-3 to identify both legal and statistical entities for county subdivisions, places, and American Indian/Alaska Native areas. FIPS PUB 55-3 includes many more entity records than those for which the Census Bureau tabulates data. The FIPS 55 codes are state-based. American Indian reservations in more than one state will have a different FIPS 55 code for each state portion of the single reservation.

The 1994, 1995, 1997 and 1998 versions of the TIGER/Line[®] files do not contain the census codes for places, county subdivisions, and sub-MCDs that were available in earlier versions of the TIGER/Line[®] files. A description of the Census Bureau's codes that are assigned to higher-level geographic entities (county subdivisions, sub-minor civil divisions, consolidated cities, and places) appears in the geographic identification coding scheme (GICS) product, TIGER/GICS[®]. The TIGER/GICS[®] contains FIPS and Census Bureau codes, names and attributes, and demographic data for the higher-level geographic entities included in the 1990 census.

Entity Type Codes

Code	Geographic Entity Type
A	Consolidated City
C	County or Equivalent Area
I	American Indian/Alaska Native Area except for Alaska Native Regional Corporation
J	Metropolitan Area
L	Sub-Minor Civil Division
M	County Subdivision
P	Place
S	State or Equivalent Area
U	Urbanized Area
V	Voting District
W	Alaska Native Regional Corporation
3	Unified School District
4	Secondary School District
5	Elementary School District

Geographic Entities

American Indian/Alaska Native Areas (AIANAs)

The AIANAs are represented in the TIGER/Line[®] files by a 5-character numeric FIPS code field, a 4-character numeric census code field, a 2-character numeric Census Alaska Native Regional Corporation code field, and a single alphabetic character American Indian trust land field. The TIGER/Line[®] files use multiple fields to identify a series of legal and statistical AIANAs:

Legal Entities

- *American Indian reservations (AIRs)* are legal entities having boundaries established by treaty, statute, and/or executive or court order over which a federally recognized American Indian tribal group has jurisdiction. The areas identified as American Indian reservations include entities with other designations, such as pueblo, colony, and community. AIRs are identified by representatives of the reservations or tribes.
- *American Indian trust lands* included in the census are the off-reservation lands associated with a specific tribe or a reservation held in trust by the Federal Government. They are identified by representatives of the reservations or tribes. Trust lands may be either tribal (held in trust for the tribe) or individual (held in trust for an individual member of the tribe).

Trust lands are assigned the same codes as the associated reservation. Trust lands not associated with a reservation are assigned codes based on the tribal name. The TIGER/Line[®] files did not previously distinguish between AIRs and trust lands because they shared the same code. Beginning with the 1994 TIGER/Line[®] files, American Indian trust lands are flagged in a separate field (previously the Census ANRC field).

- *Alaska Native Regional Corporations (ANRCs)* are corporate entities established by the Alaska Native Claims Settlement Act (PL 92-203) to conduct business and nonprofit operations for Alaska Natives. The 12 ANRCs have specific boundaries and cover the state of Alaska except for the Annette Islands Reserve (an American Indian reservation).

Statistical Entities

- *Alaska Native village statistical areas (ANVSAs)* are 1990 census statistical areas that delineate the settled area of each Alaska Native village (ANV). ANVs represent tribes, bands, clans, villages, communities, and associations that are recognized pursuant to the Alaska Native Claims Settlement Act (PL 92-203), but do not have legally recognized boundaries. Officials of Alaska Native Regional Corporations (ANRCs) and other knowledgeable officials delineated the 1990 ANVSAs for the Census Bureau for the purpose of presenting census data for these entities.
- *Tribal designated statistical areas (TDSAs)* are geographic areas that were delineated for 1990 census data tabulation purposes by tribal officials of federally and state-recognized tribes outside of Oklahoma. TDSAs do not have a legally defined reservation or associated trust lands. They define areas that contain population under tribal jurisdiction and/or areas for which the tribe provides benefits and services. TDSAs are defined for data presentation purposes only.
- *Tribal jurisdiction statistical areas (TJSAs)* are geographic areas delineated for 1990 census data tabulation purposes in Oklahoma by federally recognized tribes that do not have a legally defined reservation. TJSAs are areas defined only for data presentation purposes. They generally contain American Indian population over which one or more tribal governments have jurisdiction. They replace the single “Historic Areas of Oklahoma” (excluding UAs) recognized for the 1980 census.

AIANA Code Record Locations

<i>Record Type</i>	<i>Field Name</i>	<i>Description</i>
1	FAIRL	FIPS 55 Code (American Indian/Alaska Native Area), Current Left
1	FAIRR	FIPS 55 Code (American Indian/Alaska Native Area), Current Right
1	TRUSTL	American Indian Trust Land Flag, Current Left
1	TRUSTR	American Indian Trust Land Flag, Current Right
3	AIR90L	Census American Indian/Alaska Native Area Code, 1990 Left
3	AIR90R	Census American Indian/Alaska Native Area Code, 1990 Right
3	TRUST90L	American Indian Trust Land Flag, 1990 Left
3	TRUST90R	American Indian Trust Land Flag, 1990 Right
3	AIRL	Census American Indian/Alaska Native Area Code, Current Left
3	AIRR	Census American Indian/Alaska Native Area Code, Current Right
3	FANRCL	FIPS 55 Code (ANRC), Current Left
3	FANRCR	FIPS 55 Code (ANRC), Current Right
A	FAIR	FIPS 55 Code (American Indian/Alaska Native Area), 1990
A	AIR90	Census American Indian/Alaska Native Area Code, 1990
C	ENTITY	Entity Type
C	AIR	Census American Indian/Alaska Native Area Code
C	NAME	Name of Geographic Area
S	FAIR	FIPS 55 Code (American Indian/Alaska Native Area), Current
S	AIR	Census American Indian/Alaska Native Area Code, Current
S	TRUST	American Indian Trust Land Flag, Current
S	ANRC	Census Alaska Native Regional Corporation Code, Current

AIANA Codes Record Type C shows one record for each AIANA entity (except ANRC), by year. Also, refer to FIPS PUB 55-3 or the Census Bureau's TIGER/GICS® for a list of valid codes and entity names. The type of AIANA area can be identified either by the census code or by the FIPS 55 class code on each entity record in Record Type C. The range of census codes allocated to each AIANA and the valid FIPS 55 class code(s) associated with each are as follows:

<i>Type</i>	<i>Census Code Range</i>	<i>Valid FIPS 55 Class</i>
AIR	0001 to 4989	D1, D2, D3, D4, D5
TJSA	5001 to 5989	D6
ANVSA	6001 to 8989	E1, E2, E6
TDSA	9001 to 9589	D6

Block Groups (BGs)

Geographic BGs Block groups are clusters of blocks within the same census tract or BNA; they have the same first digit as their 3-digit 1990 census block numbers. For example, blocks 101, 102, 103,..., 199 in census tract 1210.02 belong to BG 1. BGs never cross county or census tract/BNA boundaries, but may cross the boundaries of county subdivisions, places, UAs, VTDs, congressional districts, and AIANAs. BGs generally contain between 250 and 550 housing units. Each BG usually covers a contiguous area. Each census tract/BNA contains at least one BG. BGs are uniquely numbered within census tract/BNA.

Tabulation BGs Tabulation block groups are geographic BGs split to present data for every unique combination of county subdivision, place, UA, VTD, congressional district, U/R, and AIANA shown in the data tabulation products.

The TIGER/Line[®] files do not have a separate BG data field. Data users can determine the geographic BG by using the first digit of the 1990 census block number in combination with the 1990 state, county, and census tract/BNA number. Users can identify the tabulation BG by using the geographic BG in combination with the codes for the entities listed above. STF 1A and STF 3A present data for both geographic and tabulation BGs.

Block Group Number Record Locations See the section, *Census Blocks*, in this chapter for record locations and field names. The BG is the compilation of all blocks with the same first digit of their block number in a specific 1990 state-county-census tract/BNA combination.

All polygons have a non-blank BG number. The left- and right-side complete chain block numbers should not be blank except where they are located along the outside edge of the county boundary. The TIGER/Line[®] files do not contain codes for areas outside the county file.

BGs have a valid range of 0 through 9. Some BGs beginning with a 0 are in coastal and Great Lakes water. Rather than extending the census tract/BNA boundary into the Great Lakes or out to the three-mile territorial sea limit, the Census Bureau delineated some census tract/BNA boundaries along the shoreline or just offshore. The Census Bureau assigned a default census tract/BNA number of 0000 and block number of 099 to the offshore areas not included in regularly numbered census tract/BNA areas.

Census Blocks

Census blocks usually are small statistical areas bounded on all sides by visible features such as streets, roads, streams, and railroad tracks, and by invisible boundaries such as property lines, legal limits, and short imaginary extensions of streets and roads. 1990 census blocks never cross county or 1990 census tract/BNA boundaries. In rare instances, parts of a 1990 census block may be discontinuous, but all parts of a 1990 tabulation block will be in the same geographic or governmental unit. Blocks are composed of one or more GT-polygons; that is, several GT-polygons can share the same block number. See Figures 4-2 and 4-3.

Census 2000 Collection Blocks Census 2000 uses a set of collection geographic areas for canvassing and administering the census. The collection areas and their hierarchy used in the Census 2000 are different from those used in the 1990 census. Census 2000 collection blocks are unique within collection state and county. The Census 2000 collection blocks generally follow visible features such as roads, rivers, and railroad tracks.

1990 Census Block Numbers 1990 census blocks are numbered uniquely within each 1990 state/county/census tract or BNA. A 1990 census block must be identified by a 3-character basic block number field and a 1-character block suffix field. The suffix field often is blank. The 3-character basic block number identifies the collection block used in the 1990 census field operations. The first digit of the basic 1990 block number identifies the BG.

The Census Bureau refers to the combined basic 1990 collection block number and suffix (if a suffix exists) as the *tabulation* block number. The 1990 tabulation block numbers identified in Record Types 1, 3, A, and S have a 1-character suffix field.

The suffix character is blank for whole 1990 collection blocks that also are tabulation blocks. 1990 block numbers with suffixes usually represent 1990 collection blocks that are split in order to identify separate geographic entities that divide the original block. For example, when a city limit runs through 1990 collection block 101, the portion inside the city may be tabulated in block 101A and the portion outside the city in 1990 block 101B. The suffix letters A and B have no correlation to the location of the 1990 block portion to which they are assigned. In other words, in the example above, the portion of 1990 block 101 inside the city could have been assigned a suffix of B, and the portion outside the city, a suffix of A. There is no limit on the number of parts into which a 1990 block can be split.

Census 2000 Collection Block Numbers For Census 2000, collection blocks are numbered with a four- or five-character identifier. Census 2000 collection blocks are unique within collection state and county; they do not nest within census tract as they did in 1990. To control the Census 2000 collection block numbers during the collection process, the Census Bureau retains the original state and county codes even if the current state and county changed after the original Census 2000 collection blocks were delineated. The collection state and county codes reflect the boundaries of those areas at the time of collection block numbering. To uniquely identify Census 2000 collection blocks, users must take both the collection state and county code file together with the collection block number and suffix fields.

To support its enumeration activities, the Census Bureau assigns a collection block suffix to collection blocks split by road features added to Census TIGER® after the assignment of the Census 2000 collection block numbers. The Census Bureau also assigns collection block suffixes to reflect updated American Indian reservation, American Indian trust land, and military installation boundaries. For those Census 2000 collection blocks that are split, the Census Bureau assigns a suffix to each collection block part.

Figure 4-2 *Geographic Relationships—Small Area Statistical Entities*

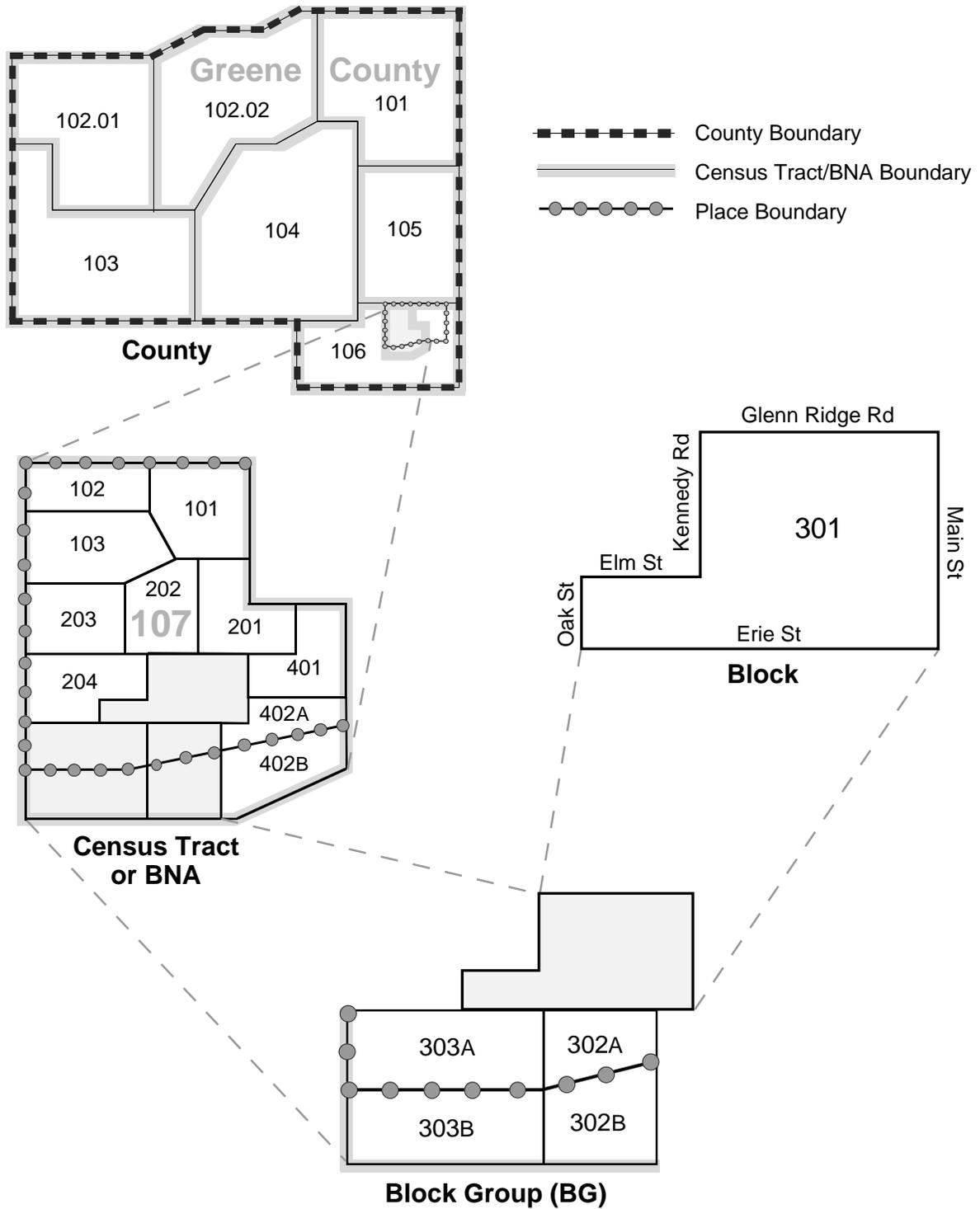
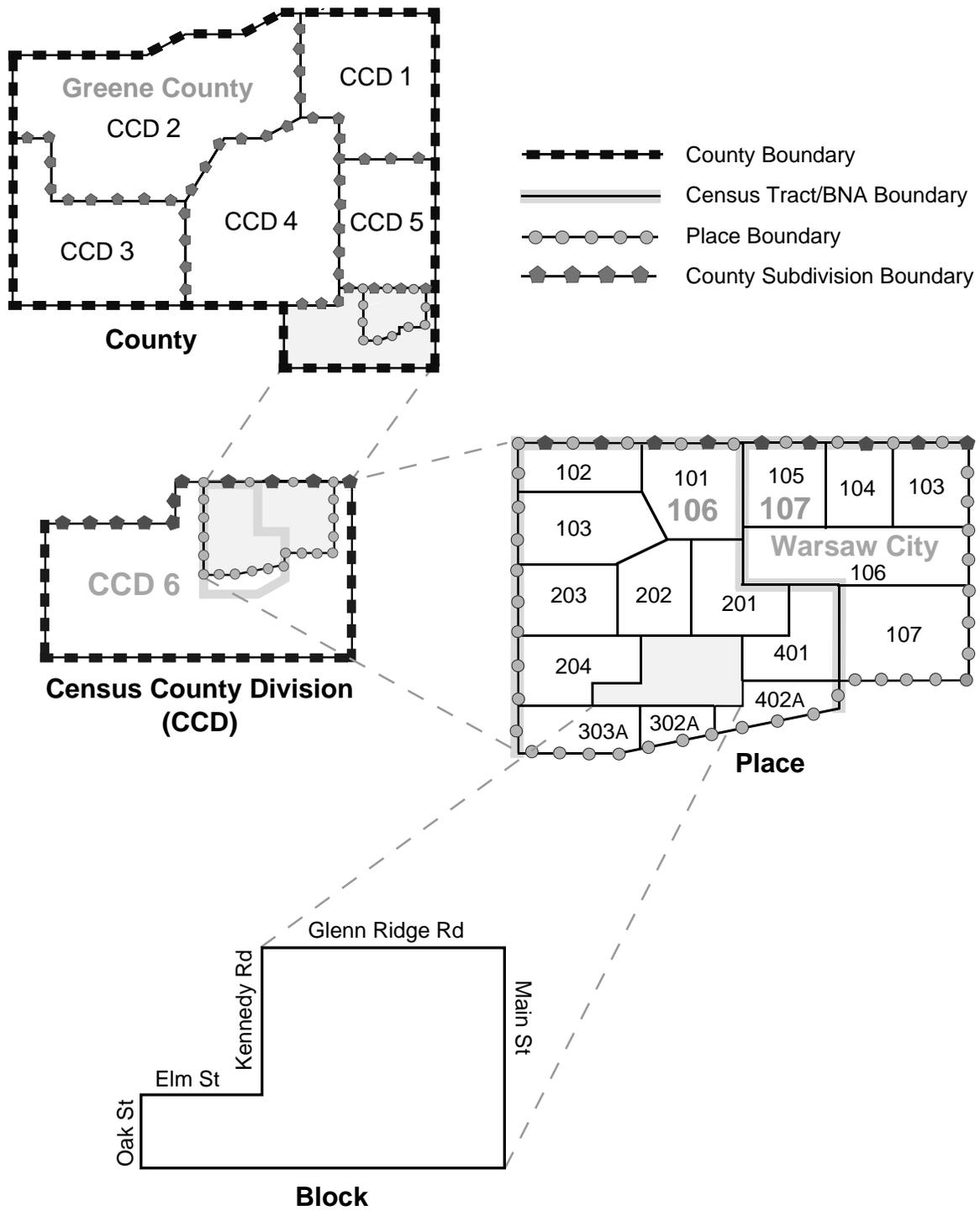


Figure 4-3 *Geographic Relationships—Legal and Statistical Entities*



1990 Census Water Blocks A 3-character basic 1990 block number that ends in 99 signifies water area. As there is only one number ending in 99 within a 1990 BG, many water polygons can have the same 1990 block number. 1990 water blocks have suffixes if parts of the same 1990 block are located in different geographic entities.

Rather than extending the 1990 census tract/BNA boundary into the Great Lakes or out to the three-mile limit, the Census Bureau closed off some 1990 census tract/BNA areas using boundaries along the shoreline or just offshore. The Census Bureau assigned a default 1990 census tract/BNA number of 0000 and 1990 block number of 099 to the offshore areas.

1990 water blocks do not appear in the 1990 census STF files. Census maps and other data files do not display the 1990 block numbers for water areas. The principal purpose for census block numbers assigned to water areas is to identify all areas of the United States and its territories and to allocate the water areas to geographic entities. Water GT-polygons with the same 1990 block number may not be contiguous, but will be in the same geographic area or governmental unit.

Changes to shorelines or boundaries made since the release of the 1990 Census TIGER/Line® files altered or removed 1990 block boundary features between parts of some 1990 water blocks and changed the 1990 block numbers (the BG designator) for those blocks. Because the 1990 water blocks had no population or housing, the tabulation of the 1990 census was unaffected. Some water blocks in the 1990 Census TIGER/Line® files Supplemental CD-ROM may contain census block suffixes that do not match subsequent TIGER/Line® file.

Census 2000 Collection Water Blocks For Census 2000, the Census Bureau is using a different method for identifying the water areas of census blocks than used in the 1990 census. Any water area located completely within the boundaries of a single land block will have the same block number as that land block. Water area that touches more than one land block is assigned a unique collection block number not associated with any adjacent land block. The Census Bureau is assigning collection water block numbers beginning with 9999 or 99999 and preceding in descending order. For example, the collection water block numbers in a county would be 9999, 9998, 9997, and so forth. In some counties it is possible that the number

of land blocks might use enough of the available collection block numbers to reach into 9000 range. For this reason, and because some land blocks include water (ponds and small lakes), no conclusions about whether or not a collection block is all land or all water can be made by looking at the Census 2000 collection block numbers. Data users must use the WATER flag on Record Type S to determine if the GT-polygon is land or water.

Current Geography Record Types 1, 3, A, C, and S identify changes (both codes and boundaries) since the 1990 census tabulation for some geographic entities. These records do not show new block numbers. The Census Bureau continues to conduct its annual Boundary and Annexation Survey to identify changes to the boundaries of legal entities. However, the 1990 block numbers remain for new polygons created by the post-census boundary changes. The Census Bureau will not systematically update block numbering to reflect the current geographic boundaries until it assigns the Census 2000 tabulation block numbers.

Census Block Number Record Locations

<i>Record Type</i>	<i>Field Name</i>	<i>Description</i>
1	BLKL	Census Block Number, 1990 Left
1	BLKR	Census Block Number, 1990 Right
3	BLK90L	Census Block Number, 1990 Left
3	BLK90R	Census Block Number, 1990 Right
A	BLK90	Census Block Number, 1990
S	BLK	Census Block Number, 1990
S	BLKCOL	Census 2000 Collection Block Number
S	BLKSUFCOL	Census 2000 Collection Block Number Suffix

Census Block Codes

1990 land blocks

- BG Number 1 to 9—First character
- 01 to 97—Second and third characters
- Block numbers ending in 98 were not used.

1990 water blocks

- BG Number 0 to 9—First character
- 99—Second and third characters

Census 2000 collection blocks

- 1001 to 9999 or 10001 to 99999

All polygons have a non-blank basic 3-character 1990 census block number. The left- and right-side complete chain block numbers are not blank except where they are located along the outside edge of the county. The TIGER/Line[®] files do not contain geographic codes for the area outside of the county file. The TIGER/Line[®] files identify boundary complete chains by placing a 1 in the single-side segment field in Record Type 1.

1990 Tabulation Block Suffix

- A to Y—Codes for land blocks with a suffix
- A to Y, a to y—Codes for water blocks with a suffix
- Z—Code for blocks assigned for the enumeration of crews-of-vessels
- Examples:
 - 102— Census block with a blank tabulation block suffix (this block has not been split by any tabulation boundary); the tabulation block number is the same as the collection block number
 - 102B— Census block with the tabulation block suffix B

Census 2000 Collection Block Suffix

- A to Z—Codes for Census 2000 collection blocks with a suffix

Census Tracts and Block Numbering Areas (BNAs)

Census Tracts Census tracts are geographic statistical entities within a county (or statistical equivalent of a county), and are defined by local data users. When first established, census tracts should have relatively homogeneous demographic characteristics. Generally, census tracts have a population size between 2,500 and 8,000 people, and average about 4,000 people. The local data users can delineate census tracts for special land uses, such as military installations and American Indian reservations.

BNAs BNAs are statistical areas delineated for the 1990 census by state agencies or the Census Bureau for counties without census tracts. The delineation of BNAs followed the same basic criteria as those for census tracts. Because BNAs appear more often in less populated counties, they may have fewer people than census tracts.

Numbering Census tract numbers have a 4-character basic number field and an optional 2-character suffix number field. In printed reports and on mapping products, the Census Bureau uses a decimal point (.) to separate the basic number from the suffix. However, in the TIGER/Line[®] files and STF data products, the decimal point is implied. The basic number and the suffix appear together in a single 6-character field in Record Types 1, 3, A, and S. A basic number smaller than 1000 will contain leading zeros. Leading zeros are shown on machine-readable products, but are not shown in printed reports and on census maps since leading zeros are not part of the basic number.

The TIGER/Line[®] files use the right-most two characters in the census tract/BNA field for the suffix. These two characters are blank if the census tract/BNA number does not have a suffix. Suffixes smaller than 10 have a leading zero. For example, census tract 0077.01 is shown as 007701 in the TIGER/Line[®] files.

The Census Bureau uses suffixes to help identify census tract changes for comparison purposes. Local data users have an opportunity to review the existing census tracts before each census. If data users split a census tract, the split parts usually retain the basic number, but receive different suffixes. In a few counties, data users approve major changes to, and renumber, the census tracts. Changes to individual census tract boundaries usually do not result in census tract numbering changes.

The Census Bureau documents all changes to census tract boundaries and numbers in the TIGER/Census Tract Comparability[®] File (1980-1990). Data users are cautioned to examine the census tract boundaries or the comparability file before making comparisons between past data and 1990 data.

Boundaries and Boundary Changes Census tract/BNA boundaries generally follow visible physical features and county boundaries. The 1990 census tract or BNA boundary may follow MCD and incorporated place boundaries in New Jersey, New York, Pennsylvania, and the New England States (and occasionally other states) because the boundaries tend to be stable and locally known.

In a few rare instances, a 1990 census tract or BNA may consist of discontinuous areas. These discontinuous areas may occur where the census tracts are coextensive with all or parts of legal entities that are themselves discontinuous. Census tracts were last defined in preparation for the 1990 census. Census tracts/BNAs must nest within a county. New 1990 census tracts/BNAs were created to accommodate updates and corrections to county boundaries following the assignment of block numbers in 1988. This was necessary because existing 1990 census tracts were in place for the 1990 census and could not be shifted. At the request of some local data users, the Census Bureau resolved a number of census tract boundary discrepancies. This explains some of the less populated census tracts and the census tracts with basic numbers or suffixes that are seemingly out of range for the county.

The Census Bureau generally identified the revised 1990 census tracts/BNAs with a unique suffix ranging from .70 to .98 (e.g., 1234.98) so data users could easily determine which census tracts/BNAs were affected. The Census Bureau made these changes after the release of the TIGER/Line[®] Precensus Files, 1990. The census tract boundaries follow legal county boundaries as of January 1, 1990. Because there have been state and/or county boundary changes since 1990, users are cautioned to only use 1990 state and county areas to identify census tracts/BNAs. Census tracts next will be defined for Census 2000.

Relationship to Other Geographic Entities The 1990 census tracts and BNAs represent the same level of geography and share the same field in the TIGER/Line[®] files. Census tracts or BNAs entirely cover a county. A county contains either census tracts or BNAs, but not a combination of both. Census BGs and blocks are uniquely numbered within census tracts and BNAs.

Census Tract/BNA Code Record Locations

<i>Record Type</i>	<i>Field Name</i>	<i>Description</i>
1	CTL	Census Tract Code, 1990 Left
1	CTR	Census Tract Code, 1990 Right
3	CTBNA90L	Census Tract/BNA Code, 1990 Left
3	CTBNA90R	Census Tract/BNA Code, 1990 Right
A	CTBNA90	Census Tract/BNA Code, 1990
S	CT	Census Tract Code, 1990

1990 Census Tract/BNA Codes

0001 to 9499—Basic number range for 1990 census tracts

9500 to 9989—Basic number range for 1990 BNAs

0000—Default basic number for 1990 census tracts/BNAs

01 to 98—Suffix codes for 1990 census tracts

85 to 98—Suffix codes for 1990 BNAs

blank—Suffix code for 1990 census tracts and BNAs without a suffix

99—Suffix code for 1990 crews-of-vessels census tracts/BNAs

All polygons have a non-blank 1990 census tract/BNA basic number. The left- and right-side complete chain census tract/BNA numbers are not blank except where they are located along the outside edge of the county boundary. The TIGER/Line[®] files do not contain geographic codes for the area outside of the county file. The TIGER/Line[®] files identify the boundary complete chains by placing a 1 in the single-side segment field in Record Type 1.

The Census Bureau assigned a default 1990 census tract/BNA number of 0000 to some coastal and Great Lakes water rather than extend the census tract/ BNA boundary into the Great Lakes or out to the three-mile limit. The Census Bureau closed off some census tract/BNA areas along the shoreline or just offshore, and assigned the default census tract/BNA and special block numbers to the offshore water areas.

Congressional Districts

The 1998 TIGER/Line[®] files contain 2-character numeric code fields for the current (106th), the 106th, and the 108th congressional districts. Congressional districts are numbered uniquely within 1990 state. Users must always combine the 1990 state codes with congressional district codes; corrections to state boundaries since 1990 will create anomalous current state to congressional district relationships. The field for the 108th congressional districts is blank. The current congressional district field always has a value other than blank for all polygons.

Congressional District Record Locations

<i>Record Type</i>	<i>Field Name</i>	<i>Description</i>
A	CD106	Congressional District Number, 106 th
A	CD108	Congressional District Number, 108 th
S	CDCU	Congressional District Number, Current (106 th)

Congressional District Codes—106th Congress

01 to 52—Congressional district codes

00—*At large* (single district for state)

98—Nonvoting delegate

99—No representation in Congress

Consolidated Cities

A consolidated city is a legally incorporated place that has consolidated its government with a county or minor civil division (MCD) and contains one or more separately incorporated places. The county or MCD and the separately incorporated places within the consolidated city continue to exist. The Census Bureau classifies the separately incorporated places within the consolidated city as place entities and creates a separate place (remainder) record for the portion of the consolidated city not within any other place. Refer to the *Places* section in this chapter for additional information. Consolidated cities are represented in the TIGER/Line[®] files by a 5-character numeric FIPS code. Record Type C has the complete list of valid codes and entity names.

Consolidated City Code Record Locations

<i>Record Type</i>	<i>Field Name</i>	<i>Description</i>
C	FIPS	FIPS 55 Code
C	ENTITY	Entity Type
C	NAME	Name of Geographic Area
S	FCCITY	FIPS 55 Code (Consolidated City), Current

Counties and Statistically Equivalent Entities

The first-order divisions of each state are counties for 48 states, parishes for Louisiana, and boroughs and census areas for Alaska. In addition, the Census Bureau treats the following entities as equivalents of counties for purposes of data presentation: independent cities in Maryland, Missouri,

Nevada, and Virginia; the portion of Yellowstone National Park in Montana; “District of Columbia” for the District of Columbia; municipios in Puerto Rico; Islands in the Virgin Islands of the United States; and a variety of entities in the Pacific Island Territories.

The TIGER/Line® files contain several 3-character numeric fields identifying the FIPS county code for the 1990 census and the FIPS county codes for current entities. Each individual TIGER/Line® file contains state and county code fields to uniquely identify its records. See Appendix A for a list of FIPS codes for county and county-equivalent areas.

Census 2000 Collection County Census 2000 uses a set of collection geographic areas for canvassing and administering the census. Because Census 2000 collection blocks are numbered uniquely within collection state and county, the Census Bureau retains the original collection state and county codes even if the state and county changes after the original Census 2000 collection blocks are delineated. See the *Census Block* section in this chapter for information on collection blocks.

County and County Equivalents Code Record Locations

<i>Record Type</i>	<i>Field Name</i>	<i>Description</i>
1	COUNTYL	FIPS County Code, Current Left
1	COUNTYR	FIPS County Code, Current Right
3	COUN90L	FIPS County Code, 1990 Left
3	COUN90R	FIPS County Code, 1990 Right
5	COUNTY	FIPS County Code for File
7	COUNTY	FIPS County Code for File
8	COUNTY	FIPS County Code for File
9	COUNTY	FIPS County Code for File
A	COUNTY	FIPS County Code for File
A	COUN90	FIPS County Code, 1990
C	COUNTY	FIPS County Code,
C	ENTITY	Entity Type
C	NAME	Name of Geographic Area
H	COUNTY	FIPS County Code for File
I	COUNTY	FIPS County Code for File
P	COUNTY	FIPS County Code for File
R	COUNTY	FIPS County Code for File

<i>Record Type</i>	<i>Field Name</i>	<i>Description</i>
S	COUNTY	FIPS County Code for File
S	COUNTY	FIPS County Code, Current
S	COUNCOL	Census 2000 Collection County FIPS Code

County Subdivisions

The TIGER/Line® files contain a 5-character numeric FIPS code field for county subdivisions. They use a single field to identify the two functional types (legal and statistical) of county subdivisions. Record Type C contains all valid codes and entity names.

Legal Entities

Minor Civil Divisions (MCDs)

- MCDs are legally defined subcounty areas such as towns (in eight states) and townships. MCDs exist in 28 states, Puerto Rico, and the Island Territories.
- Some states have incorporated places that are not part of any MCD. These places also serve as primary legal subdivisions and have a unique FIPS MCD code that is the same as the FIPS place code. The TIGER/Line® files will show the same FIPS 55 code in the county subdivision field and the place field.
- In New York and Maine, American Indian reservations (AIRs) exist outside the jurisdiction of any town (MCD) and thus also serve as MCD-equivalent entities.

Statistical Entities

Census County Divisions (CCDs)

CCDs are areas delineated by state officials and local data users for statistical purposes. CCD boundaries usually follow visible features and in most cases, coincide with census tract or BNA boundaries.

CCDs exist where:

- 1) There are no legally established minor civil divisions (MCDs).
- 2) The legally established MCDs do not have governmental or administrative purposes.
- 3) The boundaries of the MCDs change frequently.
- 4) The MCDs are not generally known to the public.

CCDs have been established for the following 21 states:

Alabama	Hawaii	Oregon
Arizona	Idaho	South Carolina
California	Kentucky	Tennessee
Colorado	Montana	Texas
Delaware	Nevada	Utah
Florida	New Mexico	Washington
Georgia	Oklahoma	Wyoming

Census Subareas

Census subareas are subdivisions of boroughs and census areas, the county equivalent entities in Alaska. The state of Alaska and the Census Bureau cooperatively delineated the census subareas to serve as the statistical equivalents of MCDs.

Unorganized Territories (UTs)

For states with partial MCD coverage, the Census Bureau defines UTs for the non-MCD area. UTs are assigned county subdivision codes and names. Eleven states had or now have UTs:

Arkansas	Minnesota
Indiana (<i>only for current</i>)	North Carolina
Iowa	North Dakota
Kansas (<i>only for 1990</i>)	Ohio (<i>only for current</i>)
Louisiana	South Dakota
Maine	

County Subdivision Code Record Locations

<i>Record Type</i>	<i>Field Name</i>	<i>Description</i>
1	FMCDL	FIPS 55 Code (MCD/CCD) Left, Current
1	FMCDR	FIPS 55 Code (MCD/CCD) Right, Current
3	FMCD90L	FIPS 55 Code (MCD/CCD), 1990 Left
3	FMCD90R	FIPS 55 Code (MCD/CCD), 1990 Right
A	FMCD	FIPS 55 Code (MCD/CCD), 1990
C	FIPS	FIPS 55 Code,
C	ENTITY	Entity Type
C	NAME	Name of Geographic Area
S	FMCD	FIPS 55 Code (MCD/CCD), Current

The Census Bureau assigned a default county subdivision code of 00000 in some coastal and Great Lakes water where county subdivisions did not extend into the Great Lakes or out to the three-mile limit.

Crews-of-Vessels

Crews-of-vessels represent the population on military (including Coast Guard) and merchant ships; they do not include the inhabitants of houseboats or marinas. The census population tables show the vessels' population in a unique 1990 census tract/BNA and census block. A crews-of-vessels census tract/BNA and block appear on census maps as an anchor symbol with the census tract/BNA and block numbers, rather than as a delimited area. The location of the anchor symbol is arbitrary and reflects neither the location of the vessel(s) at the time of the census, nor the location of the 1990 crews-of-vessels census tract/BNA and block as it appears in the TIGER/Line[®] file. See the *Census Tracts and Block Numbering Areas* and the *Census Blocks* sections in this chapter for record locations and field names.

1990 Crews-of-vessels census tract/BNA numbers use the same basic 1990 census tract/BNA number as the nearby land census tract/BNA with which the vessel is associated, plus a suffix of 99, shown in decimal notation. For example, 1990 census tract 1234.99 is shown as 123499 in the TIGER/Line[®] files and other machine-readable products. 1990 Crews-of-vessels block numbers use the same basic 1990 block number as the associated land block in that 1990 census tract/BNA, plus a block suffix of Z; for example, block 901Z in 1990 census tract 1234.99. In such a situation, the related land block also receives a suffix, even though it may not be split by a boundary; for example, the addition of crews-of-vessels associated with the 1990 block 901 creates blocks 901A and 901Z. The Census Bureau does not use the 1990 Z census block suffix for any purpose other than the crews-of-vessels.

Either the left or right 1990 census tract/BNA and census block identified in Record Type 1 will indicate the location to which the population is assigned. The 1990 census tract/BNA and census block for crews-of-vessels form an extremely small, triangular-shaped polygon requiring only one complete chain with a start node equal to the end node and two intermediate shape points. Based on the coordinates found on Record Types 1 and 2, the location of the 1990 census block is on the

shore inside the land block with the same 3-digit 1990 collection block number, not in the water as shown on the census maps. The Census Bureau defines the area measurement enclosed by the special 1990 crews-of-vessels census tract/BNA and block as zero.

Metropolitan Areas

The Office of Management and Budget (OMB) designates metropolitan areas to serve as statistical areas around the larger population centers of the United States and Puerto Rico. Basically, a metropolitan area must contain an urbanized area delineated by the Census Bureau or an incorporated place with a population of 50,000 or more. Metropolitan areas consist of whole counties or county equivalents in most states; in New England the OMB defines metropolitan areas using MCDs. The metropolitan area consists of the central county, county equivalent, or MCD (in New England) and additional areas based on OMB criteria related to population density, population growth, and commuting data.

There are three types of metropolitan areas. If a metropolitan area has a total population of less than 1,000,000, the area is designated a Metropolitan Statistical Area (MSA). Metropolitan areas with a population of 1,000,000 or greater qualify for designation as a Consolidated Metropolitan Statistical Area (CMSA) that is composed of smaller Primary Metropolitan Statistical Areas (PMSAs). This designation is not automatic; the OMB solicits local opinion to designate CMSAs and their component PMSAs.

The TIGER/Line[®] files now contain three different 4-character numeric fields to identify the FIPS code for each metropolitan area and to differentiate CMSAs and MSAs from PMSAs. The FIPS codes are from FIPS PUB 8. If the metropolitan area is a CMSA then a value exists in the CMSA field identifying the CMSA and the value in the MA field identifies the PMSA. A blank CMSA field indicates the code in the MA field is for the MSA. Record Type C uses a single metropolitan area field to identify CMSAs, MSAs, and PMSAs. The Legal/Administrative/Statistical Area code identifies the type of metropolitan area.

Metropolitan Area Code Record Locations

<i>Record Type</i>	<i>Field Name</i>	<i>Description</i>
C	MA	FIPS Metropolitan Area Code
C	ENTITY	Entity Type
C	NAME	Name of Geographic Area
S	CMSA	FIPS Consolidated Metropolitan Statistical Area Code, Current
S	MA	FIPS Metropolitan Area Code, Current

Metropolitan Area Codes Metropolitan areas are identified using the 4-character numeric FIPS codes. Record Type C in the TIGER/Line® files contains all the valid codes and entity names for CMSAs, MSAs, and PMSAs. The current metropolitan areas represent the latest OMB designations and not necessarily the metropolitan areas for which the Census Bureau tabulated data in the 1990 census. Record Type C shows both 1990 and current codes and names.

Places

The TIGER/Line® files use a single field to identify places that are legal entities, and places that are statistical entities. The FIPS place code uniquely identifies a place within a state.

Legal Entities

Incorporated Places

Incorporated places are legal entities incorporated under individual state law. Places may extend across county and county subdivision boundaries. An incorporated place can be a city, town, borough, village, or rarely, undesignated. But, for census purposes, incorporated places exclude:

- The boroughs in Alaska (treated as county equivalents)
- Towns in the New England States, New York, and Wisconsin (treated as MCDs)
- The boroughs in New York (treated as MCDs)
- The *remainder* portions of consolidated cities (statistical equivalents of incorporated places)

Statistical Entities

Census Designated Places (CDPs)

CDPs are recognizable communities or concentrations of population that are not incorporated places. CDPs may have a locally recognized name, but do not have legally defined corporate limits or corporate powers. The Census Bureau defines CDPs at the time of each decennial census in cooperation with state officials, AIR officials, and local data users. In Puerto Rico, CDPs are called *comunidades* or *zonas urbana*. Since CDPs are valid only for the presentation of decennial census data, CDP complete chain information is removed from the current geography contained on Record Types 1 and S, but remains with the 1990 geography contained on Record Types 3 and A. This change occurred in the 1995 TIGER/Line[®] files and will remain in effect until TIGER/Line[®] files are released containing Census 2000 geographic areas. CDPs in Hawaii are an exception. The Census Bureau, in agreement with the state of Hawaii, does not recognize any incorporated places in Hawaii. Thus, its CDP complete chain information is retained on Record Types 1 and S.

Consolidated City (Remainder) Portions

Consolidated city (remainder) portions refer to the areas of a consolidated city not included in another incorporated place. For example, Columbus city, GA, is a consolidated city that includes the separately incorporated municipality of Bibb City town. The area of the consolidated city that is not in Bibb City town is assigned to Columbus city (remainder). The name always includes the “(remainder)” identifier.

Legally incorporated places and CDPs are mutually exclusive and are identified in the same TIGER/Line[®] field. Users of earlier versions of the TIGER/Line[®] files without Record Type C will need to consult the publication GRF-N, FIPS PUB 55-3, or the Census Bureau’s TIGER/GICS[®] to identify the list of valid codes and entity names, and to differentiate between the legal and statistical entities.

Dependent and Independent Places Depending on the state, incorporated places are either dependent within, or independent of, county subdivisions, or there is a mixture of dependent and independent places in the state. Dependent places are part of the county subdivi-

sion; the county subdivision code of the place is the same as that of the underlying county subdivision(s), but is different from the FIPS place code. Independent places are separate from the adjoining county subdivisions and have their own county subdivision code (or codes if the place lies in multiple counties). These places also serve as primary county subdivisions. The TIGER/Line[®] files will show the same FIPS 55 code in the FIPS county subdivision code field and the FIPS place code field for independent places. The only exception is if the place is independent of the MCDs in a state in which the FIPS MCD codes are in the 90000 range. Then, the FIPS MCD and FIPS place codes will differ. CDPs and remainder portions of consolidated cities (Class C8) always are dependent within county subdivisions.

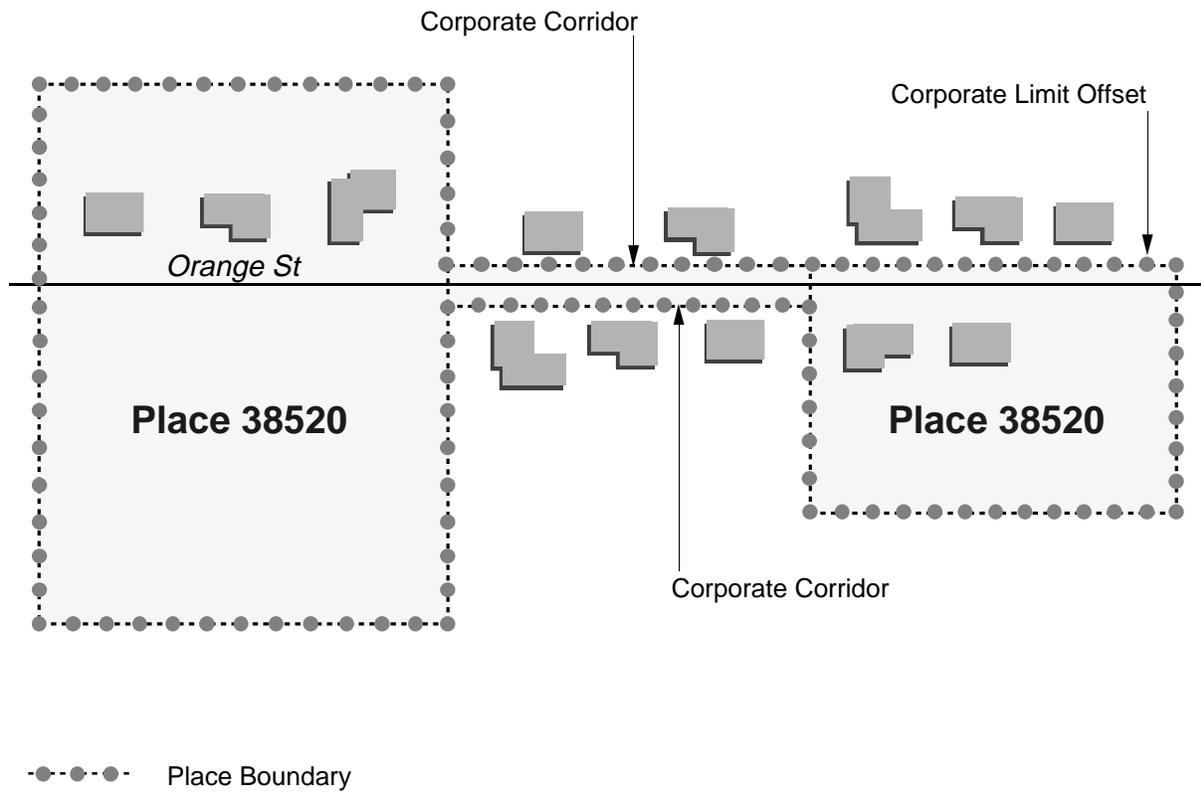
Corporate Corridors and Offset Corporate Boundaries A corporate corridor is a narrow, linear part of an incorporated place (or in a very few instances, another legal entity). The corporate corridor includes the street and/or right-of-way, or a portion of the street and/or right-of-way within the incorporated place. It excludes from the incorporated place those structures such as houses, apartments, or businesses, that front along the street or road; see Figure 4-4.

A corporate limit offset boundary exists where the incorporated place lies on only one side of the street, and may include all or part of the street and/or the right-of-way. It does not include the houses or land that adjoin the side of the street with the corporate limit offset boundary. It is possible to have two or more corporate limit offset boundaries in the same street or right-of-way. Corporate limit offset boundaries use the same map symbology as non-offset boundaries. Figure 4-4 depicts corporate corridors and corporate offset limits.

To facilitate address coding, the street name and address ranges are generally duplicated on complete chains with a CFCC of F11 (nonvisible offset boundary) or F12 (nonvisible corporate corridor). The duplicate street names for the F11 and F12 features are on Record Type 5 and the duplicate address ranges are on Record Type 6. However, Record Type 1 will not indicate that the street or right-of-way lies within a corporate corridor or offset boundary, or that the address ranges lie outside, and are encoded on either side, of the corporate corridor or offset boundary.

Figure 4-4 Corporate Corridors—Overview

This diagram, using symbology typical of a census map, shows a corporate corridor linking the two larger areas of Place 38520 (shading has been added to highlight the actual area within the corporate limits). Part of the corporate limit along Orange St is an offset boundary. A corporate limit offset covers only one side of the street or right-of-way, not the entire street or right-of-way, as is the case with a corporate corridor.



When data users find duplicate address ranges where one of the duplicates is on a complete chain with a CFCC of F11 or F12, they should use this address range for address geocoding rather than the range on the street feature that has a CFCC beginning with *A* (see Figure 4-5). Likewise, use the street name and address ranges on the related street feature (CFCC beginning with *A*) for mapping or vehicle routing.

Incorporated Place/CDP Code Record Locations

<i>Record Type</i>	<i>Field Name</i>	<i>Description</i>
1	FPLL	FIPS 55 Code (Place), Current Left
1	FPLR	FIPS 55 Code (Place), Current Right
3	FPL90L	FIPS 55 Code (Place/CDP), 1990 Left
3	FPL90R	FIPS 55 Code (Place/CDP), 1990 Right
A	FPL	FIPS 55 Code (Place/CDP), 1990
C	FIPS	FIPS 55 Code,
C	ENTITY	Entity Type
C	NAME	Name of Geographic Area
S	FPL	FIPS 55 Code (Place), Current

School Districts

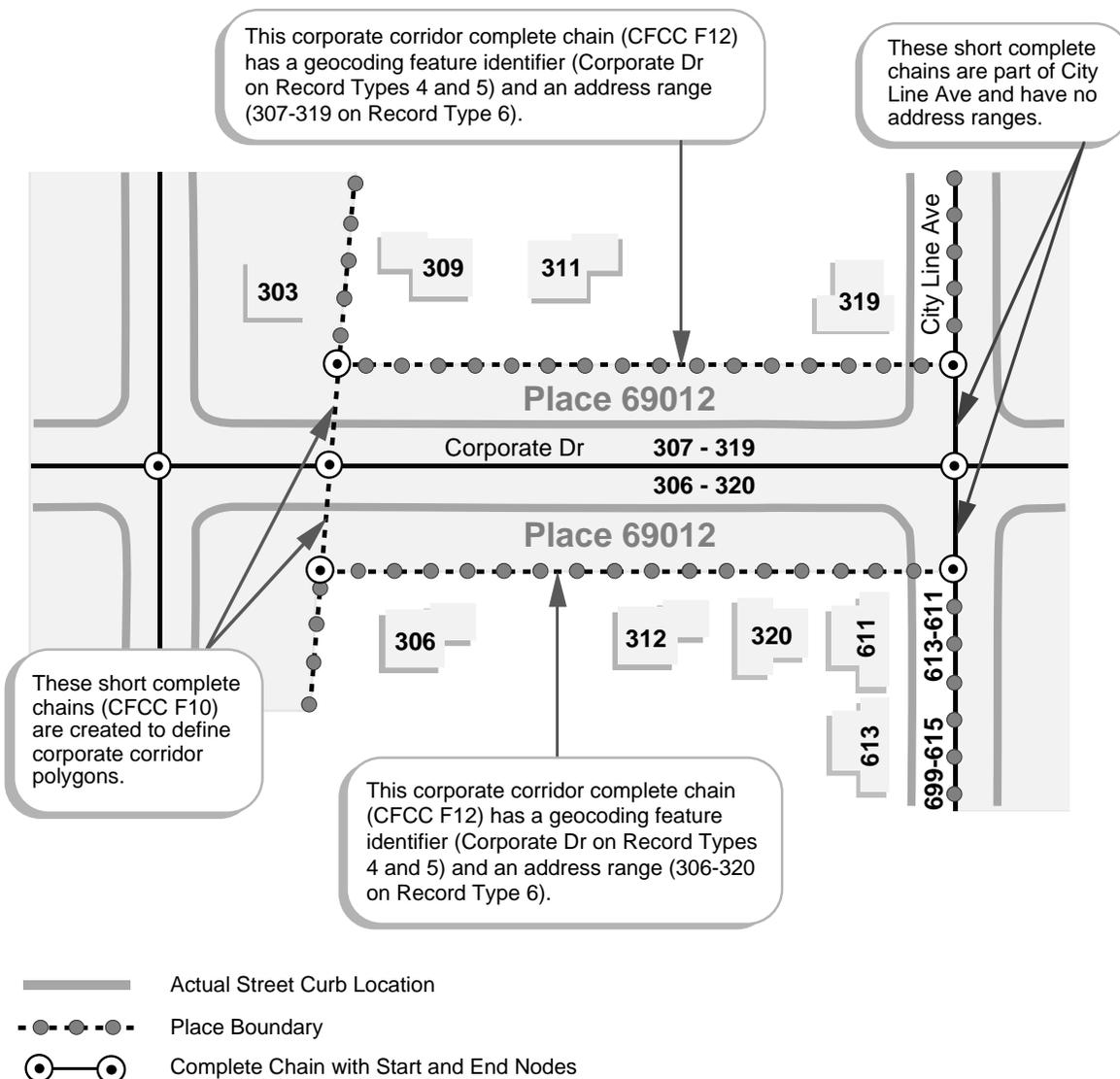
The Census Bureau initially released the school district codes in the 1992 TIGER/Line[®] files as part of the National School District Program sponsored by the US Department of Education, National Center for Education Statistics. This program was designed to provide 1990 census data tabulations for school districts. The program continues to be updated and the updates are reflected in the subsequent versions of the TIGER/Line[®] files.

The program identified three possible levels of school districts representing different segments of the school-age population (elementary, intermediate, and secondary) and a *unified* category to identify those school districts that represented all grade levels. Since 1995, the intermediate level has become defunct and is no longer a separate level.

The elementary and secondary levels of a school district can overlap each other because they represent different segments of the school-age population; for example, a secondary school district could cover parts of several elementary school districts. The TIGER/Line[®] files use separate fields to accommodate for the overlap and may not contain a code for all grade levels.

Figure 4-5 Corporate Corridors—Detail View

This diagram shows a detailed view of a corporate corridor that runs along Corporate Dr. The complete chains with the census feature class code (CFCC) F12 form the corporate corridor and have geocoding address ranges that mirror the address ranges of Corporate Dr. The geocoding address ranges exist so structures are coded to the correct block and place. For example, 311 Corporate Dr is located outside the corporate limits. Using the address range from Corporate Dr to geocode the structure will incorrectly code the structure to Place 69012. The corporate corridor (CFCC F12) splits City Line Ave at one end of the corridor and the boundary feature (F10) at the other end, creating four short complete chains. The Census TIGER® data base software compensates by moving the address ranges from these short complete chains located inside the corporate corridor to complete chains outside the corridor so they geocode to the correct geographic entity.



The TIGER/Line® files contain a *unified* school district code for those school districts where all levels are represented in a single district. The elementary and secondary school district code fields are blank if there is a unified school district code. Exceptions exist for the state of Hawaii and the five boroughs of New York city; New York city and Hawaii are each single school districts. The National School District Program has mapped Attendance Zones for each school in these two districts.

School districts may cut through existing census blocks. In such instances, the Census Bureau created new complete chains and GT-polygons. However, the school district boundaries did not create new blocks. The tabulation blocks may contain more than one polygon, and each polygon may have a different school district code. The block parts/polygons allocated to the different school districts do not have separate tabulation block numbers. Thus, a school district in the TIGER/Line® files is the actual area, but the tabulation of the school district data is created by proportionally allocating the population of the tabulation block.

The TIGER/Line® files store the school district codes in a set of three, 5-character fields. All codes consist of numeric characters. The value, 99999, is a pseudo-school district code assigned to non-water blocks for which the National School District Program does not report a school district. Some large water areas have a pseudo-school district code of 99998.

School District Code Record Locations

<i>Record Type</i>	<i>Field Name</i>	<i>Description</i>
A	SDELM	School District Code, Elementary School
A	SDSEC	School District Code, Secondary School
A	SDUNI	School District Code, Unified District
C	ENTITY	Entity Type
C	SD	School District Code
C	NAME	Name of Geographic Area

School District Names The 1995, 1997, and 1998 TIGER/Line® files contain only the codes, not the names of the school districts. For school district names relating to the codes appearing the TIGER/Line® files, data users should refer to the US Department of Education’s Common Core Data File.

States and Statistically Equivalent Entities

In addition to the 50 States, the Census Bureau treats the District of Columbia, Puerto Rico, the US Virgin Islands, and the Pacific Island Areas (American Samoa, Guam, and the Northern Mariana Islands) as the statistical equivalent of a state for the purpose of data presentation.

TIGER/Line® files were produced for the 50 States, the District of Columbia, the US Virgin Islands, Puerto Rico, and the Pacific Island Areas. See Appendix A for a list of the FIPS state codes.

Census 2000 Collection State Census 2000 uses a set of collection geographic areas for canvassing and administering the census. Because Census 2000 collection blocks are numbered uniquely within collection state and county, the Census Bureau retains the original collection state and county codes even if the state and county changes after the original Census 2000 collection blocks area delineated. See the *Census Block* section in this chapter for information on collection blocks.

State Code Record Locations

<i>Record Type</i>	<i>Field Name</i>	<i>Description</i>
1	STATEL	FIPS State Code, Current Left
1	STATER	FIPS State Code, Current Right
3	STATE90L	FIPS State Code, 1990 Left
3	STATE90R	FIPS State Code, 1990 Right
5	STATE	FIPS State Code for File
7	STATE	FIPS State Code for File
8	STATE	FIPS State Code for File
9	STATE	FIPS State Code for File
A	STATE	FIPS State Code for File
A	STATE90	FIPS State Code, 1990

<i>Record Type</i>	<i>Field Name</i>	<i>Description</i>
C	STATE	FIPS State Code
C	ENTITY	Entity Type
C	NAME	Name of Geographic Area
H	STATE	FIPS State Code for File
I	STATE	FIPS State Code for File
P	STATE	FIPS State Code for File
R	STATE	FIPS State Code for File
S	STATE	FIPS State Code for File
S	STATE	FIPS State Code, Current
S	STATECOL	Census 2000 Collection State FIPS Code

Sub-Minor Civil Divisions (Sub-MCDs)

Sub-MCDs are legally defined subdivisions of a minor civil division. Sub-MCDs called sub-barrios are found only in Puerto Rico. The TIGER/Line[®] files contain the 5-character FIPS 55 code field for sub-MCDs. The 2-numeric character census code field has been dropped.

Sub-MCD Code Record Locations

<i>Record Type</i>	<i>Field Name</i>	<i>Description</i>
1	FSMCDL	FIPS 55 Code (Sub-MCD), Current Left
1	FSMCDR	FIPS 55 Code (Sub-MCD), Current Right
C	FIPS	FIPS 55 Code
C	ENTITY	Entity Type
C	NAME	Name of Geographic Area
S	FSMCD	FIPS 55 Code (Sub-MCD), Current

Traffic Analysis Zone (TAZ)

Traffic analysis zones (TAZs) are special-purpose geographic entities defined for tabulating journey-to-work and place-of-work statistics.

Each TAZ represents an area containing similar kinds of land use and commuter travel. A TAZ may comprise a census block or blocks, a census tract or census tracts, a place, a county subdivision, or an entire county.

The Census Bureau collected and tabulated data for approximately 200,000 TAZs within approximately 300 Census Transportation Planning Package (CTPP) areas for the 1990 decennial census. The TAZs are established by metropolitan planning organizations. TAZs were not shown in any 1990 Census TIGER[®] extracts. The Census Bureau

subsequently inserted the TAZs into the Census TIGER® data base and began extracting them starting with the 1994 TIGER/Line® files. Upon insertion, contiguity edits were performed to identify inconsistencies in the current delineations. The Census Bureau did not revise any TAZ problems discovered during the insertion process because production of the CTPP data preceded the insertion of the TAZs into the Census TIGER® data base and the geography had to remain consistent with the data.

All CTPP areas are identified by a pseudo-metropolitan area (MA) 4-digit code. A 6-character alphanumeric code on each record identifies the individual TAZs. CTPP and TAZ entities exist only on Record Type A; there is no Record Type C information for these areas.

TAZ Code Record Locations

<i>Record Type</i>	<i>Field Name</i>	<i>Description</i>
A	CTPP	Census Transportation Planning Package Area Code
A	TAZ	Traffic Analysis Zone Code, 1990

Urbanized Areas (UAs)

An urbanized area (UA) consists of at least one central place and the adjacent densely settled surrounding territory that together have a minimum population of 50,000 people. The densely settled surrounding territory generally consists of an area with continuous residential development and a general overall population density of at least 1,000 people per square mile. The TIGER/Line® files identify 1990 UAs with a 4-character numeric census code. See Appendix G for a list of UA names and codes.

All polygons that have a UA code (other than blank) will have an urban/rural designation (U/R) flag equal to U. See the section, *Urban/Rural Designation*, in this chapter.

UA Code Record Locations

<i>Record Type</i>	<i>Field Name</i>	<i>Description</i>
A	UA	Census Urbanized Area Code, 2000 (blank in this version)
A	UA90	Census Urbanized Area Code, 1990
C	UA	Census Urbanized Area Code,
C	ENTITY	Entity Type
C	NAME	Name of Geographic Area

Urban/Rural (U/R) Designation

The Census Bureau defines *urban* for the 1990 census as consisting of all territory and population in UAs and in the urban portion of places with 2,500 or more people located outside of the UAs.

The Census Bureau distinguishes the urban and rural population within incorporated places whose boundaries contain large, sparsely populated, or even unpopulated area. These extended cities have either 25 percent of their land area, or at least 25 square miles, classified as sparsely settled. The sparsely settled area must consist of at least one group of one or more contiguous census blocks. Each group must be at least five square miles in area and have an overall population density of less than 100 people per square mile. Polygons in the group of sparsely settled blocks will have an indicator flag equal to R; the densely populated blocks will have an indicator flag equal to U.

Incorporated places (based on 1990 census boundaries) with both urban- and rural-flagged polygons are extended cities. For the 1990 census, the Census Bureau defined 280 incorporated places as extended cities. Extended cities exist both inside and outside of UAs.

The TIGER/Line[®] files include a 1-character Urban/Rural indicator:

R— Rural, not urban

U— Urban, in a UA or an urban place

The Census Bureau assigns the U/R indicator to tabulation blocks, so all GT- polygons within a block have the same U/R indicator. All blocks that have a UA code (other than blank) will have an U/R indicator equal to U. Blocks in places that qualify as urban places, but are not in a UA, do not have a UA code; they do have a U/R indicator equal to U. Rural areas are identified by the R indicator and will not have a UA code.

U/R Flag Record Locations

<i>Record Type</i>	<i>Field Name</i>	<i>Description</i>
A	URBFLAG	Urban/Rural Indicator, 1990

Voting Districts (VTDs)

For the 1990 census, the term voting district (VTD) replaced the 1980 census term *election precinct*. A VTD is any of a variety of areas (for example, election districts, precincts, legislative districts, and wards) defined by state and local governments for the purpose of conducting elections. The 1990 VTD codes in the TIGER/Line® files were supplied by the state governments in response to the requirements of the 1990 Census Redistricting Data Program. The 1990 VTD codes, which were provided to the Census Bureau in 1988, have not been updated since then to reflect any subsequent changes. The boundaries of the VTDs recorded in the TIGER/Line® files may represent *pseudo-VTDs*. The states may have relocated the boundaries of the actual VTDs to a nearby block boundary because they were required to submit VTDs that followed 1990 census block boundaries. States had the option of participating in the program on a county-by-county, or even a partial county basis.

The following states did not participate in the 1990 VTD program:

- Kentucky
- Mississippi
- Montana
- Oregon

The following states had partial VTD coverage during the 1990 redistricting program:

- Alabama VTDs for 59 of the 67 counties
- Georgia VTDs for 158 of the 159 counties
- Idaho VTDs for 32 of the 44 counties
- North Carolina VTDs for 48 of the 100 counties
- Ohio VTDs for 55 of the 88 counties
- South Dakota VTDs for 65 of the 66 counties
- Texas VTDs for 87 of the 254 counties
- Wisconsin VTDs for 70 of the 72 counties

The VTDs are represented by a 4-character alphanumeric code. Record Type C in the TIGER/Line® files contains all valid codes and entity names. A VTD code equal to ZZZZ is used to designate coastal water areas excluded from the VTDs. Partial coverage within a county, and in counties with no coverage within participating states. A VTD with a code

of ZZZZ could represent an area with discontinuous pieces. Some states did extend VTD coverage into water areas. Blank space indicates that a VTD is not assigned to an area.

State Legislative Districts (SLD) State legislative districts (SLDs) are the areas from which members are elected to state legislatures. The SLDs embody the upper (senate) and lower (house) bodies of the state legislature. (Nebraska has a unicameral legislature that is represented as an upper-body legislative area.) Under the Census 2000 Redistricting Data Program, states will be given the option of submitting their SLDs to the Census Bureau. A unique 3-digit code is assigned to each SLD with a state. SLDs do not appear in the 1998 TIGER/Line[®] files.

VTD Code Record Locations

<i>Record Type</i>	<i>Field Name</i>	<i>Description</i>
3	VTD90L	Voting District Code, 1990 Left
3	VTD90R	Voting District Code, 1990 Right
C	VTD	Voting District Code
C	ENTITY	Entity Type Code
C	NAME	Name of Geographic Area
S	VTD	Voting District Code(blank in this version)
S	STSENATE	State Senate District Code (blank in this version)
S	STHOUSE	State House District Code (blank in this version)

ZIP Code[®] Tabulation Areas (ZCTAs[™])

ZIP Code[®] Tabulation Areas (ZCTAs[™]) are approximate area representations of United States Postal Service (USPS) ZIP Code[®] service areas that the Census Bureau is creating for statistical purposes for Census 2000. Data users should not use ZCTAs[™] to identify the official USPS ZIP Code[®] for mail delivery.

Each Census 2000 tabulation block will have a single ZCTA[™] code that will reflect the majority ZIP Code[®] for addresses within that tabulation block. As a result, ZIP Codes[®] associated with address ranges found in Record Types 1 and 6 may not exactly match the ZCTA[™]. Because addresses and ZIP Codes[®] will not exist within all Census 2000 census tabulation blocks, the Census Bureau will use automated extension algorithms to close coverage gaps and will assign either a 5- or 3-digit ZCTA[™] code to each Census 2000 tabulation block. The ZCTA[™] delineation process will attempt

to assign a 5-digit ZCTA™ code to areas with no ZIP Code® or address data. Where reliable data are unavailable for extensive areas, the ZCTA™ code may represent the more general 3-digit ZIP Code®.

The Census Bureau will be identifying ZCTAs™ by using a five-character alphanumeric code. It will be important that data users use all five characters of the ZCTA™ code, including any trailing blank spaces. The first three characters will represent the 3-digit ZIP Code® and may contain leading zeros. For ZCTAs™ defined only by a 3-digit ZIP Code® the last two characters of the ZCTA™ code will be blank spaces. For example, ZCTA™ code "290 " will represent the generic 3-digit ZIP Code® 290 where no 5-digit ZIP Code® was available. For ZCTA™ codes that will reflect the 5-digit ZIP Code®, the last two characters of the ZCTA™ code will be numeric. For example, the ZCTA™ code "00601" will represent the 5-digit ZIP Code® 00601. The ZCTA™ delineation process will not recognize ZCTA™ codes ending in "00", such as "29000", as valid 5-digit ZCTA™ codes. Some water features will have a 3-digit ZCTA™ code followed by "HH", for example "290HH". These codes will apply only to water features and usually will belong to water features located along the edges of 5-digit ZCTAs™. The codes will indicate that the water feature does not clearly fall within one 5-digit ZCTA™ and is distinct from the 3-digit ZCTA™ code that will be assigned to land areas. In effect, these codes will identify unassigned water areas.

A ZCTA™ may not exist for every USPS ZIP Code®. For instance, a special purpose ZIP Code® may represent a point location that does not characterize the majority of the addresses for a Census 2000 tabulation block. Under these circumstances the special purpose ZIP Code® will not appear as a ZCTA™. ZCTAs™ do not appear in the 1998 TIGER/Line® files.

ZCTA™ Code Record Locations

<i>Record Type</i>	<i>Field Name</i>	<i>Description</i>
S	ZCTA	ZIP Code® Tabulation Area, 2000 (blank in this version)

Chapter 5: Data Quality

This section provides detailed information on the lineage, positional accuracy, attribute accuracy, logical consistency, and completeness of the TIGER/Line® files. Data users can use this information to help evaluate the adequacy and applicability of this geographic file for a particular use.

Lineage

Geometric Properties

Source codes that specify the original digital source of complete chains in the TIGER/Line® files are listed in the *Sources* section of this chapter. These codes cover the source categories in the Census TIGER® data base: initial source, pre-1990 computer operations, office operations, enumerator operations, local official updates, post-1990 census updates, and pre-2000 computer operations.

The initial sources used to create the Census TIGER® data base were the USGS 1:100,000-scale Digital Line Graph (DLG), USGS 1:24,000-scale quadrangles, the Census Bureau's 1980 geographic base files (GBF/DIME-Files), and a variety of miscellaneous maps for selected areas outside the contiguous 48 states. The DLG coverage is extensive, albeit of variable currency, and comprises most of the rural, small city, and suburban area of the TIGER/Line® files. GBF/DIME-File coverage areas were updated through 1987 with the manual translation of features from the most recent aerial photography available to the Census Bureau.

In order to maintain a current geographic data base from which to extract the TIGER/Line® files, the Census Bureau uses various internal and external procedures to update the Census TIGER® data base. While it has made a reasonable and systematic attempt to gather the most recent information available about the features this file portrays, the Census Bureau cautions users that the files are no more complete than the source documents used in their compilation, the vintage of those source documents, and the translation of the information on those source documents.

The Census Bureau added, to the Census TIGER[®] data base, the enumerator updates compiled during the 1988-1990 census operations. The updates came from map annotations made by enumerators as they attempted to locate living quarters by traversing every street feature in their assignment area. The Census Bureau digitized the enumerator updates directly into the Census TIGER[®] data base without geodetic controls or the use of aerial photography to confirm the features' existence or locational accuracy.

The Census Bureau also made other corrections and updates to the map sheets supplied by local participants in various Census Bureau programs. Unconfirmed local updates originated from map reviews by local government officials or their liaisons. Maps were sent to the highest elected official of governmental units for use in various census programs, and some maps were returned with update annotations and corrections. The Census Bureau generally added the updates to the Census TIGER[®] data base without extensive checks when the elected official approved the boundary or feature correction. Changes made by local officials do not have geodetic control.

Projection

The TIGER/Line[®] data is not in a mapping projection even though most of the features were scanned directly from source maps (usually USGS 1:100,000 topographic quads) that were projections. The USGS source maps were Universal Transverse Mercator (UTM) projections. After the map sheets were scanned, the coordinates were transformed from UTM into projectionless geographic coordinates of latitude and longitude. The USGS Digital Line Graphs (DLGs) were derived from the same operation, but typically were distributed as UTM projections.

As mentioned earlier, there were a variety of other sources used in creating the Census TIGER[®] data base. The features from those sources also were stored as latitude and longitude coordinates. For metropolitan areas, the GBF/DIME files were derived by digitizing a variety of sources, (in various projections) such as USGS topographic 7.5 minute quadrangles, aerial photography, and other materials, to fill in the gaps between the GBF/DIME-File coverage and the 1:100,000 topographic sheet coverage.

Also included in the Census TIGER® data base are features obtained from field updates. Paper maps were annotated in the field and subsequently digitized without rigorous adherence to a projection or coordinate system.

Sources

In the TIGER/Line® files, there is a 1-alphanumeric character source code for complete chain and landmark features. Source codes identify the original (or final, if historical) operation that created the geographic object and its geometric properties.

Source Codes

<u>Value</u>	<u>Description</u>
<i>blank</i>	Not Documented Elsewhere
A	Updated 1980 GBF/DIME-File
B	USGS 1:100,000-Scale DLG-3 File
C	Other USGS Map
D	Census Bureau Update Prior to 1990 Enumeration Operations
E	Census Bureau 1990 Enumerator Update
F	Census Bureau Update from Other 1990 Operations
G	Unconfirmed Local Official Updates
H	Census Bureau Update Post-1990 Operations
I	Census Address List/TIGER Linkage Operations

Source Code Record Locations

<u>Record Type</u>	<u>Field Name</u>	<u>Description</u>
1	SOURCE	Source or First Source Code of Update
7	SOURCE	Source or First Source Code to Update
9	SOURCE	Source or First Source Code to Update
H	HIST	History or Last Source Code to Update
H	SOURCE	Source or First Source Code to Update

Address Ranges and ZIP Codes®

The TIGER/Line® files contain potential address ranges and ZIP Codes® for most areas of the United States where city-style address ranges exist. Residential addresses from the 1990 decennial census master list of addresses, the Address Control File (ACF), were converted to address

ranges and matched into TIGER[®] using an address range creation formula for all counties. The original TIGER[®] address ranges were matched, then merged with the ACF-derived address ranges, producing a single set of integrated address ranges in the TIGER data base. Thus, the 1992 TIGER/Line[®] files contained a mixture of pre-existing TIGER[®] address ranges from these areas, or ACF ranges where no other range was available. No attempt was made to reconcile any overlapping address ranges or close any coverage gaps in the 1992 TIGER/Line[®] files.

Subsequently, during the ACF Match/Merge operation, the ranges were integrated and many address range conflicts were resolved. Further address range edits eliminated or isolated additional overlaps. The edited address ranges appear in the current TIGER/Line[®] files.

ZIP Codes[®] were originally derived from two sources: those already existing in the Census TIGER[®] data base and those derived from the ACF. Address ranges created from the ACF may have non-city delivery ZIP Codes[®]. This situation typically occurs in smaller places where structure numbers exist and appear in the ACF, but are not used in mail delivery.

The Census Bureau updated and corrected ZIP Codes[®] in the early 1990's by matching the Census TIGER[®] data base with an updated USPS ZIP+4[®] file (AMS Match) for the 50 states and the District of Columbia. The 5-digit ZIP Code[®] and street name were used as keys to match address ranges from the TIGER[®] data base to corresponding address ranges in the ZIP+4[®] file. Where a match occurred, the ZIP Add-On (Plus 4) code was added to the TIGER[®] address range record. If the TIGER[®] data base address ranges did not align exactly with the ZIP+4[®] address ranges, the TIGER[®] ranges were split into multiple records. This procedure allowed the Add-On code to transfer more easily. Two rounds of matches have been completed. The first used data from the August 1993 ZIP+4[®] file, and the second used data from the July 1994 file. Between the matches, clerical updates improved five-digit ZIP Code[®] coverage (particularly notable in southern California and central Florida), and eliminated the illegal five-digit ZIP Codes[®] and three-digit ZIP Codes[®]. Many of the ZIP Code[®] changes reflect

regular realignments and the creation of new ZIP Codes® in high growth areas of the country.

Additional matching between the ZIP+4® file and the Census TIGER® data base occurs during the normal course of operations to maintain the address range and five-digit ZIP Codes® in Census TIGER®. It is not possible to specify the version of the ZIP+4® file used for the release of any specific TIGER/Line® file.

Census Feature Class Codes

All generic CFCCs (A10, A20, A30, and A40) were changed to more descriptive CFCCs. For example, an A40 (local, neighborhood, and rural road, major category used alone when the minor category could not be determined) was changed to the more descriptive CFCC of A41 (unseparated local, neighborhood and rural road). The census feature classifications of roads were redefined to agree more closely with customary use and to be more useful to transportation planners. Thus, all road classifications were reduced to a local or neighborhood road unless the road had a highway route number. The classification was then based on the highway route number.

Feature Identifiers

Highway Route Numbers The Census Bureau updated the feature identifiers (FIDs) and census feature class codes (CFCCs) for all interstates, limited access roads, US highways, and state highways in all counties in the United States. The FIDs of highways were entered in the Census TIGER® data base using the following rules:

- If an interstate also was known by a local name, the interstate route number was entered as the primary name of the interstate and the local name was entered as the alternate name.
- If the US highways and state highways were known by a route number as well as by a local name, the local name was entered as the primary name, and the highway route number was entered as the alternate name.

Railroad Names The Census Bureau has been working to complete an ongoing project to update the railroad names in the Census TIGER® data base. National update of the railroad names has not yet been completed.

Military Installation Names The Census Bureau standardized most military installation names to match Department of Defense information.

National Park Service Area Names The Census Bureau used information to standardize the names of all areas within the jurisdiction of the National Park Service, most importantly, the complete set of National Parks and National Monuments.

Positional Accuracy

The Census Bureau's mission to count and profile the Nation's people and institutions does not require very high levels of positional accuracy in its geographic products. Its files and maps are designed to show only the relative positions of elements.

Coordinates in the TIGER/Line® files have six implied decimal places. The positional accuracy of these coordinates is not as great as the six decimal places suggest. The positional accuracy varies with the source materials used, but at best meets the established National Map Accuracy standards (approximately +/- 167 feet) where 1:100,000-scale maps from the USGS are the source. The Census Bureau can not specify the accuracy of feature updates added by its field staff or of features derived from the GBF/DIME-Files or other map or digital sources. Thus, the level of positional accuracy in the TIGER/Line® files is not suitable for high-precision measurement applications such as engineering problems, property transfers, or other uses that might require highly accurate measurements of the earth's surface.

Despite the fact that TIGER/Line® data positional accuracy is not as high as the coordinate values imply, the six-decimal place precision

is useful when producing maps. This precision allows you to place features that are next to each other on the ground in the correct position, relative to each other, on the map without overlap.

Attribute Accuracy

Topological Properties

The attribute accuracy of the TIGER/Line[®] files is as precise as the source used during the creation or update of the Census TIGER[®] data base. Accuracy statements on the Census TIGER[®] data base are based on deductive estimates; no specific field tests for attribute accuracy have been conducted on the files. However, updates or corrections resulting from normal Census Bureau field operations are entered into the Census TIGER[®] data base. In addition, quality checks are conducted to verify clerical transcription of data from source materials. Based on past experience, attribute codes match the source materials with less than a two-percent error.

The feature network of complete chains (as represented by Record Types 1 and 2) is complete for census purposes. Data users should be aware that on occasion they may not be able to trace a specific feature by name or by CFCC as a continuous line throughout the TIGER/Line[®] files without making additional edits. For example, State Highway 32 may cross the entire county. The TIGER/Line[®] files will contain complete chains in the file at the location of State Highway 32, but the complete chains may individually have one of a collection of local names such as S Elm Street, or Smallville Highway, with or without State Highway 32 as an alternate. The most frequent CFCC for a state highway is A21, but the complete chains at the location of State Highway 32 may have a variety of class codes such as A01, A41, or A21. Recent edits have reduced this problem, but not eliminated it.

Boundaries and Geographic Entity Codes

The Census Bureau collects and tabulates information for both legal and statistical entities. Record Types 1 and S mainly identify the boundaries and codes for the legal entities reported to the Census Bureau to be legally in effect as of the latest Boundary and Annexation Survey. Record Types 3 and A generally contain the final 1990 census

tabulation geographic boundaries and codes for those entities. Most legal boundaries are based on the annotations made by local officials in response to the Census Bureau's Boundary and Annexation Surveys.

Local data users generally define and delineate statistical entities following Census Bureau guidelines.

However, there are several exceptions:

- The Census Bureau defines UAs based strictly on technical considerations.
- State Departments of Education delineate school districts .
- The designated liaison for the Redistricting Data Program supplies Voting Districts (VTDs).
- The Metropolitan Planning Organization defines Traffic Analysis Zones (TAZs).

The USGS maintains the file that is published as FIPS 55. The Census Bureau uses the file for coding American Indian/Alaska Native Areas, county subdivisions, consolidated cities, places, and sub-MCDs. Cooperatively in 1993, the Census Bureau and the USGS edited the FIPS 55 file to ensure alphabetical sorting and data consistency. As a result, several hundred changes were made to the FIPS 55 codes and related class codes. These corrections, plus codes for new entities, appear in Record Type C where one record shows the codes used in 1990, and one record shows the current FIPS 55 code/class code associated with each change.

Other attribute data in the TIGER/Line[®] files were gathered from many sources. The Census Bureau's staff linked the attribute information to the spatial framework of features. Most procedures for gathering the needed attributes were clerical. The quality of these attributes was ensured by various tests conducted before, during, and after the time that the attribute information was entered into the Census TIGER[®] data base. Tests included source material selection and evaluation checks, quality control checks on staff work, independent reviews by local and tribal leaders of maps produced from the Census TIGER[®] data base, and staff reviews of computer-performed operations.

Address Ranges and ZIP Codes®

The conversion from the GBF/DIME-Files to the TIGER® format involved neither verification of previously existing address ranges nor any significant updates or corrections (except as noted below). Prior to the release of the 1992 TIGER/Line® files, the address ranges for an area were generally the same as those in the corresponding 1980 GBF/DIME-File. Preparations for the 1990 census involved making some minor updates in selected areas, but generally did not include changes in address numbering systems during the decade. The 1992 TIGER/Line® files included ACF address ranges for existing and new features identified during census operations. Users of the 1992 TIGER/Line® file's address ranges need to check for address range problems such as overlaps, gaps, odd/even reversals, and other situations that may exist. Users of the current TIGER/Line® files have the benefit of the files going through a TIGER®/ACF Match and Merge operation and subsequent address range edit and update operations. Many of the previous problems with addresses have been corrected.

Although an address range in the TIGER/Line® files may be incorrect, the Census Bureau implemented procedures to ensure that the error did not adversely affect the accuracy or the quality of the 1990 census. For the geographic areas with the GBF/DIME-File and extension area coverage, the Census Bureau used the address ranges to perform an initial assignment of residential addresses (purchased from a commercial vendor) to the 1990 census tract and block numbers, and made a number of corrections to the address ranges. Later during field operations, enumerators updated, verified, and corrected, when necessary, the addresses assigned to each block number by walking the perimeter and all interior streets of each census block.

Address ranges and ZIP Codes® are being verified and coverage extended for Census 2000 through the use of the Master Address File (MAF). The MAF will be closely linked to the Census TIGER® data base. Local address lists and addresses from the US Postal Service will supplement the MAF.

Feature Identifiers

A national consistency review of all feature names in the Census TIGER® data base was performed by running a revised name standardizer on all feature identifiers. An additional benefit was the removal of nonstandard characters and punctuation from the names. To improve accuracy, road names in the Census TIGER® data base were compared with street names in the ZIP+4® (AMS) file from the US Postal Service. Errors in feature directionals or feature types were corrected in the Census TIGER® data base.

Logical Consistency

Node-line-area relationships satisfy topological requirements. These requirements include the following:

- Complete chains must begin and end at nodes.
- Complete chains must connect to each other at nodes.
- Complete chains do not extend through nodes.
- Left and right polygons are defined for each complete chain element and are consistent for complete chains connecting at nodes.
- Complete chains representing the limits of a file are free from gaps.

The Census Bureau performed automated tests to ensure logical consistency and limits of file. Some polygons in the TIGER/Line® files may be so small, the polygon internal point has been manually placed on a node that defines the polygon perimeter. These small polygons have been detected, and corrections will be incorporated in the Census TIGER® data base in the future. The Census Bureau uses its internally developed Geographic Update System to enhance and modify spatial and attribute data in the Census TIGER® data base.

The Census TIGER® data base has three generations of currency in geographic areas. These are generally the previous census areas, current areas, and the next census areas. The boundaries of geographic areas are affected by the location, type, and number of areas.

To prepare for Census 2000, those features used only as boundaries in the 1980 census were deleted. The deletions lowered the overall count of complete chains and polygons.

Standard geographic codes, such as FIPS codes for states, counties, municipalities, and places, are used when encoding spatial entities. The Census Bureau performed spatial data tests for logical consistency of the codes during the compilation of the original Census TIGER® data base files. Most of the codes themselves were provided to the Census Bureau by the USGS, the agency responsible for maintaining FIPS 55.

Completeness

The GBF/DIME-Files and the USGS's DLG were the two main sources of spatial attribute data. Data for a given category contain attribute codes that reflect the information portrayed on the original source.

The TIGER/Line® files also use the Census Bureau's internal coding scheme which in some cases parallels the FIPS codes. The feature network of complete chains is complete for census purposes. For the 1990 census, census enumerators identified new and previously unreported street features for the entire Nation during a series of decennial census operations. In some areas, local officials reviewed the census maps and identified new features and feature changes. Similar operations are underway in preparation for Census 2000. The TIGER/Line® files contain limited point and area landmark data. The enumerator updates from the 1990 census did not stress landmark features. Computer file matching and automated updates from the Economic and Agriculture censuses added landmarks and key geographic locations (KGLs). As source material from the US Postal Service and local agencies is integrated into the Census TIGER® data base, the number of landmarks and KGLs is expected to increase.

Chapter 6: Data Dictionary

Record Type 1—Complete Chain Basic Data Record

Field	BV	Fmt	Type	Beg	End	Len	Description
RT	No	L	A	1	1	1	Record Type
VERSION	No	L	N	2	5	4	Version Number
TLID	No	R	N	6	15	10	TIGER/Line® ID, Permanent Record Number
SIDE1	Yes	R	N	16	16	1	Single-Side Complete Chain Code
SOURCE	Yes	L	A	17	17	1	Linear Segment Source Code
FEDIRP	Yes	L	A	18	19	2	Feature Direction, Prefix
FENAME	Yes	L	A	20	49	30	Feature Name
FETYPE	Yes	L	A	50	53	4	Feature Type
FEDIRS	Yes	L	A	54	55	2	Feature Direction, Suffix
CFCC	Yes	L	A	56	58	3	Census Feature Class Code
FRADDL	Yes	R	A	59	69	11	Start Address, Left
TOADDL	Yes	R	A	70	80	11	End Address, Left
FRADDR	Yes	R	A	81	91	11	Start Address, Right
TOADDR	Yes	R	A	92	102	11	End Address, Right
FRIADDL	Yes	L	A	103	103	1	Start Imputed Address Flag, Left
TOIADDL	Yes	L	A	104	104	1	End Imputed Address Flag, Left
FRIADDR	Yes	L	A	105	105	1	Start Imputed Address Flag, Right
TOIADDR	Yes	L	A	106	106	1	End Imputed Address Flag, Right
ZIPL	Yes	L	N	107	111	5	ZIP Code®, Left
ZIPR	Yes	L	N	112	116	5	ZIP Code®, Right
FAIRL	Yes	L	N	117	121	5	FIPS 55 Code (American Indian/ Alaska Native Area), Current Left
FAIRR	Yes	L	N	122	126	5	FIPS 55 Code (American Indian/ Alaska Native Area), Current Right
TRUSTL	Yes	L	A	127	127	1	American Indian Trust Land Flag, Current Left
TRUSTR	Yes	L	A	128	128	1	American Indian Trust Land Flag, Current Right
CENSUS1	Yes	L	A	129	129	1	Census Use 1
CENSUS2	Yes	L	A	130	130	1	Census Use 2

BV (*Blank Value*):

Yes = Blank value may occur here; No = Blank value should not occur here

Fmt:

L = Left-justified (numeric fields have leading zeros and may be interpreted as character data)

R = Right-justified (numeric fields do not have leading zeros and may be interpreted as integer data)

Type:

A = Alphanumeric, N = Numeric

Record Type 1—Complete Chain Basic Data Record *(cont.)*

Field	BV	Fmt	Type	Beg	End	Len	Description
STATEL	Yes	L	N	131	132	2	FIPS State Code, Current Left
STATER	Yes	L	N	133	134	2	FIPS State Code, Current Right
COUNTYL	Yes	L	N	135	137	3	FIPS County Code, Current Left
COUNTYR	Yes	L	N	138	140	3	FIPS County Code, Current Right
FMCDL	Yes	L	N	141	145	5	FIPS 55 Code (MCD/CCD) Left, Current
FMCDR	Yes	L	N	146	150	5	FIPS 55 Code (MCD/CCD) Right, Current
FSMCDL	Yes	L	N	151	155	5	FIPS 55 Code (Sub-MCD), Current Left
FSMCDR	Yes	L	N	156	160	5	FIPS 55 Code (Sub-MCD), Current Right
FPLL	Yes	L	N	161	165	5	FIPS 55 Code (Incorporated Place), Current Left*
FPLR	Yes	L	N	166	170	5	FIPS 55 Code (Incorporated Place), Current Right*
CTL	Yes	L	N	171	176	6	Census Tract Code, 1990 Left
CTR	Yes	L	N	177	182	6	Census Tract Code, 1990 Right
BLKL	Yes	L	A	183	186	4	Census Block Number, 1990 Left
BLKR	Yes	L	A	187	190	4	Census Block Number, 1990 Right
FRLONG	No	R	N	191	200	10	Start Longitude
FRLAT	No	R	N	201	209	9	Start Latitude
TOLONG	No	R	N	210	219	10	End Longitude
TOLAT	No	R	N	220	228	9	End Latitude

Note:

To find the final 1990 census state, county, and CDP codes for every Record Type 1, refer to Record Type 3 using the TIGER/Line[®] ID to link between the record types.

*Hawaii has CDP boundaries in this record which serve as substitutes for legal boundaries since it does not have any recognized incorporated place boundaries.

Record Type 2—Complete Chain Shape Coordinates

Field	BV	Fmt	Type	Beg	End	Len	Description
RT	No	L	A	1	1	1	Record Type
VERSION	No	L	N	2	5	4	Version Number
TLID	No	R	N	6	15	10	TIGER/Line® ID, Permanent Record Number
RTSQ	No	R	N	16	18	3	Record Sequence Number
LONG1	No	R	N	19	28	10	Point 1, Longitude
LAT1	No	R	N	29	37	9	Point 1, Latitude
LONG2	Yes	R	N	38	47	10	Point 2, Longitude
LAT2	Yes	R	N	48	56	9	Point 2, Latitude
LONG3	Yes	R	N	57	66	10	Point 3, Longitude
LAT3	Yes	R	N	67	75	9	Point 3, Latitude
LONG4	Yes	R	N	76	85	10	Point 4, Longitude
LAT4	Yes	R	N	86	94	9	Point 4, Latitude
LONG5	Yes	R	N	95	104	10	Point 5, Longitude
LAT5	Yes	R	N	105	113	9	Point 5, Latitude
LONG6	Yes	R	N	114	123	10	Point 6, Longitude
LAT6	Yes	R	N	124	132	9	Point 6, Latitude
LONG7	Yes	R	N	133	142	10	Point 7, Longitude
LAT7	Yes	R	N	143	151	9	Point 7, Latitude
LONG8	Yes	R	N	152	161	10	Point 8, Longitude
LAT8	Yes	R	N	162	170	9	Point 8, Latitude
LONG9	Yes	R	N	171	180	10	Point 9, Longitude
LAT9	Yes	R	N	181	189	9	Point 9, Latitude
LONG10	Yes	R	N	190	199	10	Point 10, Longitude
LAT10	Yes	R	N	200	208	9	Point 10, Latitude

Note:

The TIGER/Line® files contain a maximum of ten shape coordinates on one record. The number of shape records for a complete chain may be zero, one, or more. Complete chains with zero shape points (a straight line) do not have a Record Type 2. Coordinates have an implied six decimal places. See the *Positional Accuracy* section in Chapter 5 for more details.

Record Type 3 – Complete Chain Geographic Entity Codes

Field	BV	Fmt	Type	Beg	End	Len	Description
RT	No	L	A	1	1	1	Record Type
VERSION	No	L	N	2	5	4	Version Number
TLID	No	R	N	6	15	10	TIGER/Line® ID, Permanent Record Number
STATE90L	Yes	L	N	16	17	2	FIPS State Code, 1990 Left
STATE90R	Yes	L	N	18	19	2	FIPS State Code, 1990 Right
COUN90L	Yes	L	N	20	22	3	FIPS County Code, 1990 Left
COUN90R	Yes	L	N	23	25	3	FIPS County Code, 1990 Right
FMCD90L	Yes	L	N	26	30	5	FIPS 55 Code (MCD/CCD), 1990 Left
FMCD90R	Yes	L	N	31	35	5	FIPS 55 Code (MCD/CCD), 1990 Right
FPL90L	Yes	L	N	36	40	5	FIPS 55 Code (Place/CDP), 1990 Left
FPL90R	Yes	L	N	41	45	5	FIPS 55 Code (Place/CDP), 1990 Right
CTBNA90L	Yes	L	N	46	51	6	Census Tract/BNA Code, 1990 Left
CTBNA90R	Yes	L	N	52	57	6	Census Tract/BNA Code, 1990 Right
AIR90L	Yes	L	N	58	61	4	Census American Indian/Alaska Native Area Code 1990, Left
AIR90R	Yes	L	N	62	65	4	Census American Indian/Alaska Native Area Code 1990, Right
TRUST90L	Yes	L	A	66	66	1	American Indian Trust Land Flag 1990, Left
TRUST90R	Yes	L	A	67	67	1	American Indian Trust Land Flag 1990, Right
RS1	Yes	L	A	68	69	2	Reserved Space 1
BLK90L	Yes	L	A	70	73	4	Census Block Number, 1990 Left
BLK90R	Yes	L	A	74	77	4	Census Block Number, 1990 Right
AIRL	Yes	L	N	78	81	4	Census American Indian/Alaska Native Area Code, Current Left
AIRR	Yes	L	N	82	85	4	Census American Indian/Alaska Native Area Code, Current Right
FANRCL	Yes	L	N	86	90	5	FIPS 55 Code (ANRC), Current Left
FANRCR	Yes	L	N	91	95	5	FIPS 55 Code (ANRC), Current Right
CENSUS3	Yes	L	N	96	98	3	Census Use 3
CENSUS4	Yes	L	N	99	101	3	Census Use 4
RS2	Yes	L	A	102	103	2	Reserved Space 2
VTD90L	Yes	L	A	104	107	4	Voting District Code, 1990 Left
VTD90R	Yes	L	A	108	111	4	Voting District Code, 1990 Right

Record Type 4 – Index to Alternate Feature Identifiers

Field	BV	Fmt	Type	Beg	End	Len	Description
RT	No	L	A	1	1	1	Record Type
VERSION	No	L	N	2	5	4	Version Number
TLID	No	R	N	6	15	10	TIGER/Line® ID, Permanent Record Number
RTSQ	No	R	N	16	18	3	Record Sequence Number
FEAT1	No	R	N	19	26	8	Line Additional Name Identification Number, First
FEAT2	Yes	R	N	27	34	8	Line Additional Name Identification Number, Second
FEAT3	Yes	R	N	35	42	8	Line Additional Name Identification Number, Third
FEAT4	Yes	R	N	43	50	8	Line Additional Name Identification Number, Fourth
FEAT5	Yes	R	N	51	58	8	Line Additional Name Identification Number, Fifth

Record Type 5 – Complete Chain Feature Identifiers

Field	BV	Fmt	Type	Beg	End	Len	Description
RT	No	L	A	1	1	1	Record Type
STATE	No	L	N	2	3	2	FIPS State Code for File
COUNTY	No	L	N	4	6	3	FIPS County Code for File
FEAT	No	R	N	7	14	8	Line Name Identification Number
FEDIRP	Yes	L	A	15	16	2	Feature Direction, Prefix
FENAME	Yes	L	A	17	46	30	Feature Name
FETYPE	Yes	L	A	47	50	4	Feature Type
FEDIRS	Yes	L	A	51	52	2	Feature Direction, Suffix

Record Type 6 – Additional Address Range and ZIP Code® Data

Field	BV	Fmt	Type	Beg	End	Len	Description
RT	No	L	A	1	1	1	Record Type
VERSION	No	L	N	2	5	4	Version Number
TLID	No	R	N	6	15	10	TIGER/Line® ID, Permanent Record Number
RTSQ	No	R	N	16	18	3	Record Sequence Number
FRADDL	Yes	R	A	19	29	11	Start Address, Left
TOADDL	Yes	R	A	30	40	11	End Address, Left
FRADDR	Yes	R	A	41	51	11	Start Address, Right
TOADDR	Yes	R	A	52	62	11	End Address, Right
FRIADDL	Yes	L	A	63	63	1	Start Imputed Address Flag, Left
TOIADDL	Yes	L	A	64	64	1	End Imputed Address Flag, Left
FRIADDR	Yes	L	A	65	65	1	Start Imputed Address Flag, Right
TOIADDR	Yes	L	A	66	66	1	End Imputed Address Flag, Right
ZIPL	Yes	L	N	67	71	5	ZIP Code®, Left
ZIPR	Yes	L	N	72	76	5	ZIP Code®, Right

Record Type 7 – Landmark Features

Field	BV	Fmt	Type	Beg	End	Len	Description
RT	No	L	A	1	1	1	Record Type
VERSION	No	L	N	2	5	4	Version Number
STATE	No	L	N	6	7	2	FIPS State Code for File
COUNTY	No	L	N	8	10	3	FIPS County Code for File
LAND	No	R	N	11	20	10	Landmark Identification Number
SOURCE	Yes	L	A	21	21	1	Source or First Source Code to Update
CFCC	Yes	L	A	22	24	3	Census Feature Class Code
LANAME	Yes	L	A	25	54	30	Landmark Name
LALONG	Yes	R	N	55	64	10	Longitude
LALAT	Yes	R	N	65	73	9	Latitude
FILLER	Yes	L	A	74	74	1	Filler (to make even character count)

Record Type 8 – Polygons Linked to Area Landmarks

Field	BV	Fmt	Type	Beg	End	Len	Description
RT	No	L	A	1	1	1	Record Type
VERSION	No	L	N	2	5	4	Version Number
STATE	No	L	N	6	7	2	FIPS State Code for File
COUNTY	No	L	N	8	10	3	FIPS County Code for File
CENID	No	L	A	11	15	5	Census File Identification Code
POLYID	No	R	N	16	25	10	Polygon Identification Code
LAND	No	R	N	26	35	10	Landmark Identification Number
FILLER	Yes	L	A	36	36	1	Filler (to make even character count)

Record Type 9 – Key Geographic Location Features

Field	BV	Fmt	Type	Beg	End	Len	Description
RT	No	L	A	1	1	1	Record Type
VERSION	No	L	N	2	5	4	Version Number
STATE	No	L	N	6	7	2	FIPS State Code for File
COUNTY	No	L	N	8	10	3	FIPS County Code for File
CENID	No	L	A	11	15	5	Census File Identification Code
POLYID	No	R	N	16	25	10	Polygon Identification Code
SOURCE	Yes	L	A	26	26	1	Source or First Source Code to Update
CFCC	Yes	L	A	27	29	3	Census Feature Class Code
KGLNAME	Yes	L	A	30	59	30	Key Geographic Location Name
KGLADD	No*	R	A	60	70	11	Key Geographic Location Address
KGLZIP	No*	L	N	71	75	5	Key Geographic Location ZIP Code®
KGLZIP4	No*	L	N	76	79	4	+4 Postal Add-On Code for KGL
FEAT	Yes	R	N	80	87	8	Line Name Identification Number
FILLER	Yes	L	A	88	88	1	Filler (to make even character count)

* The KGLADD, KGLZIP, and KGLZIP4 fields always have data, but unknown data are represented by 0 or 0000.

Record Type A – Polygon Geographic Entity Codes

Field	BV	Fmt	Type	Beg	End	Len	Description
RT	No	L	A	1	1	1	Record Type
VERSION	No	L	N	2	5	4	Version Number
STATE	No	L	N	6	7	2	FIPS State Code for File
COUNTY	No	L	N	8	10	3	FIPS County Code for File
CENID	No	L	A	11	15	5	Census File Identification Code
POLYID	No	R	N	16	25	10	Polygon Identification Code
FAIR	Yes	L	N	26	30	5	FIPS 55 Code (American Indian/Alaska Native Area), 1990
FMCD	Yes	L	N	31	35	5	FIPS 55 Code (MCD/CCD), 1990
FPL	Yes	L	N	36	40	5	FIPS 55 Code (Place/CDP), 1990
CTBNA90	Yes	L	N	41	46	6	Census Tract/BNA Code, 1990
BLK90	Yes	L	A	47	50	4	Census Block Number, 1990
CD106	Yes	R	N	51	52	2	Congressional District Number, 106 th
CD108	Yes	R	N	53	54	2	Congressional District Number, 108 th
SDELM	Yes	L	A	55	59	5	School District Code, Elementary School
UA	Yes	L	N	60	64	5	Census Urbanized Area Code, 2000 (not filled)
SDSEC	Yes	L	A	65	69	5	School District Code, Secondary School
SDUNI	Yes	L	A	70	74	5	School District Code, Unified District
TAZ	Yes	L	A	75	80	6	Traffic Analysis Zone Code, 1990
UA90	Yes	L	N	81	84	4	Census Urbanized Area Code, 1990
URBFLAG	Yes	L	A	85	85	1	Urban/Rural Indicator, 1990
CTPP	Yes	L	A	86	89	4	Census Transportation Planning Package Area Code, 1990
STATE90	Yes	L	N	90	91	2	FIPS State Code, 1990
COUN90	Yes	L	N	92	94	3	FIPS County Code, 1990
AIR90	Yes	L	N	95	98	4	Census American Indian/Alaska Native Area Code, 1990

Record Type C – Geographic Entity Names

Field	BV	Fmt	Type	Beg	End	Len	Description
RT	No	L	A	1	1	1	Record Type
VERSION	No	L	N	2	5	4	Version Number
STATE	Yes	L	N	6	7	2	FIPS State Code
COUNTY	Yes	L	N	8	10	3	FIPS County Code
FIPSYR	Yes	L	N	11	14	4	FIPS Code and Name Relationship Applicable Year
FIPS	Yes	L	N	15	19	5	FIPS PUB 55-3 Code
FIPSCC	Yes	L	A	20	21	2	FIPS 55 Class Code (see Appendix B)
PDC	Yes	L	A	22	22	1	Census Place Description Code
LASAD	Yes	L	N	23	24	2	Legal/Administrative/Statistical Area Description Code
ENTITY	No	L	A	25	25	1	Entity Type Code
MA	Yes	L	N	26	29	4	Metropolitan Area Code
SD	Yes	L	N	30	34	5	School District Code
AIR	Yes	L	N	35	38	4	Census American Indian/Alaska Native Area Code
VTD	Yes	R	A	39	44	6	Voting District Code
UA	Yes	L	N	45	49	5	Census Urbanized Area Code*
ANRC	Yes	L	N	50	51	2	Census Alaska Native Regional Corporation Code
CENSUS5	Yes	L	N	52	54	3	Census Use 5
NAME	No	L	A	55	112	58	Name of Geographic Area

* The Census Urbanized Area Code, 1990 is a 4-character code, however the Census Urbanized Area Code, 2000 will be a 5-character code.

Record Type H – TIGER/Line® ID History

Field	BV	Fmt	Type	Beg	End	Len	Description
RT	No	L	A	1	1	1	Record Type
VERSION	No	L	N	2	5	4	Version Number
STATE	No	L	N	6	7	2	FIPS State Code for File
COUNTY	No	L	N	8	10	3	FIPS County Code for File
TLID	No	R	N	11	20	10	TIGER/Line® ID, Permanent Record Number
HIST	Yes	L	A	21	21	1	History or Last Source Code to Update
SOURCE	No	L	A	22	22	1	Source or First Source Code to Update
TLIDFR1	Yes	R	N	23	32	10	TIGER/Line® ID, Created From Number 1
TLIDFR2	Yes	R	N	33	42	10	TIGER/Line® ID, Created From Number 2
TLIDTO1	Yes	R	N	43	52	10	TIGER/Line® ID, Became Number 1
TLIDTO2	Yes	R	N	53	62	10	TIGER/Line® ID, Became Number 2

Record Type I – Link Between Complete Chains and Polygons

Field	BV	Fmt	Type	Beg	End	Len	Description
RT	No	L	A	1	1	1	Record Type
VERSION	No	L	N	2	5	4	Version Number
TLID	No	R	N	6	15	10	TIGER/Line® ID, Permanent Record Number
STATE	No	L	N	16	17	2	FIPS State Code for File
COUNTY	No	L	N	18	20	3	FIPS County Code for File
RTLINK	No	L	A	21	21	1	Record Type of Link
CENIDL	Yes	L	A	22	26	5	Census File Identification Code, Left
POLYIDL	Yes	R	N	27	36	10	Polygon Identification Code, Left
CENIDR	Yes	L	A	37	41	5	Census File Identification Code, Right
POLYIDR	Yes	R	N	42	51	10	Polygon Identification Code, Right
FILLER	Yes	L	A	52	52	1	Filler (to make even character count)

Record Type P – Polygon Internal Point

Field	BV	Fmt	Type	Beg	End	Len	Description
RT	No	L	A	1	1	1	Record Type
VERSION	No	L	N	2	5	4	Version Number
STATE	No	L	N	6	7	2	FIPS State Code for File
COUNTY	No	L	N	8	10	3	FIPS County Code for File
CENID	No	L	A	11	15	5	Census File Identification Code
POLYID	No	R	N	16	25	10	Polygon Identification Code
POLYLONG	No	R	N	26	35	10	Polygon Internal Point Longitude
POLYLAT	No	R	N	36	44	9	Polygon Internal Point Latitude

Record Type R – TIGER/Line® ID Record Number Range

Field	BV	Fmt	Type	Beg	End	Len	Description
RT	No	L	A	1	1	1	Record Type
VERSION	No	L	N	2	5	4	Version Number
STATE	No	L	N	6	7	2	FIPS State Code for File
COUNTY	No	L	N	8	10	3	FIPS County Code for File
CENID	No	L	A	11	15	5	Census File Identification Code
MAXID	No	R	N	16	25	10	TIGER/Line® ID, Maximum Permanent ID for Census File
MINID	No	R	N	26	35	10	TIGER/Line® ID, Minimum Permanent ID for Census File
HIGHID	No	R	N	36	45	10	TIGER/Line® ID, Current High ID for Census File
FILLER	Yes	L	A	46	46	1	Filler (to make even character count)

Record Type S – Polygon Additional Geographic Entity Codes

Field	BV	Fmt	Type	Beg	End	Len	Description
RT	No	L	A	1	1	1	Record Type
VERSION	No	L	N	2	5	4	Version Number
STATE	No	L	N	6	7	2	FIPS State Code for File
COUNTY	No	L	N	8	10	3	FIPS County Code for File
CENID	No	L	A	11	15	5	Census File Identification Code
POLYID	No	R	N	16	25	10	Polygon Identification Code
WATER	Yes	L	N	26	26	1	Water Flag
CMSA	Yes	L	N	27	30	4	FIPS Consolidated Metropolitan Statistical Area Code, Current
MA	Yes	L	N	31	34	4	FIPS Metropolitan Area Code, Current
FAIR	Yes	L	N	35	39	5	FIPS 55 Code (American Indian/Alaska Native Area), Current
AIR	Yes	L	N	40	43	4	Census American Indian/Alaska Native Area Code, Current
TRUST	Yes	L	A	44	44	1	American Indian Trust Land Flag, Current
ANRC	Yes	L	N	45	46	2	Census Alaska Native Regional Corporation Code, Current
STATE	Yes	L	N	47	48	2	FIPS State Code, Current
COUNTY	Yes	L	N	49	51	3	FIPS County Code, Current
FCCITY	Yes	L	N	52	56	5	FIPS 55 Code (Consolidated City), Current
FMCD	Yes	L	N	57	61	5	FIPS 55 Code (MCD/CCD), Current
FSMCD	Yes	L	N	62	66	5	FIPS 55 Code (Sub-MCD), Current
FPL	Yes	L	N	67	71	5	FIPS 55 Code (Place), Current
CT	Yes	L	N	72	77	6	Census Tract Code, 1990
BLK	Yes	L	A	78	81	4	Census Block Number, 1990
CENSUS6	Yes	R	N	82	82	1	Census Use 6
CDCU	Yes	R	N	83	84	2	Congressional District Code, Current
STSENATE	Yes	R	A	85	87	3	State Senate District Code (not filled)
STHOUSE	Yes	R	A	88	90	3	State House District Code (not filled)
CENSUS7	Yes	L	A	91	95	5	Census Use 7
RS7	Yes	L	A	96	96	1	Reserved Space 7
VTD	Yes	L	A	97	102	6	Voting District Code (not filled)
STATECOL	Yes	L	N	103	104	2	Census 2000 Collection State FIPS Code
COUNCOL	Yes	L	N	105	107	3	Census 2000 Collection County FIPS Code
BLKCOL	Yes	R	N	108	112	5	Census 2000 Collection Block Number
BLKSUFCOL	Yes	L	A	113	113	1	Census 2000 Collection Block Number Suffix

Record Type S – Polygon Additional Geographic Entity Codes *(cont.)*

Field	BV	Fmt	Type	Beg	End	Len	Description
ZCTA	Yes	L	A	114	118	5	ZIP Code [®] Tabulation Area, 2000 (not filled)
RS8	Yes	L	A	119	120	2	Reserved Space 8

Record Type Z – ZIP+4[®] Codes

Field	BV	Fmt	Type	Beg	End	Len	Description
RT	No	L	A	1	1	1	Record Type
VERSION	No	L	N	2	5	4	Version Number
TLID	No	R	N	6	15	10	TIGER/Line [®] ID, Permanent Record Number
RTSQ	No	R	N	16	18	3	Record Sequence Number
ZIP4L	Yes	L	N	19	22	4	+4 Postal Add-On Code, Left
ZIP4R	Yes	L	N	23	26	4	+4 Postal Add-On Code, Right

Appendix A—State and County Codes and Names

FIPS	County	State	FIPS	County	State
01 001	Autauga	AL	01 069	Houston	AL
01 003	Baldwin	AL	01 071	Jackson	AL
01 005	Barbour	AL	01 073	Jefferson	AL
01 007	Bibb	AL	01 075	Lamar	AL
01 009	Blount	AL	01 077	Lauderdale	AL
01 011	Bullock	AL	01 079	Lawrence	AL
01 013	Butler	AL	01 081	Lee	AL
01 015	Calhoun	AL	01 083	Limestone	AL
01 017	Chambers	AL	01 085	Lowndes	AL
01 019	Cherokee	AL	01 087	Macon	AL
01 021	Chilton	AL	01 089	Madison	AL
01 023	Choctaw	AL	01 091	Marengo	AL
01 025	Clarke	AL	01 093	Marion	AL
01 027	Clay	AL	01 095	Marshall	AL
01 029	Cleburne	AL	01 097	Mobile	AL
01 031	Coffee	AL	01 099	Monroe	AL
01 033	Colbert	AL	01 101	Montgomery	AL
01 035	Conecuh	AL	01 103	Morgan	AL
01 037	Coosa	AL	01 105	Perry	AL
01 039	Covington	AL	01 107	Pickens	AL
01 041	Crenshaw	AL	01 109	Pike	AL
01 043	Cullman	AL	01 111	Randolph	AL
01 045	Dale	AL	01 113	Russell	AL
01 047	Dallas	AL	01 115	St. Clair	AL
01 049	DeKalb	AL	01 117	Shelby	AL
01 051	Elmore	AL	01 119	Sumter	AL
01 053	Escambia	AL	01 121	Talladega	AL
01 055	Etowah	AL	01 123	Tallapoosa	AL
01 057	Fayette	AL	01 125	Tuscaloosa	AL
01 059	Franklin	AL	01 127	Walker	AL
01 061	Geneva	AL	01 129	Washington	AL
01 063	Greene	AL	01 131	Wilcox	AL
01 065	Hale	AL	01 133	Winston	AL
01 067	Henry	AL	02 013	Aleutians East	AK

FIPS	County	State	FIPS	County	State
02 016	Aleutians West	AK	04 021	Pinal	AZ
02 020	Anchorage	AK	04 023	Santa Cruz	AZ
02 050	Bethel	AK	04 025	Yavapai	AZ
02 060	Bristol Bay	AK	04 027	Yuma	AZ
02 068	Denali	AK	05 001	Arkansas	AR
02 070	Dillingham	AK	05 003	Ashley	AR
02 090	Fairbanks North Star	AK	05 005	Baxter	AR
02 100	Haines	AK	05 007	Benton	AR
02 110	Juneau	AK	05 009	Boone	AR
02 122	Kenai Peninsula	AK	05 011	Bradley	AR
02 130	Ketchikan Gateway	AK	05 013	Calhoun	AR
02 150	Kodiak Island	AK	05 015	Carroll	AR
02 164	Lake and Peninsula	AK	05 017	Chicot	AR
02 170	Matanuska-Susitna	AK	05 019	Clark	AR
02 180	Nome	AK	05 021	Clay	AR
02 185	North Slope	AK	05 023	Cleburne	AR
02 188	Northwest Arctic	AK	05 025	Cleveland	AR
02 201	Prince of Wales- Outer Ketchikan	AK	05 027	Columbia	AR
02 220	Sitka	AK	05 029	Conway	AR
02 232	Skagway-Hoonah-Angoon	AK	05 031	Craighead	AR
02 240	Southeast Fairbanks	AK	05 033	Crawford	AR
02 261	Valdez-Cordova	AK	05 035	Crittenden	AR
02 270	Wade Hampton	AK	05 037	Cross	AR
02 280	Wrangell-Petersburg	AK	05 039	Dallas	AR
02 282	Yakutat	AK	05 041	Desha	AR
02 290	Yukon-Koyukuk	AK	05 043	Drew	AR
04 001	Apache	AZ	05 045	Faulkner	AR
04 003	Cochise	AZ	05 047	Franklin	AR
04 005	Coconino	AZ	05 049	Fulton	AR
04 007	Gila	AZ	05 051	Garland	AR
04 009	Graham	AZ	05 053	Grant	AR
04 011	Greenlee	AZ	05 055	Greene	AR
04 012	La Paz	AZ	05 057	Hempstead	AR
04 013	Maricopa	AZ	05 059	Hot Spring	AR
04 015	Mohave	AZ	05 061	Howard	AR
04 017	Navajo	AZ	05 063	Independence	AR
04 019	Pima	AZ	05 065	Izard	AR
			05 067	Jackson	AR

FIPS	County	State	FIPS	County	State
05 069	Jefferson	AR	05 145	White	AR
05 071	Johnson	AR	05 147	Woodruff	AR
05 073	Lafayette	AR	05 149	Yell	AR
05 075	Lawrence	AR	06 001	Alameda	CA
05 077	Lee	AR	06 003	Alpine	CA
05 079	Lincoln	AR	06 005	Amador	CA
05 081	Little River	AR	06 007	Butte	CA
05 083	Logan	AR	06 009	Calaveras	CA
05 085	Lonoke	AR	06 011	Colusa	CA
05 087	Madison	AR	06 013	Contra Costa	CA
05 089	Marion	AR	06 015	Del Norte	CA
05 091	Miller	AR	06 017	El Dorado	CA
05 093	Mississippi	AR	06 019	Fresno	CA
05 095	Monroe	AR	06 021	Glenn	CA
05 097	Montgomery	AR	06 023	Humboldt	CA
05 099	Nevada	AR	06 025	Imperial	CA
05 101	Newton	AR	06 027	Inyo	CA
05 103	Ouachita	AR	06 029	Kern	CA
05 105	Perry	AR	06 031	Kings	CA
05 107	Phillips	AR	06 033	Lake	CA
05 109	Pike	AR	06 035	Lassen	CA
05 111	Poinsett	AR	06 037	Los Angeles	CA
05 113	Polk	AR	06 039	Madera	CA
05 115	Pope	AR	06 041	Marin	CA
05 117	Prairie	AR	06 043	Mariposa	CA
05 119	Pulaski	AR	06 045	Mendocino	CA
05 121	Randolph	AR	06 047	Merced	CA
05 123	St. Francis	AR	06 049	Modoc	CA
05 125	Saline	AR	06 051	Mono	CA
05 127	Scott	AR	06 053	Monterey	CA
05 129	Searcy	AR	06 055	Napa	CA
05 131	Sebastian	AR	06 057	Nevada	CA
05 133	Sevier	AR	06 059	Orange	CA
05 135	Sharp	AR	06 061	Placer	CA
05 137	Stone	AR	06 063	Plumas	CA
05 139	Union	AR	06 065	Riverside	CA
05 141	Van Buren	AR	06 067	Sacramento	CA
05 143	Washington	AR	06 069	San Benito	CA

FIPS	County	State	FIPS	County	State
06 071	San Bernardino	CA	08 031	Denver	CO
06 073	San Diego	CA	08 033	Dolores	CO
06 075	San Francisco	CA	08 035	Douglas	CO
06 077	San Joaquin	CA	08 037	Eagle	CO
06 079	San Luis Obispo	CA	08 039	Elbert	CO
06 081	San Mateo	CA	08 041	El Paso	CO
06 083	Santa Barbara	CA	08 043	Fremont	CO
06 085	Santa Clara	CA	08 045	Garfield	CO
06 087	Santa Cruz	CA	08 047	Gilpin	CO
06 089	Shasta	CA	08 049	Grand	CO
06 091	Sierra	CA	08 051	Gunnison	CO
06 093	Siskiyou	CA	08 053	Hinsdale	CO
06 095	Solano	CA	08 055	Huerfano	CO
06 097	Sonoma	CA	08 057	Jackson	CO
06 099	Stanislaus	CA	08 059	Jefferson	CO
06 101	Sutter	CA	08 061	Kiowa	CO
06 103	Tehama	CA	08 063	Kit Carson	CO
06 105	Trinity	CA	08 065	Lake	CO
06 107	Tulare	CA	08 067	La Plata	CO
06 109	Tuolumne	CA	08 069	Larimer	CO
06 111	Ventura	CA	08 071	Las Animas	CO
06 113	Yolo	CA	08 073	Lincoln	CO
06 115	Yuba	CA	08 075	Logan	CO
08 001	Adams	CO	08 077	Mesa	CO
08 003	Alamosa	CO	08 079	Mineral	CO
08 005	Arapahoe	CO	08 081	Moffat	CO
08 007	Archuleta	CO	08 083	Montezuma	CO
08 009	Baca	CO	08 085	Montrose	CO
08 011	Bent	CO	08 087	Morgan	CO
08 013	Boulder	CO	08 089	Otero	CO
08 015	Chaffee	CO	08 091	Ouray	CO
08 017	Cheyenne	CO	08 093	Park	CO
08 019	Clear Creek	CO	08 095	Phillips	CO
08 021	Conejos	CO	08 097	Pitkin	CO
08 023	Costilla	CO	08 099	Prowers	CO
08 025	Crowley	CO	08 101	Pueblo	CO
08 027	Custer	CO	08 103	Rio Blanco	CO
08 029	Delta	CO	08 105	Rio Grande	CO

FIPS	County	State	FIPS	County	State
08 107	Routt	CO	12 035	Flagler	FL
08 109	Saguache	CO	12 037	Franklin	FL
08 111	San Juan	CO	12 039	Gadsden	FL
08 113	San Miguel	CO	12 041	Gilchrist	FL
08 115	Sedgwick	CO	12 043	Glades	FL
08 117	Summit	CO	12 045	Gulf	FL
08 119	Teller	CO	12 047	Hamilton	FL
08 121	Washington	CO	12 049	Hardee	FL
08 123	Weld	CO	12 051	Hendry	FL
08 125	Yuma	CO	12 053	Hernando	FL
09 001	Fairfield	CT	12 055	Highlands	FL
09 003	Hartford	CT	12 057	Hillsborough	FL
09 005	Litchfield	CT	12 059	Holmes	FL
09 007	Middlesex	CT	12 061	Indian River	FL
09 009	New Haven	CT	12 063	Jackson	FL
09 011	New London	CT	12 065	Jefferson	FL
09 013	Tolland	CT	12 067	Lafayette	FL
09 015	Windham	CT	12 069	Lake	FL
10 001	Kent	DE	12 071	Lee	FL
10 003	New Castle	DE	12 073	Leon	FL
10 005	Sussex	DE	12 075	Levy	FL
11 001	District of Columbia	DC	12 077	Liberty	FL
12 001	Alachua	FL	12 079	Madison	FL
12 003	Baker	FL	12 081	Manatee	FL
12 005	Bay	FL	12 083	Marion	FL
12 007	Bradford	FL	12 085	Martin	FL
12 009	Brevard	FL	12 086	Miami-Dade	FL
12 011	Broward	FL	12 087	Monroe	FL
12 013	Calhoun	FL	12 089	Nassau	FL
12 015	Charlotte	FL	12 091	Okaloosa	FL
12 017	Citrus	FL	12 093	Okeechobee	FL
12 019	Clay	FL	12 095	Orange	FL
12 021	Collier	FL	12 097	Osceola	FL
12 023	Columbia	FL	12 099	Palm Beach	FL
12 027	DeSoto	FL	12 101	Pasco	FL
12 029	Dixie	FL	12 103	Pinellas	FL
12 031	Duval	FL	12 105	Polk	FL
12 033	Escambia	FL	12 107	Putnam	FL

FIPS	County	State	FIPS	County	State
12 109	St. Johns	FL	13 053	Chattahoochee	GA
12 111	St. Lucie	FL	13 055	Chattooga	GA
12 113	Santa Rosa	FL	13 057	Cherokee	GA
12 115	Sarasota	FL	13 059	Clarke	GA
12 117	Seminole	FL	13 061	Clay	GA
12 119	Sumter	FL	13 063	Clayton	GA
12 121	Suwannee	FL	13 065	Clinch	GA
12 123	Taylor	FL	13 067	Cobb	GA
12 125	Union	FL	13 069	Coffee	GA
12 127	Volusia	FL	13 071	Colquitt	GA
12 129	Wakulla	FL	13 073	Columbia	GA
12 131	Walton	FL	13 075	Cook	GA
12 133	Washington	FL	13 077	Coweta	GA
13 001	Appling	GA	13 079	Crawford	GA
13 003	Atkinson	GA	13 081	Crisp	GA
13 005	Bacon	GA	13 083	Dade	GA
13 007	Baker	GA	13 085	Dawson	GA
13 009	Baldwin	GA	13 087	Decatur	GA
13 011	Banks	GA	13 089	DeKalb	GA
13 013	Barrow	GA	13 091	Dodge	GA
13 015	Bartow	GA	13 093	Dooly	GA
13 017	Ben Hill	GA	13 095	Dougherty	GA
13 019	Berrien	GA	13 097	Douglas	GA
13 021	Bibb	GA	13 099	Early	GA
13 023	Bleckley	GA	13 101	Echols	GA
13 025	Brantley	GA	13 103	Effingham	GA
13 027	Brooks	GA	13 105	Elbert	GA
13 029	Bryan	GA	13 107	Emanuel	GA
13 031	Bulloch	GA	13 109	Evans	GA
13 033	Burke	GA	13 111	Fannin	GA
13 035	Butts	GA	13 113	Fayette	GA
13 037	Calhoun	GA	13 115	Floyd	GA
13 039	Camden	GA	13 117	Forsyth	GA
13 043	Candler	GA	13 119	Franklin	GA
13 045	Carroll	GA	13 121	Fulton	GA
13 047	Catoosa	GA	13 123	Gilmer	GA
13 049	Charlton	GA	13 125	Glascocock	GA
13 051	Chatham	GA	13 127	Glynn	GA

FIPS	County	State	FIPS	County	State
13 129	Gordon	GA	13 207	Monroe	GA
13 131	Grady	GA	13 209	Montgomery	GA
13 133	Greene	GA	13 211	Morgan	GA
13 135	Gwinnett	GA	13 213	Murray	GA
13 137	Habersham	GA	13 215	Muscogee	GA
13 139	Hall	GA	13 217	Newton	GA
13 141	Hancock	GA	13 219	Oconee	GA
13 143	Haralson	GA	13 221	Oglethorpe	GA
13 145	Harris	GA	13 223	Paulding	GA
13 147	Hart	GA	13 225	Peach	GA
13 149	Heard	GA	13 227	Pickens	GA
13 151	Henry	GA	13 229	Pierce	GA
13 153	Houston	GA	13 231	Pike	GA
13 155	Irwin	GA	13 233	Polk	GA
13 157	Jackson	GA	13 235	Pulaski	GA
13 159	Jasper	GA	13 237	Putnam	GA
13 161	Jeff Davis	GA	13 239	Quitman	GA
13 163	Jefferson	GA	13 241	Rabun	GA
13 165	Jenkins	GA	13 243	Randolph	GA
13 167	Johnson	GA	13 245	Richmond	GA
13 169	Jones	GA	13 247	Rockdale	GA
13 171	Lamar	GA	13 249	Schley	GA
13 173	Lanier	GA	13 251	Screven	GA
13 175	Laurens	GA	13 253	Seminole	GA
13 177	Lee	GA	13 255	Spalding	GA
13 179	Liberty	GA	13 257	Stephens	GA
13 181	Lincoln	GA	13 259	Stewart	GA
13 183	Long	GA	13 261	Sumter	GA
13 185	Lowndes	GA	13 263	Talbot	GA
13 187	Lumpkin	GA	13 265	Taliaferro	GA
13 189	McDuffie	GA	13 267	Tattnall	GA
13 191	McIntosh	GA	13 269	Taylor	GA
13 193	Macon	GA	13 271	Telfair	GA
13 195	Madison	GA	13 273	Terrell	GA
13 197	Marion	GA	13 275	Thomas	GA
13 199	Meriwether	GA	13 277	Tift	GA
13 201	Miller	GA	13 279	Toombs	GA
13 205	Mitchell	GA	13 281	Towns	GA

FIPS	County	State	FIPS	County	State
13 283	Treutlen	GA	16 027	Canyon	ID
13 285	Troup	GA	16 029	Caribou	ID
13 287	Turner	GA	16 031	Cassia	ID
13 289	Twiggs	GA	16 033	Clark	ID
13 291	Union	GA	16 035	Clearwater	ID
13 293	Upson	GA	16 037	Custer	ID
13 295	Walker	GA	16 039	Elmore	ID
13 297	Walton	GA	16 041	Franklin	ID
13 299	Ware	GA	16 043	Fremont	ID
13 301	Warren	GA	16 045	Gem	ID
13 303	Washington	GA	16 047	Gooding	ID
13 305	Wayne	GA	16 049	Idaho	ID
13 307	Webster	GA	16 051	Jefferson	ID
13 309	Wheeler	GA	16 053	Jerome	ID
13 311	White	GA	16 055	Kootenai	ID
13 313	Whitfield	GA	16 057	Latah	ID
13 315	Wilcox	GA	16 059	Lemhi	ID
13 317	Wilkes	GA	16 061	Lewis	ID
13 319	Wilkinson	GA	16 063	Lincoln	ID
13 321	Worth	GA	16 065	Madison	ID
15 001	Hawaii	HI	16 067	Minidoka	ID
15 003	Honolulu	HI	16 069	Nez Perce	ID
15 005	Kalawao	HI	16 071	Oneida	ID
15 007	Kauai	HI	16 073	Owyhee	ID
15 009	Maui	HI	16 075	Payette	ID
16 001	Ada	ID	16 077	Power	ID
16 003	Adams	ID	16 079	Shoshone	ID
16 005	Bannock	ID	16 081	Teton	ID
16 007	Bear Lake	ID	16 083	Twin Falls	ID
16 009	Benewah	ID	16 085	Valley	ID
16 011	Bingham	ID	16 087	Washington	ID
16 013	Blaine	ID	17 001	Adams	IL
16 015	Boise	ID	17 003	Alexander	IL
16 017	Bonner	ID	17 005	Bond	IL
16 019	Bonneville	ID	17 007	Boone	IL
16 021	Boundary	ID	17 009	Brown	IL
16 023	Butte	ID	17 011	Bureau	IL
16 025	Camas	ID	17 013	Calhoun	IL

FIPS	County	State	FIPS	County	State
17 015	Carroll	IL	17 091	Kankakee	IL
17 017	Cass	IL	17 093	Kendall	IL
17 019	Champaign	IL	17 095	Knox	IL
17 021	Christian	IL	17 097	Lake	IL
17 023	Clark	IL	17 099	La Salle	IL
17 025	Clay	IL	17 101	Lawrence	IL
17 027	Clinton	IL	17 103	Lee	IL
17 029	Coles	IL	17 105	Livingston	IL
17 031	Cook	IL	17 107	Logan	IL
17 033	Crawford	IL	17 109	McDonough	IL
17 035	Cumberland	IL	17 111	McHenry	IL
17 037	DeKalb	IL	17 113	McLean	IL
17 039	De Witt	IL	17 115	Macon	IL
17 041	Douglas	IL	17 117	Macoupin	IL
17 043	DuPage	IL	17 119	Madison	IL
17 045	Edgar	IL	17 121	Marion	IL
17 047	Edwards	IL	17 123	Marshall	IL
17 049	Effingham	IL	17 125	Mason	IL
17 051	Fayette	IL	17 127	Massac	IL
17 053	Ford	IL	17 129	Menard	IL
17 055	Franklin	IL	17 131	Mercer	IL
17 057	Fulton	IL	17 133	Monroe	IL
17 059	Gallatin	IL	17 135	Montgomery	IL
17 061	Greene	IL	17 137	Morgan	IL
17 063	Grundy	IL	17 139	Moultrie	IL
17 065	Hamilton	IL	17 141	Ogle	IL
17 067	Hancock	IL	17 143	Peoria	IL
17 069	Hardin	IL	17 145	Perry	IL
17 071	Henderson	IL	17 147	Piatt	IL
17 073	Henry	IL	17 149	Pike	IL
17 075	Iroquois	IL	17 151	Pope	IL
17 077	Jackson	IL	17 153	Pulaski	IL
17 079	Jasper	IL	17 155	Putnam	IL
17 081	Jefferson	IL	17 157	Randolph	IL
17 083	Jersey	IL	17 159	Richland	IL
17 085	Jo Daviess	IL	17 161	Rock Island	IL
17 087	Johnson	IL	17 163	St. Clair	IL
17 089	Kane	IL	17 165	Saline	IL

FIPS	County	State	FIPS	County	State
17 167	Sangamon	IL	18 039	Elkhart	IN
17 169	Schuyler	IL	18 041	Fayette	IN
17 171	Scott	IL	18 043	Floyd	IN
17 173	Shelby	IL	18 045	Fountain	IN
17 175	Stark	IL	18 047	Franklin	IN
17 177	Stephenson	IL	18 049	Fulton	IN
17 179	Tazewell	IL	18 051	Gibson	IN
17 181	Union	IL	18 053	Grant	IN
17 183	Vermilion	IL	18 055	Greene	IN
17 185	Wabash	IL	18 057	Hamilton	IN
17 187	Warren	IL	18 059	Hancock	IN
17 189	Washington	IL	18 061	Harrison	IN
17 191	Wayne	IL	18 063	Hendricks	IN
17 193	White	IL	18 065	Henry	IN
17 195	Whiteside	IL	18 067	Howard	IN
17 197	Will	IL	18 069	Huntington	IN
17 199	Williamson	IL	18 071	Jackson	IN
17 201	Winnebago	IL	18 073	Jasper	IN
17 203	Woodford	IL	18 075	Jay	IN
18 001	Adams	IN	18 077	Jefferson	IN
18 003	Allen	IN	18 079	Jennings	IN
18 005	Bartholomew	IN	18 081	Johnson	IN
18 007	Benton	IN	18 083	Knox	IN
18 009	Blackford	IN	18 085	Kosciusko	IN
18 011	Boone	IN	18 087	Lagrange	IN
18 013	Brown	IN	18 089	Lake	IN
18 015	Carroll	IN	18 091	La Porte	IN
18 017	Cass	IN	18 093	Lawrence	IN
18 019	Clark	IN	18 095	Madison	IN
18 021	Clay	IN	18 097	Marion	IN
18 023	Clinton	IN	18 099	Marshall	IN
18 025	Crawford	IN	18 101	Martin	IN
18 027	Daviess	IN	18 103	Miami	IN
18 029	Dearborn	IN	18 105	Monroe	IN
18 031	Decatur	IN	18 107	Montgomery	IN
18 033	De Kalb	IN	18 109	Morgan	IN
18 035	Delaware	IN	18 111	Newton	IN
18 037	Dubois	IN	18 113	Noble	IN

FIPS	County	State	FIPS	County	State
18 115	Ohio	IN	19 007	Appanoose	IA
18 117	Orange	IN	19 009	Audubon	IA
18 119	Owen	IN	19 011	Benton	IA
18 121	Parke	IN	19 013	Black Hawk	IA
18 123	Perry	IN	19 015	Boone	IA
18 125	Pike	IN	19 017	Bremer	IA
18 127	Porter	IN	19 019	Buchanan	IA
18 129	Posey	IN	19 021	Buena Vista	IA
18 131	Pulaski	IN	19 023	Butler	IA
18 133	Putnam	IN	19 025	Calhoun	IA
18 135	Randolph	IN	19 027	Carroll	IA
18 137	Ripley	IN	19 029	Cass	IA
18 139	Rush	IN	19 031	Cedar	IA
18 141	St. Joseph	IN	19 033	Cerro Gordo	IA
18 143	Scott	IN	19 035	Cherokee	IA
18 145	Shelby	IN	19 037	Chickasaw	IA
18 147	Spencer	IN	19 039	Clarke	IA
18 149	Starke	IN	19 041	Clay	IA
18 151	Steuben	IN	19 043	Clayton	IA
18 153	Sullivan	IN	19 045	Clinton	IA
18 155	Switzerland	IN	19 047	Crawford	IA
18 157	Tippecanoe	IN	19 049	Dallas	IA
18 159	Tipton	IN	19 051	Davis	IA
18 161	Union	IN	19 053	Decatur	IA
18 163	Vanderburgh	IN	19 055	Delaware	IA
18 165	Vermillion	IN	19 057	Des Moines	IA
18 167	Vigo	IN	19 059	Dickinson	IA
18 169	Wabash	IN	19 061	Dubuque	IA
18 171	Warren	IN	19 063	Emmet	IA
18 173	Warrick	IN	19 065	Fayette	IA
18 175	Washington	IN	19 067	Floyd	IA
18 177	Wayne	IN	19 069	Franklin	IA
18 179	Wells	IN	19 071	Fremont	IA
18 181	White	IN	19 073	Greene	IA
18 183	Whitley	IN	19 075	Grundy	IA
19 001	Adair	IA	19 077	Guthrie	IA
19 003	Adams	IA	19 079	Hamilton	IA
19 005	Allamakee	IA	19 081	Hancock	IA

FIPS	County	State	FIPS	County	State
19 083	Hardin	IA	19 159	Ringgold	IA
19 085	Harrison	IA	19 161	Sac	IA
19 087	Henry	IA	19 163	Scott	IA
19 089	Howard	IA	19 165	Shelby	IA
19 091	Humboldt	IA	19 167	Sioux	IA
19 093	Ida	IA	19 169	Story	IA
19 095	Iowa	IA	19 171	Tama	IA
19 097	Jackson	IA	19 173	Taylor	IA
19 099	Jasper	IA	19 175	Union	IA
19 101	Jefferson	IA	19 177	Van Buren	IA
19 103	Johnson	IA	19 179	Wapello	IA
19 105	Jones	IA	19 181	Warren	IA
19 107	Keokuk	IA	19 183	Washington	IA
19 109	Kossuth	IA	19 185	Wayne	IA
19 111	Lee	IA	19 187	Webster	IA
19 113	Linn	IA	19 189	Winnebago	IA
19 115	Louisa	IA	19 191	Winneshiek	IA
19 117	Lucas	IA	19 193	Woodbury	IA
19 119	Lyon	IA	19 195	Worth	IA
19 121	Madison	IA	19 197	Wright	IA
19 123	Mahaska	IA	20 001	Allen	KS
19 125	Marion	IA	20 003	Anderson	KS
19 127	Marshall	IA	20 005	Atchison	KS
19 129	Mills	IA	20 007	Barber	KS
19 131	Mitchell	IA	20 009	Barton	KS
19 133	Monona	IA	20 011	Bourbon	KS
19 135	Monroe	IA	20 013	Brown	KS
19 137	Montgomery	IA	20 015	Butler	KS
19 139	Muscatine	IA	20 017	Chase	KS
19 141	O'Brien	IA	20 019	Chautauqua	KS
19 143	Osceola	IA	20 021	Cherokee	KS
19 145	Page	IA	20 023	Cheyenne	KS
19 147	Palo Alto	IA	20 025	Clark	KS
19 149	Plymouth	IA	20 027	Clay	KS
19 151	Pocahontas	IA	20 029	Cloud	KS
19 153	Polk	IA	20 031	Coffey	KS
19 155	Pottawattamie	IA	20 033	Comanche	KS
19 157	Poweshiek	IA	20 035	Cowley	KS

FIPS	County	State	FIPS	County	State
20 037	Crawford	KS	20 113	McPherson	KS
20 039	Decatur	KS	20 115	Marion	KS
20 041	Dickinson	KS	20 117	Marshall	KS
20 043	Doniphan	KS	20 119	Meade	KS
20 045	Douglas	KS	20 121	Miami	KS
20 047	Edwards	KS	20 123	Mitchell	KS
20 049	Elk	KS	20 125	Montgomery	KS
20 051	Ellis	KS	20 127	Morris	KS
20 053	Ellsworth	KS	20 129	Morton	KS
20 055	Finney	KS	20 131	Nemaha	KS
20 057	Ford	KS	20 133	Neosho	KS
20 059	Franklin	KS	20 135	Ness	KS
20 061	Geary	KS	20 137	Norton	KS
20 063	Gove	KS	20 139	Osage	KS
20 065	Graham	KS	20 141	Osborne	KS
20 067	Grant	KS	20 143	Ottawa	KS
20 069	Gray	KS	20 145	Pawnee	KS
20 071	Greeley	KS	20 147	Phillips	KS
20 073	Greenwood	KS	20 149	Pottawatomie	KS
20 075	Hamilton	KS	20 151	Pratt	KS
20 077	Harper	KS	20 153	Rawlins	KS
20 079	Harvey	KS	20 155	Reno	KS
20 081	Haskell	KS	20 157	Republic	KS
20 083	Hodgeman	KS	20 159	Rice	KS
20 085	Jackson	KS	20 161	Riley	KS
20 087	Jefferson	KS	20 163	Rooks	KS
20 089	Jewell	KS	20 165	Rush	KS
20 091	Johnson	KS	20 167	Russell	KS
20 093	Kearny	KS	20 169	Saline	KS
20 095	Kingman	KS	20 171	Scott	KS
20 097	Kiowa	KS	20 173	Sedgwick	KS
20 099	Labette	KS	20 175	Seward	KS
20 101	Lane	KS	20 177	Shawnee	KS
20 103	Leavenworth	KS	20 179	Sheridan	KS
20 105	Lincoln	KS	20 181	Sherman	KS
20 107	Linn	KS	20 183	Smith	KS
20 109	Logan	KS	20 185	Stafford	KS
20 111	Lyon	KS	20 187	Stanton	KS

FIPS	County	State	FIPS	County	State
20 189	Stevens	KS	21 055	Crittenden	KY
20 191	Sumner	KS	21 057	Cumberland	KY
20 193	Thomas	KS	21 059	Daviess	KY
20 195	Trego	KS	21 061	Edmonson	KY
20 197	Wabaunsee	KS	21 063	Elliott	KY
20 199	Wallace	KS	21 065	Estill	KY
20 201	Washington	KS	21 067	Fayette	KY
20 203	Wichita	KS	21 069	Fleming	KY
20 205	Wilson	KS	21 071	Floyd	KY
20 207	Woodson	KS	21 073	Franklin	KY
20 209	Wyandotte	KS	21 075	Fulton	KY
21 001	Adair	KY	21 077	Gallatin	KY
21 003	Allen	KY	21 079	Garrard	KY
21 005	Anderson	KY	21 081	Grant	KY
21 007	Ballard	KY	21 083	Graves	KY
21 009	Barren	KY	21 085	Grayson	KY
21 011	Bath	KY	21 087	Green	KY
21 013	Bell	KY	21 089	Greenup	KY
21 015	Boone	KY	21 091	Hancock	KY
21 017	Bourbon	KY	21 093	Hardin	KY
21 019	Boyd	KY	21 095	Harlan	KY
21 021	Boyle	KY	21 097	Harrison	KY
21 023	Bracken	KY	21 099	Hart	KY
21 025	Breathitt	KY	21 101	Henderson	KY
21 027	Breckinridge	KY	21 103	Henry	KY
21 029	Bullitt	KY	21 105	Hickman	KY
21 031	Butler	KY	21 107	Hopkins	KY
21 033	Caldwell	KY	21 109	Jackson	KY
21 035	Calloway	KY	21 111	Jefferson	KY
21 037	Campbell	KY	21 113	Jessamine	KY
21 039	Carlisle	KY	21 115	Johnson	KY
21 041	Carroll	KY	21 117	Kenton	KY
21 043	Carter	KY	21 119	Knott	KY
21 045	Casey	KY	21 121	Knox	KY
21 047	Christian	KY	21 123	Larue	KY
21 049	Clark	KY	21 125	Laurel	KY
21 051	Clay	KY	21 127	Lawrence	KY
21 053	Clinton	KY	21 129	Lee	KY

FIPS	County	State	FIPS	County	State
21 131	Leslie	KY	21 207	Russell	KY
21 133	Letcher	KY	21 209	Scott	KY
21 135	Lewis	KY	21 211	Shelby	KY
21 137	Lincoln	KY	21 213	Simpson	KY
21 139	Livingston	KY	21 215	Spencer	KY
21 141	Logan	KY	21 217	Taylor	KY
21 143	Lyon	KY	21 219	Todd	KY
21 145	McCracken	KY	21 221	Trigg	KY
21 147	McCreary	KY	21 223	Trimble	KY
21 149	McLean	KY	21 225	Union	KY
21 151	Madison	KY	21 227	Warren	KY
21 153	Magoffin	KY	21 229	Washington	KY
21 155	Marion	KY	21 231	Wayne	KY
21 157	Marshall	KY	21 233	Webster	KY
21 159	Martin	KY	21 235	Whitley	KY
21 161	Mason	KY	21 237	Wolfe	KY
21 163	Meade	KY	21 239	Woodford	KY
21 165	Menifee	KY	22 001	Acadia	LA
21 167	Mercer	KY	22 003	Allen	LA
21 169	Metcalfe	KY	22 005	Ascension	LA
21 171	Monroe	KY	22 007	Assumption	LA
21 173	Montgomery	KY	22 009	Avoyelles	LA
21 175	Morgan	KY	22 011	Beauregard	LA
21 177	Muhlenberg	KY	22 013	Bienville	LA
21 179	Nelson	KY	22 015	Bossier	LA
21 181	Nicholas	KY	22 017	Caddo	LA
21 183	Ohio	KY	22 019	Calcasieu	LA
21 185	Oldham	KY	22 021	Caldwell	LA
21 187	Owen	KY	22 023	Cameron	LA
21 189	Owsley	KY	22 025	Catahoula	LA
21 191	Pendleton	KY	22 027	Claiborne	LA
21 193	Perry	KY	22 029	Concordia	LA
21 195	Pike	KY	22 031	De Soto	LA
21 197	Powell	KY	22 033	East Baton Rouge	LA
21 199	Pulaski	KY	22 035	East Carroll	LA
21 201	Robertson	KY	22 037	East Feliciana	LA
21 203	Rockcastle	KY	22 039	Evangeline	LA
21 205	Rowan	KY	22 041	Franklin	LA

FIPS	County	State	FIPS	County	State
22 043	Grant	LA	22 119	Webster	LA
22 045	Iberia	LA	22 121	West Baton Rouge	LA
22 047	Iberville	LA	22 123	West Carroll	LA
22 049	Jackson	LA	22 125	West Feliciana	LA
22 051	Jefferson	LA	22 127	Winn	LA
22 053	Jefferson Davis	LA	23 001	Androscoggin	ME
22 055	Lafayette	LA	23 003	Aroostook	ME
22 057	Lafourche	LA	23 005	Cumberland	ME
22 059	La Salle	LA	23 007	Franklin	ME
22 061	Lincoln	LA	23 009	Hancock	ME
22 063	Livingston	LA	23 011	Kennebec	ME
22 065	Madison	LA	23 013	Knox	ME
22 067	Morehouse	LA	23 015	Lincoln	ME
22 069	Natchitoches	LA	23 017	Oxford	ME
22 071	Orleans	LA	23 019	Penobscot	ME
22 073	Ouachita	LA	23 021	Piscataquis	ME
22 075	Plaquemines	LA	23 023	Sagadahoc	ME
22 077	Pointe Coupee	LA	23 025	Somerset	ME
22 079	Rapides	LA	23 027	Waldo	ME
22 081	Red River	LA	23 029	Washington	ME
22 083	Richland	LA	23 031	York	ME
22 085	Sabine	LA	24 001	Allegany	MD
22 087	St. Bernard	LA	24 003	Anne Arundel	MD
22 089	St. Charles	LA	24 005	Baltimore	MD
22 091	St. Helena	LA	24 009	Calvert	MD
22 093	St. James	LA	24 011	Caroline	MD
22 095	St. John the Baptist	LA	24 013	Carroll	MD
22 097	St. Landry	LA	24 015	Cecil	MD
22 099	St. Martin	LA	24 017	Charles	MD
22 101	St. Mary	LA	24 019	Dorchester	MD
22 103	St. Tammany	LA	24 021	Frederick	MD
22 105	Tangipahoa	LA	24 023	Garrett	MD
22 107	Tensas	LA	24 025	Harford	MD
22 109	Terrebonne	LA	24 027	Howard	MD
22 111	Union	LA	24 029	Kent	MD
22 113	Vermilion	LA	24 031	Montgomery	MD
22 115	Vernon	LA	24 033	Prince George's	MD
22 117	Washington	LA	24 035	Queen Anne's	MD

FIPS	County	State	FIPS	County	State
24 037	St. Mary's	MD	26 035	Clare	MI
24 039	Somerset	MD	26 037	Clinton	MI
24 041	Talbot	MD	26 039	Crawford	MI
24 043	Washington	MD	26 041	Delta	MI
24 045	Wicomico	MD	26 043	Dickinson	MI
24 047	Worcester	MD	26 045	Eaton	MI
24 510	Baltimore	MD	26 047	Emmet	MI
25 001	Barnstable	MA	26 049	Genesee	MI
25 003	Berkshire	MA	26 051	Gladwin	MI
25 005	Bristol	MA	26 053	Gogebic	MI
25 007	Dukes	MA	26 055	Grand Traverse	MI
25 009	Essex	MA	26 057	Gratiot	MI
25 011	Franklin	MA	26 059	Hillsdale	MI
25 013	Hampden	MA	26 061	Houghton	MI
25 015	Hampshire	MA	26 063	Huron	MI
25 017	Middlesex	MA	26 065	Ingham	MI
25 019	Nantucket	MA	26 067	Ionia	MI
25 021	Norfolk	MA	26 069	Iosco	MI
25 023	Plymouth	MA	26 071	Iron	MI
25 025	Suffolk	MA	26 073	Isabella	MI
25 027	Worcester	MA	26 075	Jackson	MI
26 001	Alcona	MI	26 077	Kalamazoo	MI
26 003	Alger	MI	26 079	Kalkaska	MI
26 005	Allegan	MI	26 081	Kent	MI
26 007	Alpena	MI	26 083	Keweenaw	MI
26 009	Antrim	MI	26 085	Lake	MI
26 011	Arenac	MI	26 087	Lapeer	MI
26 013	Baraga	MI	26 089	Leelanau	MI
26 015	Barry	MI	26 091	Lenawee	MI
26 017	Bay	MI	26 093	Livingston	MI
26 019	Benzie	MI	26 095	Luce	MI
26 021	Berrien	MI	26 097	Mackinac	MI
26 023	Branch	MI	26 099	Macomb	MI
26 025	Calhoun	MI	26 101	Manistee	MI
26 027	Cass	MI	26 103	Marquette	MI
26 029	Charlevoix	MI	26 105	Mason	MI
26 031	Cheboygan	MI	26 107	Mecosta	MI
26 033	Chippewa	MI	26 109	Menominee	MI

FIPS	County	State	FIPS	County	State
26 111	Midland	MI	27 021	Cass	MN
26 113	Missaukee	MI	27 023	Chippewa	MN
26 115	Monroe	MI	27 025	Chisago	MN
26 117	Montcalm	MI	27 027	Clay	MN
26 119	Montmorency	MI	27 029	Clearwater	MN
26 121	Muskegon	MI	27 031	Cook	MN
26 123	Newaygo	MI	27 033	Cottonwood	MN
26 125	Oakland	MI	27 035	Crow Wing	MN
26 127	Oceana	MI	27 037	Dakota	MN
26 129	Ogemaw	MI	27 039	Dodge	MN
26 131	Ontonagon	MI	27 041	Douglas	MN
26 133	Osceola	MI	27 043	Faribault	MN
26 135	Oscoda	MI	27 045	Fillmore	MN
26 137	Otsego	MI	27 047	Freeborn	MN
26 139	Ottawa	MI	27 049	Goodhue	MN
26 141	Presque Isle	MI	27 051	Grant	MN
26 143	Roscommon	MI	27 053	Hennepin	MN
26 145	Saginaw	MI	27 055	Houston	MN
26 147	St. Clair	MI	27 057	Hubbard	MN
26 149	St. Joseph	MI	27 059	Isanti	MN
26 151	Sanilac	MI	27 061	Itasca	MN
26 153	Schoolcraft	MI	27 063	Jackson	MN
26 155	Shiawassee	MI	27 065	Kanabec	MN
26 157	Tuscola	MI	27 067	Kandiyohi	MN
26 159	Van Buren	MI	27 069	Kittson	MN
26 161	Washtenaw	MI	27 071	Koochiching	MN
26 163	Wayne	MI	27 073	Lac qui Parle	MN
26 165	Wexford	MI	27 075	Lake	MN
27 001	Aitkin	MN	27 077	Lake of the Woods	MN
27 003	Anoka	MN	27 079	Le Sueur	MN
27 005	Becker	MN	27 081	Lincoln	MN
27 007	Beltrami	MN	27 083	Lyon	MN
27 009	Benton	MN	27 085	McLeod	MN
27 011	Big Stone	MN	27 087	Mahnomen	MN
27 013	Blue Earth	MN	27 089	Marshall	MN
27 015	Brown	MN	27 091	Martin	MN
27 017	Carlton	MN	27 093	Meeker	MN
27 019	Carver	MN	27 095	Mille Lacs	MN

FIPS	County	State	FIPS	County	State
27 097	Morrison	MN	27 173	Yellow Medicine	MN
27 099	Mower	MN	28 001	Adams	MS
27 101	Murray	MN	28 003	Alcorn	MS
27 103	Nicollet	MN	28 005	Amite	MS
27 105	Nobles	MN	28 007	Attala	MS
27 107	Norman	MN	28 009	Benton	MS
27 109	Olmsted	MN	28 011	Bolivar	MS
27 111	Otter Tail	MN	28 013	Calhoun	MS
27 113	Pennington	MN	28 015	Carroll	MS
27 115	Pine	MN	28 017	Chickasaw	MS
27 117	Pipestone	MN	28 019	Choctaw	MS
27 119	Polk	MN	28 021	Claiborne	MS
27 121	Pope	MN	28 023	Clarke	MS
27 123	Ramsey	MN	28 025	Clay	MS
27 125	Red Lake	MN	28 027	Coahoma	MS
27 127	Redwood	MN	28 029	Copiah	MS
27 129	Renville	MN	28 031	Covington	MS
27 131	Rice	MN	28 033	DeSoto	MS
27 133	Rock	MN	28 035	Forrest	MS
27 135	Roseau	MN	28 037	Franklin	MS
27 137	St. Louis	MN	28 039	George	MS
27 139	Scott	MN	28 041	Greene	MS
27 141	Sherburne	MN	28 043	Grenada	MS
27 143	Sibley	MN	28 045	Hancock	MS
27 145	Stearns	MN	28 047	Harrison	MS
27 147	Steele	MN	28 049	Hinds	MS
27 149	Stevens	MN	28 051	Holmes	MS
27 151	Swift	MN	28 053	Humphreys	MS
27 153	Todd	MN	28 055	Issaquena	MS
27 155	Traverse	MN	28 057	Itawamba	MS
27 157	Wabasha	MN	28 059	Jackson	MS
27 159	Wadena	MN	28 061	Jasper	MS
27 161	Waseca	MN	28 063	Jefferson	MS
27 163	Washington	MN	28 065	Jefferson Davis	MS
27 165	Watonwan	MN	28 067	Jones	MS
27 167	Wilkin	MN	28 069	Kemper	MS
27 169	Winona	MN	28 071	Lafayette	MS
27 171	Wright	MN	28 073	Lamar	MS

FIPS	County	State	FIPS	County	State
28 075	Lauderdale	MS	28 151	Washington	MS
28 077	Lawrence	MS	28 153	Wayne	MS
28 079	Leake	MS	28 155	Webster	MS
28 081	Lee	MS	28 157	Wilkinson	MS
28 083	Leflore	MS	28 159	Winston	MS
28 085	Lincoln	MS	28 161	Yalobusha	MS
28 087	Lowndes	MS	28 163	Yazoo	MS
28 089	Madison	MS	29 001	Adair	MO
28 091	Marion	MS	29 003	Andrew	MO
28 093	Marshall	MS	29 005	Atchison	MO
28 095	Monroe	MS	29 007	Audrain	MO
28 097	Montgomery	MS	29 009	Barry	MO
28 099	Neshoba	MS	29 011	Barton	MO
28 101	Newton	MS	29 013	Bates	MO
28 103	Noxubee	MS	29 015	Benton	MO
28 105	Oktibbeha	MS	29 017	Bollinger	MO
28 107	Panola	MS	29 019	Boone	MO
28 109	Pearl River	MS	29 021	Buchanan	MO
28 111	Perry	MS	29 023	Butler	MO
28 113	Pike	MS	29 025	Caldwell	MO
28 115	Pontotoc	MS	29 027	Callaway	MO
28 117	Prentiss	MS	29 029	Camden	MO
28 119	Quitman	MS	29 031	Cape Girardeau	MO
28 121	Rankin	MS	29 033	Carroll	MO
28 123	Scott	MS	29 035	Carter	MO
28 125	Sharkey	MS	29 037	Cass	MO
28 127	Simpson	MS	29 039	Cedar	MO
28 129	Smith	MS	29 041	Chariton	MO
28 131	Stone	MS	29 043	Christian	MO
28 133	Sunflower	MS	29 045	Clark	MO
28 135	Tallahatchie	MS	29 047	Clay	MO
28 137	Tate	MS	29 049	Clinton	MO
28 139	Tippah	MS	29 051	Cole	MO
28 141	Tishomingo	MS	29 053	Cooper	MO
28 143	Tunica	MS	29 055	Crawford	MO
28 145	Union	MS	29 057	Dade	MO
28 147	Walthall	MS	29 059	Dallas	MO
28 149	Warren	MS	29 061	Daviess	MO

FIPS	County	State	FIPS	County	State
29 063	DeKalb	MO	29 139	Montgomery	MO
29 065	Dent	MO	29 141	Morgan	MO
29 067	Douglas	MO	29 143	New Madrid	MO
29 069	Dunklin	MO	29 145	Newton	MO
29 071	Franklin	MO	29 147	Nodaway	MO
29 073	Gasconade	MO	29 149	Oregon	MO
29 075	Gentry	MO	29 151	Osage	MO
29 077	Greene	MO	29 153	Ozark	MO
29 079	Grundy	MO	29 155	Pemiscot	MO
29 081	Harrison	MO	29 157	Perry	MO
29 083	Henry	MO	29 159	Pettis	MO
29 085	Hickory	MO	29 161	Phelps	MO
29 087	Holt	MO	29 163	Pike	MO
29 089	Howard	MO	29 165	Platte	MO
29 091	Howell	MO	29 167	Polk	MO
29 093	Iron	MO	29 169	Pulaski	MO
29 095	Jackson	MO	29 171	Putnam	MO
29 097	Jasper	MO	29 173	Ralls	MO
29 099	Jefferson	MO	29 175	Randolph	MO
29 101	Johnson	MO	29 177	Ray	MO
29 103	Knox	MO	29 179	Reynolds	MO
29 105	Laclede	MO	29 181	Ripley	MO
29 107	Lafayette	MO	29 183	St. Charles	MO
29 109	Lawrence	MO	29 185	St. Clair	MO
29 111	Lewis	MO	29 186	Ste. Genevieve	MO
29 113	Lincoln	MO	29 187	St. Francois	MO
29 115	Linn	MO	29 189	St. Louis	MO
29 117	Livingston	MO	29 195	Saline	MO
29 119	McDonald	MO	29 197	Schuyler	MO
29 121	Macon	MO	29 199	Scotland	MO
29 123	Madison	MO	29 201	Scott	MO
29 125	Maries	MO	29 203	Shannon	MO
29 127	Marion	MO	29 205	Shelby	MO
29 129	Mercer	MO	29 207	Stoddard	MO
29 131	Miller	MO	29 209	Stone	MO
29 133	Mississippi	MO	29 211	Sullivan	MO
29 135	Moniteau	MO	29 213	Taney	MO
29 137	Monroe	MO	29 215	Texas	MO

FIPS	County	State	FIPS	County	State
29 217	Vernon	MO	30 061	Mineral	MT
29 219	Warren	MO	30 063	Missoula	MT
29 221	Washington	MO	30 065	Musselshell	MT
29 223	Wayne	MO	30 067	Park	MT
29 225	Webster	MO	30 069	Petroleum	MT
29 227	Worth	MO	30 071	Phillips	MT
29 229	Wright	MO	30 073	Pondera	MT
29 510	St. Louis	MO	30 075	Powder River	MT
30 001	Beaverhead	MT	30 077	Powell	MT
30 003	Big Horn	MT	30 079	Prairie	MT
30 005	Blaine	MT	30 081	Ravalli	MT
30 007	Broadwater	MT	30 083	Richland	MT
30 009	Carbon	MT	30 085	Roosevelt	MT
30 011	Carter	MT	30 087	Rosebud	MT
30 013	Cascade	MT	30 089	Sanders	MT
30 015	Chouteau	MT	30 091	Sheridan	MT
30 017	Custer	MT	30 093	Silver Bow	MT
30 019	Daniels	MT	30 095	Stillwater	MT
30 021	Dawson	MT	30 097	Sweet Grass	MT
30 023	Deer Lodge	MT	30 099	Teton	MT
30 025	Fallon	MT	30 101	Toole	MT
30 027	Fergus	MT	30 103	Treasure	MT
30 029	Flathead	MT	30 105	Valley	MT
30 031	Gallatin	MT	30 107	Wheatland	MT
30 033	Garfield	MT	30 109	Wibaux	MT
30 035	Glacier	MT	30 111	Yellowstone	MT
30 037	Golden Valley	MT	31 001	Adams	NE
30 039	Granite	MT	31 003	Antelope	NE
30 041	Hill	MT	31 005	Arthur	NE
30 043	Jefferson	MT	31 007	Banner	NE
30 045	Judith Basin	MT	31 009	Blaine	NE
30 047	Lake	MT	31 011	Boone	NE
30 049	Lewis and Clark	MT	31 013	Box Butte	NE
30 051	Liberty	MT	31 015	Boyd	NE
30 053	Lincoln	MT	31 017	Brown	NE
30 055	McCone	MT	31 019	Buffalo	NE
30 057	Madison	MT	31 021	Burt	NE
30 059	Meagher	MT	31 023	Butler	NE

FIPS	County	State	FIPS	County	State
31 025	Cass	NE	31 101	Keith	NE
31 027	Cedar	NE	31 103	Keya Paha	NE
31 029	Chase	NE	31 105	Kimball	NE
31 031	Cherry	NE	31 107	Knox	NE
31 033	Cheyenne	NE	31 109	Lancaster	NE
31 035	Clay	NE	31 111	Lincoln	NE
31 037	Colfax	NE	31 113	Logan	NE
31 039	Cuming	NE	31 115	Loup	NE
31 041	Custer	NE	31 117	McPherson	NE
31 043	Dakota	NE	31 119	Madison	NE
31 045	Dawes	NE	31 121	Merrick	NE
31 047	Dawson	NE	31 123	Morrill	NE
31 049	Deuel	NE	31 125	Nance	NE
31 051	Dixon	NE	31 127	Nemaha	NE
31 053	Dodge	NE	31 129	Nuckolls	NE
31 055	Douglas	NE	31 131	Otoe	NE
31 057	Dundy	NE	31 133	Pawnee	NE
31 059	Fillmore	NE	31 135	Perkins	NE
31 061	Franklin	NE	31 137	Phelps	NE
31 063	Frontier	NE	31 139	Pierce	NE
31 065	Furnas	NE	31 141	Platte	NE
31 067	Gage	NE	31 143	Polk	NE
31 069	Garden	NE	31 145	Red Willow	NE
31 071	Garfield	NE	31 147	Richardson	NE
31 073	Gosper	NE	31 149	Rock	NE
31 075	Grant	NE	31 151	Saline	NE
31 077	Greeley	NE	31 153	Sarpy	NE
31 079	Hall	NE	31 155	Saunders	NE
31 081	Hamilton	NE	31 157	Scotts Bluff	NE
31 083	Harlan	NE	31 159	Seward	NE
31 085	Hayes	NE	31 161	Sheridan	NE
31 087	Hitchcock	NE	31 163	Sherman	NE
31 089	Holt	NE	31 165	Sioux	NE
31 091	Hooker	NE	31 167	Stanton	NE
31 093	Howard	NE	31 169	Thayer	NE
31 095	Jefferson	NE	31 171	Thomas	NE
31 097	Johnson	NE	31 173	Thurston	NE
31 099	Kearney	NE	31 175	Valley	NE

FIPS	County	State	FIPS	County	State
31 177	Washington	NE	34 013	Essex	NJ
31 179	Wayne	NE	34 015	Gloucester	NJ
31 181	Webster	NE	34 017	Hudson	NJ
31 183	Wheeler	NE	34 019	Hunterdon	NJ
31 185	York	NE	34 021	Mercer	NJ
32 001	Churchill	NV	34 023	Middlesex	NJ
32 003	Clark	NV	34 025	Monmouth	NJ
32 005	Douglas	NV	34 027	Morris	NJ
32 007	Elko	NV	34 029	Ocean	NJ
32 009	Esmeralda	NV	34 031	Passaic	NJ
32 011	Eureka	NV	34 033	Salem	NJ
32 013	Humboldt	NV	34 035	Somerset	NJ
32 015	Lander	NV	34 037	Sussex	NJ
32 017	Lincoln	NV	34 039	Union	NJ
32 019	Lyon	NV	34 041	Warren	NJ
32 021	Mineral	NV	35 001	Bernalillo	NM
32 023	Nye	NV	35 003	Catron	NM
32 027	Pershing	NV	35 005	Chaves	NM
32 029	Storey	NV	35 006	Cibola	NM
32 031	Washoe	NV	35 007	Colfax	NM
32 033	White Pine	NV	35 009	Curry	NM
32 510	Carson City	NV	35 011	DeBaca	NM
33 001	Belknap	NH	35 013	Dona Ana	NM
33 003	Carroll	NH	35 015	Eddy	NM
33 005	Cheshire	NH	35 017	Grant	NM
33 007	Coos	NH	35 019	Guadalupe	NM
33 009	Grafton	NH	35 021	Harding	NM
33 011	Hillsborough	NH	35 023	Hidalgo	NM
33 013	Merrimack	NH	35 025	Lea	NM
33 015	Rockingham	NH	35 027	Lincoln	NM
33 017	Strafford	NH	35 028	Los Alamos	NM
33 019	Sullivan	NH	35 029	Luna	NM
34 001	Atlantic	NJ	35 031	McKinley	NM
34 003	Bergen	NJ	35 033	Mora	NM
34 005	Burlington	NJ	35 035	Otero	NM
34 007	Camden	NJ	35 037	Quay	NM
34 009	Cape May	NJ	35 039	Rio Arriba	NM
34 011	Cumberland	NJ	35 041	Roosevelt	NM

FIPS	County	State	FIPS	County	State
35 043	Sandoval	NM	36 057	Montgomery	NY
35 045	San Juan	NM	36 059	Nassau	NY
35 047	San Miguel	NM	36 061	New York	NY
35 049	Santa Fe	NM	36 063	Niagara	NY
35 051	Sierra	NM	36 065	Oneida	NY
35 053	Socorro	NM	36 067	Onondaga	NY
35 055	Taos	NM	36 069	Ontario	NY
35 057	Torrance	NM	36 071	Orange	NY
35 059	Union	NM	36 073	Orleans	NY
35 061	Valencia	NM	36 075	Oswego	NY
36 001	Albany	NY	36 077	Otsego	NY
36 003	Allegany	NY	36 079	Putnam	NY
36 005	Bronx	NY	36 081	Queens	NY
36 007	Broome	NY	36 083	Rensselaer	NY
36 009	Cattaraugus	NY	36 085	Richmond	NY
36 011	Cayuga	NY	36 087	Rockland	NY
36 013	Chautauqua	NY	36 089	St. Lawrence	NY
36 015	Chemung	NY	36 091	Saratoga	NY
36 017	Chenango	NY	36 093	Schenectady	NY
36 019	Clinton	NY	36 095	Schoharie	NY
36 021	Columbia	NY	36 097	Schuyler	NY
36 023	Cortland	NY	36 099	Seneca	NY
36 025	Delaware	NY	36 101	Steuben	NY
36 027	Dutchess	NY	36 103	Suffolk	NY
36 029	Erie	NY	36 105	Sullivan	NY
36 031	Essex	NY	36 107	Tioga	NY
36 033	Franklin	NY	36 109	Tompkins	NY
36 035	Fulton	NY	36 111	Ulster	NY
36 037	Genesee	NY	36 113	Warren	NY
36 039	Greene	NY	36 115	Washington	NY
36 041	Hamilton	NY	36 117	Wayne	NY
36 043	Herkimer	NY	36 119	Westchester	NY
36 045	Jefferson	NY	36 121	Wyoming	NY
36 047	Kings	NY	36 123	Yates	NY
36 049	Lewis	NY	37 001	Alamance	NC
36 051	Livingston	NY	37 003	Alexander	NC
36 053	Madison	NY	37 005	Alleghany	NC
36 055	Monroe	NY	37 007	Anson	NC

FIPS	County	State	FIPS	County	State
37 009	Ashe	NC	37 085	Harnett	NC
37 011	Avery	NC	37 087	Haywood	NC
37 013	Beaufort	NC	37 089	Henderson	NC
37 015	Bertie	NC	37 091	Hertford	NC
37 017	Bladen	NC	37 093	Hoke	NC
37 019	Brunswick	NC	37 095	Hyde	NC
37 021	Buncombe	NC	37 097	Iredell	NC
37 023	Burke	NC	37 099	Jackson	NC
37 025	Cabarrus	NC	37 101	Johnston	NC
37 027	Caldwell	NC	37 103	Jones	NC
37 029	Camden	NC	37 105	Lee	NC
37 031	Carteret	NC	37 107	Lenoir	NC
37 033	Caswell	NC	37 109	Lincoln	NC
37 035	Catawba	NC	37 111	McDowell	NC
37 037	Chatham	NC	37 113	Macon	NC
37 039	Cherokee	NC	37 115	Madison	NC
37 041	Chowan	NC	37 117	Martin	NC
37 043	Clay	NC	37 119	Mecklenburg	NC
37 045	Cleveland	NC	37 121	Mitchell	NC
37 047	Columbus	NC	37 123	Montgomery	NC
37 049	Craven	NC	37 125	Moore	NC
37 051	Cumberland	NC	37 127	Nash	NC
37 053	Currituck	NC	37 129	New Hanover	NC
37 055	Dare	NC	37 131	Northampton	NC
37 057	Davidson	NC	37 133	Onslow	NC
37 059	Davie	NC	37 135	Orange	NC
37 061	Duplin	NC	37 137	Pamlico	NC
37 063	Durham	NC	37 139	Pasquotank	NC
37 065	Edgecombe	NC	37 141	Pender	NC
37 067	Forsyth	NC	37 143	Perquimans	NC
37 069	Franklin	NC	37 145	Person	NC
37 071	Gaston	NC	37 147	Pitt	NC
37 073	Gates	NC	37 149	Polk	NC
37 075	Graham	NC	37 151	Randolph	NC
37 077	Granville	NC	37 153	Richmond	NC
37 079	Greene	NC	37 155	Robeson	NC
37 081	Guilford	NC	37 157	Rockingham	NC
37 083	Halifax	NC	37 159	Rowan	NC

FIPS	County	State	FIPS	County	State
37 161	Rutherford	NC	38 037	Grant	ND
37 163	Sampson	NC	38 039	Griggs	ND
37 165	Scotland	NC	38 041	Hettinger	ND
37 167	Stanly	NC	38 043	Kidder	ND
37 169	Stokes	NC	38 045	LaMoure	ND
37 171	Surry	NC	38 047	Logan	ND
37 173	Swain	NC	38 049	McHenry	ND
37 175	Transylvania	NC	38 051	McIntosh	ND
37 177	Tyrrell	NC	38 053	McKenzie	ND
37 179	Union	NC	38 055	McLean	ND
37 181	Vance	NC	38 057	Mercer	ND
37 183	Wake	NC	38 059	Morton	ND
37 185	Warren	NC	38 061	Mountrail	ND
37 187	Washington	NC	38 063	Nelson	ND
37 189	Watauga	NC	38 065	Oliver	ND
37 191	Wayne	NC	38 067	Pembina	ND
37 193	Wilkes	NC	38 069	Pierce	ND
37 195	Wilson	NC	38 071	Ramsey	ND
37 197	Yadkin	NC	38 073	Ransom	ND
37 199	Yancey	NC	38 075	Renville	ND
38 001	Adams	ND	38 077	Richland	ND
38 003	Barnes	ND	38 079	Rolette	ND
38 005	Benson	ND	38 081	Sargent	ND
38 007	Billings	ND	38 083	Sheridan	ND
38 009	Bottineau	ND	38 085	Sioux	ND
38 011	Bowman	ND	38 087	Slope	ND
38 013	Burke	ND	38 089	Stark	ND
38 015	Burleigh	ND	38 091	Steele	ND
38 017	Cass	ND	38 093	Stutsman	ND
38 019	Cavalier	ND	38 095	Towner	ND
38 021	Dickey	ND	38 097	Traill	ND
38 023	Divide	ND	38 099	Walsh	ND
38 025	Dunn	ND	38 101	Ward	ND
38 027	Eddy	ND	38 103	Wells	ND
38 029	Emmons	ND	38 105	Williams	ND
38 031	Foster	ND	39 001	Adams	OH
38 033	Golden Valley	ND	39 003	Allen	OH
38 035	Grand Forks	ND	39 005	Ashland	OH

FIPS	County	State	FIPS	County	State
39 007	Ashtabula	OH	39 083	Knox	OH
39 009	Athens	OH	39 085	Lake	OH
39 011	Auglaize	OH	39 087	Lawrence	OH
39 013	Belmont	OH	39 089	Licking	OH
39 015	Brown	OH	39 091	Logan	OH
39 017	Butler	OH	39 093	Lorain	OH
39 019	Carroll	OH	39 095	Lucas	OH
39 021	Champaign	OH	39 097	Madison	OH
39 023	Clark	OH	39 099	Mahoning	OH
39 025	Clermont	OH	39 101	Marion	OH
39 027	Clinton	OH	39 103	Medina	OH
39 029	Columbiana	OH	39 105	Meigs	OH
39 031	Coshocton	OH	39 107	Mercer	OH
39 033	Crawford	OH	39 109	Miami	OH
39 035	Cuyahoga	OH	39 111	Monroe	OH
39 037	Darke	OH	39 113	Montgomery	OH
39 039	Defiance	OH	39 115	Morgan	OH
39 041	Delaware	OH	39 117	Morrow	OH
39 043	Erie	OH	39 119	Muskingum	OH
39 045	Fairfield	OH	39 121	Noble	OH
39 047	Fayette	OH	39 123	Ottawa	OH
39 049	Franklin	OH	39 125	Paulding	OH
39 051	Fulton	OH	39 127	Perry	OH
39 053	Gallia	OH	39 129	Pickaway	OH
39 055	Geauga	OH	39 131	Pike	OH
39 057	Greene	OH	39 133	Portage	OH
39 059	Guernsey	OH	39 135	Preble	OH
39 061	Hamilton	OH	39 137	Putnam	OH
39 063	Hancock	OH	39 139	Richland	OH
39 065	Hardin	OH	39 141	Ross	OH
39 067	Harrison	OH	39 143	Sandusky	OH
39 069	Henry	OH	39 145	Scioto	OH
39 071	Highland	OH	39 147	Seneca	OH
39 073	Hocking	OH	39 149	Shelby	OH
39 075	Holmes	OH	39 151	Stark	OH
39 077	Huron	OH	39 153	Summit	OH
39 079	Jackson	OH	39 155	Trumbull	OH
39 081	Jefferson	OH	39 157	Tuscarawas	OH

FIPS	County	State	FIPS	County	State
39 159	Union	OH	40 059	Harper	OK
39 161	Van Wert	OH	40 061	Haskell	OK
39 163	Vinton	OH	40 063	Hughes	OK
39 165	Warren	OH	40 065	Jackson	OK
39 167	Washington	OH	40 067	Jefferson	OK
39 169	Wayne	OH	40 069	Johnston	OK
39 171	Williams	OH	40 071	Kay	OK
39 173	Wood	OH	40 073	Kingfisher	OK
39 175	Wyandot	OH	40 075	Kiowa	OK
40 001	Adair	OK	40 077	Latimer	OK
40 003	Alfalfa	OK	40 079	Le Flore	OK
40 005	Atoka	OK	40 081	Lincoln	OK
40 007	Beaver	OK	40 083	Logan	OK
40 009	Beckham	OK	40 085	Love	OK
40 011	Blaine	OK	40 087	McClain	OK
40 013	Bryan	OK	40 089	McCurtain	OK
40 015	Caddo	OK	40 091	McIntosh	OK
40 017	Canadian	OK	40 093	Major	OK
40 019	Carter	OK	40 095	Marshall	OK
40 021	Cherokee	OK	40 097	Mayes	OK
40 023	Choctaw	OK	40 099	Murray	OK
40 025	Cimarron	OK	40 101	Muskogee	OK
40 027	Cleveland	OK	40 103	Noble	OK
40 029	Coal	OK	40 105	Nowata	OK
40 031	Comanche	OK	40 107	Okfuskee	OK
40 033	Cotton	OK	40 109	Oklahoma	OK
40 035	Craig	OK	40 111	Okmulgee	OK
40 037	Creek	OK	40 113	Osage	OK
40 039	Custer	OK	40 115	Ottawa	OK
40 041	Delaware	OK	40 117	Pawnee	OK
40 043	Dewey	OK	40 119	Payne	OK
40 045	Ellis	OK	40 121	Pittsburg	OK
40 047	Garfield	OK	40 123	Pontotoc	OK
40 049	Garvin	OK	40 125	Pottawatomie	OK
40 051	Grady	OK	40 127	Pushmataha	OK
40 053	Grant	OK	40 129	Roger Mills	OK
40 055	Greer	OK	40 131	Rogers	OK
40 057	Harmon	OK	40 133	Seminole	OK

FIPS	County	State	FIPS	County	State
40 135	Sequoyah	OK	41 057	Tillamook	OR
40 137	Stephens	OK	41 059	Umatilla	OR
40 139	Texas	OK	41 061	Union	OR
40 141	Tillman	OK	41 063	Wallowa	OR
40 143	Tulsa	OK	41 065	Wasco	OR
40 145	Wagoner	OK	41 067	Washington	OR
40 147	Washington	OK	41 069	Wheeler	OR
40 149	Washita	OK	41 071	Yamhill	OR
40 151	Woods	OK	42 001	Adams	PA
40 153	Woodward	OK	42 003	Allegheny	PA
41 001	Baker	OR	42 005	Armstrong	PA
41 003	Benton	OR	42 007	Beaver	PA
41 005	Clackamas	OR	42 009	Bedford	PA
41 007	Clatsop	OR	42 011	Berks	PA
41 009	Columbia	OR	42 013	Blair	PA
41 011	Coos	OR	42 015	Bradford	PA
41 013	Crook	OR	42 017	Bucks	PA
41 015	Curry	OR	42 019	Butler	PA
41 017	Deschutes	OR	42 021	Cambria	PA
41 019	Douglas	OR	42 023	Cameron	PA
41 021	Gilliam	OR	42 025	Carbon	PA
41 023	Grant	OR	42 027	Centre	PA
41 025	Harney	OR	42 029	Chester	PA
41 027	Hood River	OR	42 031	Clarion	PA
41 029	Jackson	OR	42 033	Clearfield	PA
41 031	Jefferson	OR	42 035	Clinton	PA
41 033	Josephine	OR	42 037	Columbia	PA
41 035	Klamath	OR	42 039	Crawford	PA
41 037	Lake	OR	42 041	Cumberland	PA
41 039	Lane	OR	42 043	Dauphin	PA
41 041	Lincoln	OR	42 045	Delaware	PA
41 043	Linn	OR	42 047	Elk	PA
41 045	Malheur	OR	42 049	Erie	PA
41 047	Marion	OR	42 051	Fayette	PA
41 049	Morrow	OR	42 053	Forest	PA
41 051	Multnomah	OR	42 055	Franklin	PA
41 053	Polk	OR	42 057	Fulton	PA
41 055	Sherman	OR	42 059	Greene	PA

FIPS	County	State	FIPS	County	State
42 061	Huntingdon	PA	44 003	Kent	RI
42 063	Indiana	PA	44 005	Newport	RI
42 065	Jefferson	PA	44 007	Providence	RI
42 067	Juniata	PA	44 009	Washington	RI
42 069	Lackawanna	PA	45 001	Abbeville	SC
42 071	Lancaster	PA	45 003	Aiken	SC
42 073	Lawrence	PA	45 005	Allendale	SC
42 075	Lebanon	PA	45 007	Anderson	SC
42 077	Lehigh	PA	45 009	Bamberg	SC
42 079	Luzerne	PA	45 011	Barnwell	SC
42 081	Lycoming	PA	45 013	Beaufort	SC
42 083	McKean	PA	45 015	Berkeley	SC
42 085	Mercer	PA	45 017	Calhoun	SC
42 087	Mifflin	PA	45 019	Charleston	SC
42 089	Monroe	PA	45 021	Cherokee	SC
42 091	Montgomery	PA	45 023	Chester	SC
42 093	Montour	PA	45 025	Chesterfield	SC
42 095	Northampton	PA	45 027	Clarendon	SC
42 097	Northumberland	PA	45 029	Colleton	SC
42 099	Perry	PA	45 031	Darlington	SC
42 101	Philadelphia	PA	45 033	Dillon	SC
42 103	Pike	PA	45 035	Dorchester	SC
42 105	Potter	PA	45 037	Edgefield	SC
42 107	Schuylkill	PA	45 039	Fairfield	SC
42 109	Snyder	PA	45 041	Florence	SC
42 111	Somerset	PA	45 043	Georgetown	SC
42 113	Sullivan	PA	45 045	Greenville	SC
42 115	Susquehanna	PA	45 047	Greenwood	SC
42 117	Tioga	PA	45 049	Hampton	SC
42 119	Union	PA	45 051	Horry	SC
42 121	Venango	PA	45 053	Jasper	SC
42 123	Warren	PA	45 055	Kershaw	SC
42 125	Washington	PA	45 057	Lancaster	SC
42 127	Wayne	PA	45 059	Laurens	SC
42 129	Westmoreland	PA	45 061	Lee	SC
42 131	Wyoming	PA	45 063	Lexington	SC
42 133	York	PA	45 065	McCormick	SC
44 001	Bristol	RI	45 067	Marion	SC

FIPS	County	State	FIPS	County	State
45 069	Marlboro	SC	46 055	Haakon	SD
45 071	Newberry	SC	46 057	Hamlin	SD
45 073	Oconee	SC	46 059	Hand	SD
45 075	Orangeburg	SC	46 061	Hanson	SD
45 077	Pickens	SC	46 063	Harding	SD
45 079	Richland	SC	46 065	Hughes	SD
45 081	Saluda	SC	46 067	Hutchinson	SD
45 083	Spartanburg	SC	46 069	Hyde	SD
45 085	Sumter	SC	46 071	Jackson	SD
45 087	Union	SC	46 073	Jerauld	SD
45 089	Williamsburg	SC	46 075	Jones	SD
45 091	York	SC	46 077	Kingsbury	SD
46 003	Aurora	SD	46 079	Lake	SD
46 005	Beadle	SD	46 081	Lawrence	SD
46 007	Bennett	SD	46 083	Lincoln	SD
46 009	Bon Homme	SD	46 085	Lyman	SD
46 011	Brookings	SD	46 087	McCook	SD
46 013	Brown	SD	46 089	McPherson	SD
46 015	Brule	SD	46 091	Marshall	SD
46 017	Buffalo	SD	46 093	Meade	SD
46 019	Butte	SD	46 095	Mellette	SD
46 021	Campbell	SD	46 097	Miner	SD
46 023	Charles Mix	SD	46 099	Minnehaha	SD
46 025	Clark	SD	46 101	Moody	SD
46 027	Clay	SD	46 103	Pennington	SD
46 029	Codington	SD	46 105	Perkins	SD
46 031	Corson	SD	46 107	Potter	SD
46 033	Custer	SD	46 109	Roberts	SD
46 035	Davison	SD	46 111	Sanborn	SD
46 037	Day	SD	46 113	Shannon	SD
46 039	Deuel	SD	46 115	Spink	SD
46 041	Dewey	SD	46 117	Stanley	SD
46 043	Douglas	SD	46 119	Sully	SD
46 045	Edmunds	SD	46 121	Todd	SD
46 047	Fall River	SD	46 123	Tripp	SD
46 049	Faulk	SD	46 125	Turner	SD
46 051	Grant	SD	46 127	Union	SD
46 053	Gregory	SD	46 129	Walworth	SD

FIPS	County	State	FIPS	County	State
46 135	Yankton	SD	47 073	Hawkins	TN
46 137	Ziebach	SD	47 075	Haywood	TN
47 001	Anderson	TN	47 077	Henderson	TN
47 003	Bedford	TN	47 079	Henry	TN
47 005	Benton	TN	47 081	Hickman	TN
47 007	Bledsoe	TN	47 083	Houston	TN
47 009	Blount	TN	47 085	Humphreys	TN
47 011	Bradley	TN	47 087	Jackson	TN
47 013	Campbell	TN	47 089	Jefferson	TN
47 015	Cannon	TN	47 091	Johnson	TN
47 017	Carroll	TN	47 093	Knox	TN
47 019	Carter	TN	47 095	Lake	TN
47 021	Cheatham	TN	47 097	Lauderdale	TN
47 023	Chester	TN	47 099	Lawrence	TN
47 025	Claiborne	TN	47 101	Lewis	TN
47 027	Clay	TN	47 103	Lincoln	TN
47 029	Cocke	TN	47 105	Loudon	TN
47 031	Coffee	TN	47 107	McMinn	TN
47 033	Crockett	TN	47 109	McNairy	TN
47 035	Cumberland	TN	47 111	Macon	TN
47 037	Davidson	TN	47 113	Madison	TN
47 039	Decatur	TN	47 115	Marion	TN
47 041	DeKalb	TN	47 117	Marshall	TN
47 043	Dickson	TN	47 119	Maury	TN
47 045	Dyer	TN	47 121	Meigs	TN
47 047	Fayette	TN	47 123	Monroe	TN
47 049	Fentress	TN	47 125	Montgomery	TN
47 051	Franklin	TN	47 127	Moore	TN
47 053	Gibson	TN	47 129	Morgan	TN
47 055	Giles	TN	47 131	Obion	TN
47 057	Grainger	TN	47 133	Overton	TN
47 059	Greene	TN	47 135	Perry	TN
47 061	Grundy	TN	47 137	Pickett	TN
47 063	Hamblen	TN	47 139	Polk	TN
47 065	Hamilton	TN	47 141	Putnam	TN
47 067	Hancock	TN	47 143	Rhea	TN
47 069	Hardeman	TN	47 145	Roane	TN
47 071	Hardin	TN	47 147	Robertson	TN

FIPS	County	State	FIPS	County	State
47 149	Rutherford	TN	48 035	Bosque	TX
47 151	Scott	TN	48 037	Bowie	TX
47 153	Sequatchie	TN	48 039	Brazoria	TX
47 155	Sevier	TN	48 041	Brazos	TX
47 157	Shelby	TN	48 043	Brewster	TX
47 159	Smith	TN	48 045	Briscoe	TX
47 161	Stewart	TN	48 047	Brooks	TX
47 163	Sullivan	TN	48 049	Brown	TX
47 165	Sumner	TN	48 051	Burleson	TX
47 167	Tipton	TN	48 053	Burnet	TX
47 169	Trousdale	TN	48 055	Caldwell	TX
47 171	Unicoi	TN	48 057	Calhoun	TX
47 173	Union	TN	48 059	Callahan	TX
47 175	Van Buren	TN	48 061	Cameron	TX
47 177	Warren	TN	48 063	Camp	TX
47 179	Washington	TN	48 065	Carson	TX
47 181	Wayne	TN	48 067	Cass	TX
47 183	Weakley	TN	48 069	Castro	TX
47 185	White	TN	48 071	Chambers	TX
47 187	Williamson	TN	48 073	Cherokee	TX
47 189	Wilson	TN	48 075	Childress	TX
48 001	Anderson	TX	48 077	Clay	TX
48 003	Andrews	TX	48 079	Cochran	TX
48 005	Angelina	TX	48 081	Coke	TX
48 007	Aransas	TX	48 083	Coleman	TX
48 009	Archer	TX	48 085	Collin	TX
48 011	Armstrong	TX	48 087	Collingsworth	TX
48 013	Atascosa	TX	48 089	Colorado	TX
48 015	Austin	TX	48 091	Comal	TX
48 017	Bailey	TX	48 093	Comanche	TX
48 019	Bandera	TX	48 095	Concho	TX
48 021	Bastrop	TX	48 097	Cooke	TX
48 023	Baylor	TX	48 099	Coryell	TX
48 025	Bee	TX	48 101	Cottle	TX
48 027	Bell	TX	48 103	Crane	TX
48 029	Bexar	TX	48 105	Crockett	TX
48 031	Blanco	TX	48 107	Crosby	TX
48 033	Borden	TX	48 109	Culberson	TX

FIPS	County	State	FIPS	County	State
48 111	Dallam	TX	48 187	Guadalupe	TX
48 113	Dallas	TX	48 189	Hale	TX
48 115	Dawson	TX	48 191	Hall	TX
48 117	Deaf Smith	TX	48 193	Hamilton	TX
48 119	Delta	TX	48 195	Hansford	TX
48 121	Denton	TX	48 197	Hardeman	TX
48 123	DeWitt	TX	48 199	Hardin	TX
48 125	Dickens	TX	48 201	Harris	TX
48 127	Dimmit	TX	48 203	Harrison	TX
48 129	Donley	TX	48 205	Hartley	TX
48 131	Duval	TX	48 207	Haskell	TX
48 133	Eastland	TX	48 209	Hays	TX
48 135	Ector	TX	48 211	Hemphill	TX
48 137	Edwards	TX	48 213	Henderson	TX
48 139	Ellis	TX	48 215	Hidalgo	TX
48 141	El Paso	TX	48 217	Hill	TX
48 143	Erath	TX	48 219	Hockley	TX
48 145	Falls	TX	48 221	Hood	TX
48 147	Fannin	TX	48 223	Hopkins	TX
48 149	Fayette	TX	48 225	Houston	TX
48 151	Fisher	TX	48 227	Howard	TX
48 153	Floyd	TX	48 229	Hudspeth	TX
48 155	Foard	TX	48 231	Hunt	TX
48 157	Fort Bend	TX	48 233	Hutchinson	TX
48 159	Franklin	TX	48 235	Irion	TX
48 161	Freestone	TX	48 237	Jack	TX
48 163	Frio	TX	48 239	Jackson	TX
48 165	Gaines	TX	48 241	Jasper	TX
48 167	Galveston	TX	48 243	Jeff Davis	TX
48 169	Garza	TX	48 245	Jefferson	TX
48 171	Gillespie	TX	48 247	Jim Hogg	TX
48 173	Glasscock	TX	48 249	Jim Wells	TX
48 175	Goliad	TX	48 251	Johnson	TX
48 177	Gonzales	TX	48 253	Jones	TX
48 179	Gray	TX	48 255	Karnes	TX
48 181	Grayson	TX	48 257	Kaufman	TX
48 183	Gregg	TX	48 259	Kendall	TX
48 185	Grimes	TX	48 261	Kenedy	TX

FIPS	County	State	FIPS	County	State
48 263	Kent	TX	48 339	Montgomery	TX
48 265	Kerr	TX	48 341	Moore	TX
48 267	Kimble	TX	48 343	Morris	TX
48 269	King	TX	48 345	Motley	TX
48 271	Kinney	TX	48 347	Nacogdoches	TX
48 273	Kleberg	TX	48 349	Navarro	TX
48 275	Knox	TX	48 351	Newton	TX
48 277	Lamar	TX	48 353	Nolan	TX
48 279	Lamb	TX	48 355	Nueces	TX
48 281	Lampasas	TX	48 357	Ochiltree	TX
48 283	La Salle	TX	48 359	Oldham	TX
48 285	Lavaca	TX	48 361	Orange	TX
48 287	Lee	TX	48 363	Palo Pinto	TX
48 289	Leon	TX	48 365	Panola	TX
48 291	Liberty	TX	48 367	Parker	TX
48 293	Limestone	TX	48 369	Parmer	TX
48 295	Lipscomb	TX	48 371	Pecos	TX
48 297	Live Oak	TX	48 373	Polk	TX
48 299	Llano	TX	48 375	Potter	TX
48 301	Loving	TX	48 377	Presidio	TX
48 303	Lubbock	TX	48 379	Rains	TX
48 305	Lynn	TX	48 381	Randall	TX
48 307	McCulloch	TX	48 383	Reagan	TX
48 309	McLennan	TX	48 385	Real	TX
48 311	McMullen	TX	48 387	Red River	TX
48 313	Madison	TX	48 389	Reeves	TX
48 315	Marion	TX	48 391	Refugio	TX
48 317	Martin	TX	48 393	Roberts	TX
48 319	Mason	TX	48 395	Robertson	TX
48 321	Matagorda	TX	48 397	Rockwall	TX
48 323	Maverick	TX	48 399	Runnels	TX
48 325	Medina	TX	48 401	Rusk	TX
48 327	Menard	TX	48 403	Sabine	TX
48 329	Midland	TX	48 405	San Augustine	TX
48 331	Milam	TX	48 407	San Jacinto	TX
48 333	Mills	TX	48 409	San Patricio	TX
48 335	Mitchell	TX	48 411	San Saba	TX
48 337	Montague	TX	48 413	Schleicher	TX

FIPS	County	State	FIPS	County	State
48 415	Scurry	TX	48 491	Williamson	TX
48 417	Shackelford	TX	48 493	Wilson	TX
48 419	Shelby	TX	48 495	Winkler	TX
48 421	Sherman	TX	48 497	Wise	TX
48 423	Smith	TX	48 499	Wood	TX
48 425	Somervell	TX	48 501	Yoakum	TX
48 427	Starr	TX	48 503	Young	TX
48 429	Stephens	TX	48 505	Zapata	TX
48 431	Sterling	TX	48 507	Zavala	TX
48 433	Stonewall	TX	49 001	Beaver	UT
48 435	Sutton	TX	49 003	Box Elder	UT
48 437	Swisher	TX	49 005	Cache	UT
48 439	Tarrant	TX	49 007	Carbon	UT
48 441	Taylor	TX	49 009	Daggett	UT
48 443	Terrell	TX	49 011	Davis	UT
48 445	Terry	TX	49 013	Duchesne	UT
48 447	Throckmorton	TX	49 015	Emery	UT
48 449	Titus	TX	49 017	Garfield	UT
48 451	Tom Green	TX	49 019	Grand	UT
48 453	Travis	TX	49 021	Iron	UT
48 455	Trinity	TX	49 023	Juab	UT
48 457	Tyler	TX	49 025	Kane	UT
48 459	Upshur	TX	49 027	Millard	UT
48 461	Upton	TX	49 029	Morgan	UT
48 463	Uvalde	TX	49 031	Piute	UT
48 465	Val Verde	TX	49 033	Rich	UT
48 467	Van Zandt	TX	49 035	Salt Lake	UT
48 469	Victoria	TX	49 037	San Juan	UT
48 471	Walker	TX	49 039	Sanpete	UT
48 473	Waller	TX	49 041	Sevier	UT
48 475	Ward	TX	49 043	Summit	UT
48 477	Washington	TX	49 045	Tooele	UT
48 479	Webb	TX	49 047	Uintah	UT
48 481	Wharton	TX	49 049	Utah	UT
48 483	Wheeler	TX	49 051	Wasatch	UT
48 485	Wichita	TX	49 053	Washington	UT
48 487	Wilbarger	TX	49 055	Wayne	UT
48 489	Willacy	TX	49 057	Weber	UT

FIPS	County	State	FIPS	County	State
50 001	Addison	VT	51 049	Cumberland	VA
50 003	Bennington	VT	51 051	Dickenson	VA
50 005	Caledonia	VT	51 053	Dinwiddie	VA
50 007	Chittenden	VT	51 057	Essex	VA
50 009	Essex	VT	51 059	Fairfax	VA
50 011	Franklin	VT	51 061	Fauquier	VA
50 013	Grand Isle	VT	51 063	Floyd	VA
50 015	Lamoille	VT	51 065	Fluvanna	VA
50 017	Orange	VT	51 067	Franklin	VA
50 019	Orleans	VT	51 069	Frederick	VA
50 021	Rutland	VT	51 071	Giles	VA
50 023	Washington	VT	51 073	Gloucester	VA
50 025	Windham	VT	51 075	Goochland	VA
50 027	Windsor	VT	51 077	Grayson	VA
51 001	Accomack	VA	51 079	Greene	VA
51 003	Albemarle	VA	51 081	Greensville	VA
51 005	Alleghany	VA	51 083	Halifax	VA
51 007	Amelia	VA	51 085	Hanover	VA
51 009	Amherst	VA	51 087	Henrico	VA
51 011	Appomattox	VA	51 089	Henry	VA
51 013	Arlington	VA	51 091	Highland	VA
51 015	Augusta	VA	51 093	Isle of Wight	VA
51 017	Bath	VA	51 095	James City	VA
51 019	Bedford	VA	51 097	King and Queen	VA
51 021	Bland	VA	51 099	King George	VA
51 023	Botetourt	VA	51 101	King William	VA
51 025	Brunswick	VA	51 103	Lancaster	VA
51 027	Buchanan	VA	51 105	Lee	VA
51 029	Buckingham	VA	51 107	Loudoun	VA
51 031	Campbell	VA	51 109	Louisa	VA
51 033	Caroline	VA	51 111	Lunenburg	VA
51 035	Carroll	VA	51 113	Madison	VA
51 036	Charles City	VA	51 115	Mathews	VA
51 037	Charlotte	VA	51 117	Mecklenburg	VA
51 041	Chesterfield	VA	51 119	Middlesex	VA
51 043	Clarke	VA	51 121	Montgomery	VA
51 045	Craig	VA	51 125	Nelson	VA
51 047	Culpeper	VA	51 127	New Kent	VA

FIPS	County	State	FIPS	County	State
51 131	Northampton	VA	51 550	Chesapeake	VA
51 133	Northumberland	VA	51 560	Clifton Forge	VA
51 135	Nottoway	VA	51 570	Colonial Heights	VA
51 137	Orange	VA	51 580	Covington	VA
51 139	Page	VA	51 590	Danville	VA
51 141	Patrick	VA	51 595	Emporia	VA
51 143	Pittsylvania	VA	51 600	Fairfax	VA
51 145	Powhatan	VA	51 610	Falls Church	VA
51 147	Prince Edward	VA	51 620	Franklin	VA
51 149	Prince George	VA	51 630	Fredericksburg	VA
51 153	Prince William	VA	51 640	Galax	VA
51 155	Pulaski	VA	51 650	Hampton	VA
51 157	Rappahannock	VA	51 660	Harrisonburg	VA
51 159	Richmond	VA	51 670	Hopewell	VA
51 161	Roanoke	VA	51 678	Lexington	VA
51 163	Rockbridge	VA	51 680	Lynchburg	VA
51 165	Rockingham	VA	51 683	Manassas	VA
51 167	Russell	VA	51 685	Manassas Park	VA
51 169	Scott	VA	51 690	Martinsville	VA
51 171	Shenandoah	VA	51 700	Newport News	VA
51 173	Smyth	VA	51 710	Norfolk	VA
51 175	Southampton	VA	51 720	Norton	VA
51 177	Spotsylvania	VA	51 730	Petersburg	VA
51 179	Stafford	VA	51 735	Poquoson	VA
51 181	Surry	VA	51 740	Portsmouth	VA
51 183	Sussex	VA	51 750	Radford	VA
51 185	Tazewell	VA	51 760	Richmond	VA
51 187	Warren	VA	51 770	Roanoke	VA
51 191	Washington	VA	51 775	Salem	VA
51 193	Westmoreland	VA	51 790	Staunton	VA
51 195	Wise	VA	51 800	Suffolk	VA
51 197	Wythe	VA	51 810	Virginia Beach	VA
51 199	York	VA	51 820	Waynesboro	VA
51 510	Alexandria	VA	51 830	Williamsburg	VA
51 515	Bedford	VA	51 840	Winchester	VA
51 520	Bristol	VA	53 001	Adams	WA
51 530	Buena Vista	VA	53 003	Asotin	WA
51 540	Charlottesville	VA	53 005	Benton	WA

FIPS	County	State	FIPS	County	State
53 007	Chelan	WA	54 005	Boone	WV
53 009	Clallam	WA	54 007	Braxton	WV
53 011	Clark	WA	54 009	Brooke	WV
53 013	Columbia	WA	54 011	Cabell	WV
53 015	Cowlitz	WA	54 013	Calhoun	WV
53 017	Douglas	WA	54 015	Clay	WV
53 019	Ferry	WA	54 017	Doddridge	WV
53 021	Franklin	WA	54 019	Fayette	WV
53 023	Garfield	WA	54 021	Gilmer	WV
53 025	Grant	WA	54 023	Grant	WV
53 027	Grays Harbor	WA	54 025	Greenbrier	WV
53 029	Island	WA	54 027	Hampshire	WV
53 031	Jefferson	WA	54 029	Hancock	WV
53 033	King	WA	54 031	Hardy	WV
53 035	Kitsap	WA	54 033	Harrison	WV
53 037	Kittitas	WA	54 035	Jackson	WV
53 039	Klickitat	WA	54 037	Jefferson	WV
53 041	Lewis	WA	54 039	Kanawha	WV
53 043	Lincoln	WA	54 041	Lewis	WV
53 045	Mason	WA	54 043	Lincoln	WV
53 047	Okanogan	WA	54 045	Logan	WV
53 049	Pacific	WA	54 047	McDowell	WV
53 051	Pend Oreille	WA	54 049	Marion	WV
53 053	Pierce	WA	54 051	Marshall	WV
53 055	San Juan	WA	54 053	Mason	WV
53 057	Skagit	WA	54 055	Mercer	WV
53 059	Skamania	WA	54 057	Mineral	WV
53 061	Snohomish	WA	54 059	Mingo	WV
53 063	Spokane	WA	54 061	Monongalia	WV
53 065	Stevens	WA	54 063	Monroe	WV
53 067	Thurston	WA	54 065	Morgan	WV
53 069	Wahkiakum	WA	54 067	Nicholas	WV
53 071	Walla Walla	WA	54 069	Ohio	WV
53 073	Whatcom	WA	54 071	Pendleton	WV
53 075	Whitman	WA	54 073	Pleasants	WV
53 077	Yakima	WA	54 075	Pocahontas	WV
54 001	Barbour	WV	54 077	Preston	WV
54 003	Berkeley	WV	54 079	Putnam	WV

FIPS	County	State	FIPS	County	State
54 081	Raleigh	WV	55 047	Green Lake	WI
54 083	Randolph	WV	55 049	Iowa	WI
54 085	Ritchie	WV	55 051	Iron	WI
54 087	Roane	WV	55 053	Jackson	WI
54 089	Summers	WV	55 055	Jefferson	WI
54 091	Taylor	WV	55 057	Juneau	WI
54 093	Tucker	WV	55 059	Kenosha	WI
54 095	Tyler	WV	55 061	Kewaunee	WI
54 097	Upshur	WV	55 063	La Crosse	WI
54 099	Wayne	WV	55 065	Lafayette	WI
54 101	Webster	WV	55 067	Langlade	WI
54 103	Wetzel	WV	55 069	Lincoln	WI
54 105	Wirt	WV	55 071	Manitowoc	WI
54 107	Wood	WV	55 073	Marathon	WI
54 109	Wyoming	WV	55 075	Marinette	WI
55 001	Adams	WI	55 077	Marquette	WI
55 003	Ashland	WI	55 078	Menominee	WI
55 005	Barron	WI	55 079	Milwaukee	WI
55 007	Bayfield	WI	55 081	Monroe	WI
55 009	Brown	WI	55 083	Oconto	WI
55 011	Buffalo	WI	55 085	Oneida	WI
55 013	Burnett	WI	55 087	Outagamie	WI
55 015	Calumet	WI	55 089	Ozaukee	WI
55 017	Chippewa	WI	55 091	Pepin	WI
55 019	Clark	WI	55 093	Pierce	WI
55 021	Columbia	WI	55 095	Polk	WI
55 023	Crawford	WI	55 097	Portage	WI
55 025	Dane	WI	55 099	Price	WI
55 027	Dodge	WI	55 101	Racine	WI
55 029	Door	WI	55 103	Richland	WI
55 031	Douglas	WI	55 105	Rock	WI
55 033	Dunn	WI	55 107	Rusk	WI
55 035	Eau Claire	WI	55 109	St. Croix	WI
55 037	Florence	WI	55 111	Sauk	WI
55 039	Fond du Lac	WI	55 113	Sawyer	WI
55 041	Forest	WI	55 115	Shawano	WI
55 043	Grant	WI	55 117	Sheboygan	WI
55 045	Green	WI	55 119	Taylor	WI

FIPS	County	State	FIPS	County	State
55 121	Trempealeau	WI	60 050	Western	AS
55 123	Vernon	WI	66 010	Guam	GU
55 125	Vilas	WI	69 085	Northern Islands	MP
55 127	Walworth	WI	69 100	Rota	MP
55 129	Washburn	WI	69 110	Saipan	MP
55 131	Washington	WI	69 120	Tinian	MP
55 133	Waukesha	WI	72 001	Adjuntas	PR
55 135	Waupaca	WI	72 003	Aguada	PR
55 137	Waushara	WI	72 005	Aguadilla	PR
55 139	Winnebago	WI	72 007	Aguas Buenas	PR
55 141	Wood	WI	72 009	Aibonito	PR
56 001	Albany	WY	72 011	Añasco	PR
56 003	Big Horn	WY	72 013	Arecibo	PR
56 005	Campbell	WY	72 015	Arroyo	PR
56 007	Carbon	WY	72 017	Barceloneta	PR
56 009	Converse	WY	72 019	Barranquitas	PR
56 011	Crook	WY	72 021	Bayamón	PR
56 013	Fremont	WY	72 023	Cabo Rojo	PR
56 015	Goshen	WY	72 025	Caguas	PR
56 017	Hot Springs	WY	72 027	Camuy	PR
56 019	Johnson	WY	72 029	Canóvanas	PR
56 021	Laramie	WY	72 031	Carolina	PR
56 023	Lincoln	WY	72 033	Cataño	PR
56 025	Natrona	WY	72 035	Cayey	PR
56 027	Niobrara	WY	72 037	Ceiba	PR
56 029	Park	WY	72 039	Ciales	PR
56 031	Platte	WY	72 041	Cidra	PR
56 033	Sheridan	WY	72 043	Coamo	PR
56 035	Sublette	WY	72 045	Comerío	PR
56 037	Sweetwater	WY	72 047	Corozal	PR
56 039	Teton	WY	72 049	Culebra	PR
56 041	Uinta	WY	72 051	Dorado	PR
56 043	Washakie	WY	72 053	Fajardo	PR
56 045	Weston	WY	72 054	Florida	PR
60 010	Eastern	AS	72 055	Guánica	PR
60 020	Manu'a	AS	72 057	Guayama	PR
60 030	Rose Island	AS	72 059	Guayanilla	PR
60 040	Swains Island	AS	72 061	Guaynabo	PR

FIPS	County	State	FIPS	County	State
72 063	Gurabo	PR	72 139	Trujillo Alto	PR
72 065	Hatillo	PR	72 141	Utua	PR
72 067	Hormigueros	PR	72 143	Vega Alta	PR
72 069	Humacao	PR	72 145	Vega Baja	PR
72 071	Isabela	PR	72 147	Vieques	PR
72 073	Jayuya	PR	72 149	Villalba	PR
72 075	Juana Díaz	PR	72 151	Yabucoa	PR
72 077	Juncos	PR	72 153	Yauco	PR
72 079	Lajas	PR	74 300	Midway Islands	UM
72 081	Lares	PR	78 010	St. Croix	VI
72 083	Las Marías	PR	78 020	St. John	VI
72 085	Las Piedras	PR	78 030	St. Thomas	VI
72 087	Loíza	PR			
72 089	Luquillo	PR			
72 091	Manatí	PR			
72 093	Maricao	PR			
72 095	Maunabo	PR			
72 097	Mayagüez	PR			
72 099	Moca	PR			
72 101	Morovis	PR			
72 103	Naguabo	PR			
72 105	Naranjito	PR			
72 107	Orocovis	PR			
72 109	Patillas	PR			
72 111	Peñuelas	PR			
72 113	Ponce	PR			
72 115	Quebradillas	PR			
72 117	Rincón	PR			
72 119	Río Grande	PR			
72 121	Sabana Grande	PR			
72 123	Salinas	PR			
72 125	San Germán	PR			
72 127	San Juan	PR			
72 129	San Lorenzo	PR			
72 131	San Sebastián	PR			
72 133	Santa Isabel	PR			
72 135	Toa Alta	PR			
72 137	Toa Baja	PR			

Appendix B—FIPS Class Code Definitions

The FIPS class code appears in Record Type C. There are five major class groups that differentiate between populated places, other geopolitical and census units, institutional facilities, and terminated entries. Some subclasses relate an entry to a class different from its own. This is useful because a number of entries serve in more than one capacity; for example, an American Indian reservation also may serve as the statistical equivalent of a minor civil division. Subclasses also identify close relationships; for example, some subclasses identify entries in different classes that are coextensive. The Census Bureau uses only three of the five groups and a subset of the classes within each group for its needs. The FIPS class codes and definitions for these three groups follow.

Group 1: Populated Places Except Those Associated With Facilities

Class C— Incorporated Places

- C1** An active incorporated place that is not also recognized as an Alaska Native village statistical area (ANVSA), and does not serve as a primary county division equivalent.
- C2** Incorporated place that also serves as a primary county division because, although the place is coextensive with an MCD, the Census Bureau, in agreement with state officials, does not recognize that MCD for presenting census data because the MCD is a nonfunctioning entity (*applies to Iowa and Ohio only*).
- C3** Consolidated city
- C5** Incorporated place that also serves as a primary county division; that is, it is not included in any adjacent primary county division of Class T or Z.
- C6** Incorporated place that is coincident with, or approximates, an Alaska Native village statistical area.
- C7** Independent city; that is, an incorporated place that also serves as a county equivalent.
- C8** The portion (remainder) of a consolidated city that is not within another incorporated place.
- C9** An inactive or nonfunctioning incorporated place

Class E—Alaska Native Village Statistical Areas (ANVSAs)

- E1** ANVSA that does not coincide with, or approximate, an incorporated place or census designated place (CDP).
- E2** ANVSA that coincides with, or approximates, a CDP.
- E6** ANVSA that coincides with, or approximates, an incorporated place.

Class U—Unincorporated Places Except Those Associated With Facilities

- U1** CDP with a name that is commonly recognized for the populated area.
- U2** CDP with a name that is not commonly recognized for the populated area (*e.g., a combination of the names of two or three commonly recognized communities, or a name that identifies the location of the CDP in relation to an adjacent incorporated place*).
- U9** CDP that coincides with, or approximates, an ANVSA.

Group 2: Geopolitical and Census Units (Other Than Populated Places or Facilities)

Class D—American Indian Reservations (AIRs)

- D1** Federally recognized American Indian reservation and its associated trust land that does not also serve as a primary county division.
- D2** Federally recognized American Indian reservation that exists in a single county and also serves as a primary county division.
- D3** Federally recognized American Indian tribal government that holds off-reservation property in trust—*trust land*—for a tribe or individual member(s) of the tribe, and the trust land is not associated with a specific American Indian reservation.
- D4** State-recognized American Indian reservation that does not serve as a primary county division.
- D5** State-recognized American Indian reservation that exists in a single county and also serves as a primary county division.

Class D—American Indian Reservations (AIRs) (cont.)

- D6** Identifies a statistical entity delineated for the Census Bureau to delimit an area containing American Indian population over which a federally or state-recognized American Indian tribe not having a reservation has jurisdiction (tribal jurisdiction statistical area—TJSA—in Oklahoma) and/or provides benefits and services to its members (tribal designated statistical area—TDSA—in other states).

Class T—Active Minor Civil Divisions (MCDs)

- T1** Governmentally active MCD that is not coextensive with an incorporated place.
- T5** Governmentally active MCD that is coextensive with an incorporated place.

Class Z—Inactive or Nonfunctioning County Divisions

- Z1** Inactive or nonfunctioning MCD recognized as a primary county division by the Census Bureau.
- Z3** Unorganized territory established as an MCD equivalent by the Census Bureau.
- Z5** Census county division (CCD), census subarea (Alaska), or census subdistrict (United States Virgin Islands).
- Z6** Sub-MCD in Puerto Rico (sub-barrio).
- Z7** Independent incorporated place that serves as a primary county division in Iowa, North Carolina, and in counties containing only nonfunctioning MCDs in Nebraska.

Group 3: Facilities

Class M—Federal Facilities

- M2** Identifies an installation (or part of an installation) of the US Department of Defense or any branch thereof, or of the US Coast Guard, that has been reported by the Census Bureau as a census designated place.

Appendix C— Field Name Changes

The 1994 and 1995 TIGER/Line[®] files contain some field name changes from the 1992 and 1990 Census TIGER/Line[®] files. The size and definition of these fields remains substantially unchanged. The name changes represent a clarification of the existing field names. The fields may have additional valid codes, or may be split into two data fields.

Record Type	1990 Version	1992 Version	1994/Later Versions
Record Type 1	SIDE1	1SIDE	SIDE1
	FRIADDFL	FRIADDL	FRIADDL
	TOIADDFL	TOIADDL	TOIADDL
	FRIADDFR	FRIADDR	FRIADDR
	TOIADDFR	TOIADDR	TOIADDR
	AIRR	FAIRR	FAIRR
	ANRCL	ANRCL	TRUSTL and TRUSTR
	ANRCR	ANRCR	CENSUS1 and CENSUS2
	CTBNAL	CTBNAL	CTBNA90L
	CTBNAR	CTBNAR	CTBNA90R
	BLKL	BLKL	BLK90L
	BLKR	BLKR	BLK90R
	Record Type 3	80STATEL	STATE80L
80STATER		STATE80R	STATE90R
80COUNL		COUN80L	COUN90L
80COUNR		COUN80R	COUN90R
80FMCDL		FMCD80L	FMCD90L
80FMCDR		FMCD80R	FMCD90R
80FPLL		FPL80L	FPL90L
80FPLR		FPL80R	FPL90R
80CTBNAL		CTBNA80L	CTBNA90L
80CTBNAR		CTBNA80R	CTBNA90R
80BLKL		BLK80L	RS1
80BLKR		BLK80R	RS2
80MCDL		MCD80L	RS3
80MCDR		MCD80R	RS4
80PLL		PL80L	BLK90L
80PLR		PL80R	BLK90R
MCDL		MCDL	RS5

Record Type	1990 Version	1992 Version	1994/Later Versions
Record Type 3	MCDR	MCDR	RS6
	SMCDL	SMCDL	ANRCL
	SMCDR	SMCDR	ANRCR
	PLL	PLL	RS7
	PLR	PLR	RS8
Record Type 6	FRIADDFL	FRIADDL	FRIADDL
	TOIADDFL	TOIADDL	TOIADDL
	FRIADDFR	FRIADDR	FRIADDR
	TOIADDFR	TOIADDR	TOIADDR
Record Type 7	LONG	LALONG	LALONG
	LAT	LALAT	LALAT
Record Type A	CTBNA	CTBNA	CTBNA90
	BLK	BLK	BLK90
	CD101	CD101	CD106
	CD103	CD103	CD108
	RS	RS	CTPP, STATE90, COUN90, and RS9 <i>(see note below)</i>
Record Type I	RTPOINT	RTLINK	RTLINK
	POLYL	POLYIDL	POLYIDL
	POLYR	POLYIDR	POLYIDR
Record Type P	LONG	POLYLONG	POLYLONG
	LAT	POLYLAT	POLYLAT

Note:

STATE90 and COUN90 fields are included in Record Type A only in the 1995 and later versions of the TIGER/Line® files.

Appendix D—Standard Abbreviations

The following text, standard abbreviations, or short abbreviations may appear in the feature name field or the landmark feature name field.

Feature Type	Abbreviations			Translation
	<i>Standard</i>	<i>Short</i>	<i>USPS</i>	
Academia	Acade	Acad	–	Academy
Academy	Acad	–	–	–
Acueducto	Acued	Acue	–	Aqueduct
Aeropuerto	Arpto	Arpt	–	Airport
Air Force Base	AFB	–	–	–
Airfield	Afld	–	–	–
Airpark	Airpark	Aprk	–	–
Airport	Arpt	–	–	–
Airstrip	Airstrp	Astrp	–	–
Aljibe	Aljibe	Alj	–	Cistern
Alley	Alley	Al	ALY	–
Alternate Route	Alt	Alt	–	–
Apartment	Apt	–	–	–
Aqueduct	Aque	–	–	–
Arcade	Arcade	Arc	ARC	–
Arroyo	Arroyo	Arryo	–	Creek
Autopista	Atpta	Apta	–	Expressway
Avenida	Avenida	Ave	AVE	Avenue
Avenue	Avenue	Ave	AVE	–
Bahia	Bahia	B	–	Bay
Bank	Bank	Bnk	–	–
Basin	Basin	Basn	–	–
Bay	Bay	B	–	–
Bayou	Bayou	Byu	BYU	–
BIA Highway	BIA Hwy	BIAHy	–	–
BIA Road	BIA Rd	BIARd	–	–
BIA Route	BIA Rte	BIARt	–	–
Bluff	Bluff	Blf	BLF	–
Boulevard	Bldv	–	BLD	–
Boundary	Bdy	–	–	–
Branch	Branch	Br	BR	–

Feature Type	Abbreviations			Translation
	<i>Standard</i>	<i>Short</i>	<i>USPS</i>	
Bridge	Bridge	Brg	BRG	–
Brook	Brook	Brk	BRK	–
Building	Bldg	–	–	–
Bulevar	Blvr	Blv	–	Boulevard
Bureau of Land Mgmt Rd	BLM Rd	BLMRd	–	–
Business Route	Bus Rte	Bus	–	–
Bypass	Bypass	Byp	BYP	–
Calle	Calle	C	CLL	Street
Calleja	Calleja	Cja	–	Lane
Callejon	Callej	Cjon	–	Narrow street
Camino	Camino	Cam	CAM	Road
Camp	Camp	–	CP	–
Campamento	Campam	Camp	–	Campground
Campground	Campgrnd	Cmpgr	–	–
Canal	Canal	Can	–	–
Cano	Cano	Cno	–	Drain
Cantera	Cantera	Cant	–	Quarry
Canyon	Canyon	Cyn	CYN	–
Capilla	Capilla	Cplla	–	Chapel
Carretera	Carrt	Carr	–	Road
Caserio	Cas	–	–	Public housing project
Causeway	Cswy	–	CSWY	–
Cementerio	Cemt	Cem	–	Cemetery
Cemetery	Cem	–	–	–
Center	Center	Ctr	CTR	–
Centro	Centro	Ctro	–	Center
Channel	Chan	–	–	–
Chapel	Chapel	Ch	–	–
Church	Church	Ch	–	–
Circle	Circle	Cir	CIR	–
Circulo	Circ	Cir	CIR	Circle
Cliff	Cliff	Clf	CLFS	–
Club	Club	Clb	CLB	–
Colegio	Colegio	Col	–	College

Feature Type	Abbreviations			Translation
	Standard	Short	USPS	
College	College	Clg	–	–
Condominio	Cond	–	–	Condominium
Condominium	Condo	–	–	–
Convent	Cnvt	–	–	–
Coulee	Coulee	Coul	–	–
Country Club	Country Club	CC	–	–
County Highway	County Hwy	CoHwy	–	–
County Home	County Home	CoHm	–	–
County Lane	Co Ln	CoLn	–	–
County Loop	Co Loop	CoLp	–	–
County Road	County Rd	CoRd	–	–
County Route	County Rte	CoRt	–	–
County Spur	Co Spur	CoSpr	–	–
Court	Court	Ct	CT	–
Courthouse	Cthse	–	–	–
Cove	Cove	Cv	CV	–
Crater	Crater	Crtr	–	–
Creek	Creek	Cr	CRK	–
Crescent	Cres	Cres	CRES	–
Crossing	Xing	–	XING	–
Cruce	Cruce	Cru	–	Crossroad
Dam	Dam	Dm	DM	–
Depot	Depot	Dpo	–	–
Detention Center	Det Ctr	DtCtr	–	–
District of Columbia Hwy	DC Hwy	DCHwy	–	–
Ditch	Ditch	Dit	–	–
Divide	Divide	Div	DV	–
Dock	Dock	Dock	Dock	Dock
Dormitory	Dorm	–	–	–
Drain	Drain	Drn	–	–
Draw	Draw	–	–	–
Drive	Drive	Dr	DR	–
Edificio	Edif	–	–	Building
Emergency Road	Em Rd	EmRd	–	–
Ensenada	Ensen	Ens	–	Cove

Feature Type	Abbreviations			Translation
	<i>Standard</i>	<i>Short</i>	<i>USPS</i>	
Escarpment	Escarp	Escrp	–	–
Escuela	Escul	Esc	–	School
Estuary	Est	–	–	–
Expreso	Expo	Exp	–	Expressway
Expressway	Exwy	–	EXPY	–
Extended	Extd	–	–	–
Extension	Extn	–	EXT	–
Fairgrounds	Fairgrnds	Fgrnd	–	–
Falls	Falls	–	FLS	–
Farm Road	Farm Rd	FmRd	–	–
Farm-to-Market Road	F-M Rd	FM	–	–
Faro	Faro	–	–	Lighthouse
Federal Penitentiary	Fed Pen	FdPn	–	–
Fence Line	Fence	Fen	–	–
Ferry Crossing	Ferry	Fy	FRY	–
Field	Field	Fld	FLD	–
Fire Control Road	FC Rd	FCRd	–	–
Fire District Road	FD Rd	FDRd	–	–
Fire Road	FR Rd	FRRd	–	–
Fire Route	FR Rte	FRRte	–	–
Fire Trail	FR Trl	FRTrl	–	–
Floodway	Floodway	Fldwy	–	–
Flowage	Flowage	Flow	–	–
Flume	Flume	Fln	–	–
Forest	Forest	For	FRST	–
Forest Highway	For Hwy	ForHy	–	–
Forest Road	For Rd	ForRd	–	–
Forest Route	For Rte	ForRt	–	–
Forest Service Road	FS Rd	FSRd	–	–
Fork	Fork	Frk	FRK	–
Four-Wheel Drive Trail	4WD Trl	4WD	–	–
Fraternity	Frat	–	–	–
Freeway	Frwy	Fwy	FWY	–
Golf Course	Golf Course	GC	–	–

Feature Type	Abbreviations			Translation
	<i>Standard</i>	<i>Short</i>	<i>USPS</i>	
Grade	Grade	Grd	–	–
Gravel Pit	Gr Pit	GrPt	–	–
Gravero	Grav	–	–	Gravel pit
Gulch	Gulch	Gl	–	–
Gulf	Gulf	GlF	–	–
Gully	Gully	–	–	–
Harbor	Harbor	Hbr	HBR	–
High School	H S	HS	–	–
Highway	Hwy	–	HWY	–
Hill	Hill	–	HL	–
Hollow	Hollow	Hllw	HOLW	–
Hospital	Hosp	–	–	–
Hotel	Hotel	Htl	–	–
Iglesia	Iglesia	Igle	–	Church
Illinois Route	IL Rte	ILRte	–	–
Indian Route	Ind Rte	IndRt	–	–
Indian Service Route	IndSvRte	IndSR	–	–
Industrial Center	Indl Ctr	IndC	–	–
Industrial Park	Indl Park	IPrk	–	–
Inlet	Inlet	Inlt	INLT	–
Inn	Inn	–	–	–
Institute	Inst	–	–	–
Institution	Instn	–	–	–
Interstate Highway	I-	–	–	–
Isla	Isla	Is	–	Island
Island	Island	Is	IS	–
Islands	Islands	Is	ISS	–
Jail	Jail	Jl	–	–
Jeep Trail	Jeep Trl	4WD	–	–
Kansas State Highway	KS StHwy	KStHy	–	–
Kill	Kill	–	–	–
Lago	Lago	Lag	–	Lake
Lagoon	Lagoon	Lag	–	–

Feature Type	Abbreviations			Translation
	<i>Standard</i>	<i>Short</i>	<i>USPS</i>	
Lagoons	Lagoons	Lag	–	–
Laguna	Laguna	Lagna	–	Lagoon
Lake	Lake	Lk	LK	–
Lakes	Lakes	Lk	LKS	–
Lane	Lane	Ln	LN	–
Lateral	Lateral	Ltrl	–	–
Levee	Levee	Lv	–	–
Lighthouse	Lghthse	Lh	–	–
Line	Line	–	–	–
Logging Road	Lg Rd	LgRd	–	–
Loop	Loop	Lp	LOOP	–
Mall	Mall	Ml	MALL	–
Mar	Mar	Mr	–	Sea
Marginal	Marg	–	–	Service road
Marina	Marina	Mrna	–	–
Marsh	Marsh	Mrsh	–	–
Medical Building	Med Bldg	MdBldg	–	–
Medical Center	Med Ctr	MdCtr	–	–
Millpond	Mllpd	Mlpd	–	–
Mission	Msn	–	MSN	–
Monastery	Mony	–	–	–
Monument	Mon	–	–	–
Motel	Motel	Mtl	–	–
Motorway	Mtwy	–	–	–
Mount	Mount	Mt	MT	–
Mountain	Mtn	Mt	MTN	–
Muro	Muro	Mro	–	Wall
National Battlefield	Nat Bfld	NB	–	–
Natl Battlefield Park	Nat Bfld Pk	NBP	–	–
Natl Battlefield Site	Nat Bfld Site	NBS	–	–
Natl Conservation Area	Nat Con Area	NCA	–	–
National Forest	Nat For	NF	–	–
Natl Forest Develop Road	NFD	–	–	–
Natl Forest Highway	NF Hwy	NFHwy	–	–

Feature Type	Abbreviations			Translation
	Standard	Short	USPS	
National Grassland	Nat Grsslnd	NG	–	–
National Historic Site	Nat Hist Site	NHS	–	–
National Historical Park	Nat Hist Pk	NHP	–	–
National Lakeshore	Nat Lkshr	NLksh	–	–
National Memorial	Nat Mem	MMem	–	–
National Military Park	Nat Mil Pk	NMP	–	–
National Monument	Nat Mon	NMon	–	–
National Park	Nat Pk	NP	–	–
National Preserve	Nat Prsv	NPrsv	–	–
Natl Recreation Area	Nat Rec Area	NRA	–	–
Natl Recreational River	Nat Rec Rvr	NRR	–	–
National Reserve	Nat Rsv	NRsv	–	–
National River	Nat Rvr	NRvr	–	–
National Scenic Area	Nat Sc Area	NSA	–	–
National Scenic River	Nat Sc Rvr	NSR	–	–
Natl Scenic Riverway	Nat Sc Rvrwy	NSR	–	–
Natl Scenic Riverways	Nat ScRvrwys	NSR	–	–
National Scenic Trail	Nat Sc Trl	NST	–	–
National Seashore	Nat Seashr	NS	–	–
Natl Wildlife Refuge	Nat Wld Rfg	NWR	–	–
Navajo Service Route	NSv Rte	NSvRt	–	–
Naval Air Station	NAS	–	–	–
Naval Base	NB	–	–	–
New Jersey Route	NJ Rte	NJRte	–	–
Nursing Home	Nrs Hme	NrsHm	–	–
Ocean	Ocean	O	–	–
Oceano	Oceano	O	–	Ocean
Office Building	Ofc Bldg	OfBlg	–	–
Office Center	Ofc Ctr	OfCtr	–	–
Office Park	Ofc Park	OfPrk	–	–
Orphanage	Orph	–	–	–
Outlet	Outlet	Outlt	–	–
Overpass	Ovps	–	–	–
Parish Road	Par Rd	ParRd	–	–

Feature Type	Abbreviations			Translation
	<i>Standard</i>	<i>Short</i>	<i>USPS</i>	
Park	Park	–	PARK	–
Parkway	Pkwy	–	PKY	–
Parque	Parque	Prqe	–	Park
Pasaje	Pasaje	Pas	–	Passage
Paseo	Paseo	Pso	–	Drive
Paso	Paso	–	PSO	Strait
Pass	Pass	Ps	PASS	–
Passage	Psgе	Pas	–	–
Path	Path	–	PATH	–
Peak	Peak	Pek	–	–
Pike	Pike	Pke	PIKE	–
Pipeline	Pipe	–	–	–
Pista	Pista	Psta	–	Track
Place	Place	Pl	PL	–
Plaza	Plaza	Plz	PLZ	–
Point	Point	Pt	PT	–
Pond	Pond	Pd	–	–
Ponds	Ponds	Pd	–	–
Port	Port	Prt	PRT	–
Power Line	Pwr Line	PwrLn	–	–
Preserve	Prsv	Prsv	–	–
Prison	Prison	Prsn	–	–
Property Line	Prop Line	Prop	–	–
Puente	Puente	Pte	–	Bridge
Quarry	Qry	–	–	–
Race	Race	Rc	–	–
Rail	Rail	R	–	–
Railroad	RR	–	–	–
Railway	Ry	–	–	–
Ramal	Ramal	Rml	–	Short street
Ramp	Ramp	Rmp	–	–
Rampa	Rampa	Rmp	–	Ramp
Ranch Road	Ranch Rd	–	–	–

Feature Type	Abbreviations			Translation
	<i>Standard</i>	<i>Short</i>	<i>USPS</i>	
Ranch to Market Road	R-M Rd	RM	–	–
Rapids	Rapids	Rpds	RPDS	–
Ravine	Ravine	Rav	–	–
Reformatory	Ref	–	–	–
Refuge	Refuge	Rfg	–	–
Reservation	Res	–	–	–
Reservation Highway	Res Hwy	ResHy	–	–
Reserve	Rsv	–	–	–
Reservoir	Rsvr	–	–	–
Reservoirs	Rsvrs	–	–	–
Resort	Resort	Rsrt	–	–
Ridge	Ridge	Rdg	RDG	–
Rio	Rio	R	–	River
River	River	R	RIV	–
Road	Road	Rd	RD	–
Roca	Roca	Rc	–	Rock
Rock	Rock	Rk	–	–
Rooming House	Rmg Hse	RmHse	–	–
Route	Route	Rt	–	–
Row	Row	–	ROW	–
Rue	Rue	–	–	–
Run	Run	–	RUN	–
Rural Route	R Rte	Rt	–	–
Ruta	Ruta	–	–	Route
Sanatorium	Sanat	San	–	–
Sanitarium	Sanit	San	–	–
School	School	Sch	–	–
Sea	Sea	–	–	–
Seashore	Seashore	Seash	–	–
Seminary	Sem	–	–	–
Sendero	Sndr	–	–	Path
Service Road	Srv Rd	SrvRd	–	–
Service Route	Sv Rte	SvRte	–	–
Shelter	Shltr	Shlr	–	–
Shoal	Shoal	Shl	SHL	–

Feature Type	Abbreviations			Translation
	<i>Standard</i>	<i>Short</i>	<i>USPS</i>	
Shopping Center	Shop Ctr	SC	–	–
Shopping Mall	Shop Mall	SM	–	–
Shopping Mart	Shop Mart	SMt	–	–
Shopping Plaza	Shop Plz	SP	–	–
Shopping Square	Shop Sq	SS	–	–
Skyway	Skwy	–	–	–
Slough	Slough	Slu	–	–
Sonda	Sonda	Snd	–	Sound
Sorority	Soror	Sor	–	–
Sound	Sound	Snd	–	–
South Dakota Route or Road	SD	SD	–	–
Speedway	Spdwy	–	–	–
Spring	Spring	Spg	SPG	–
Spur	Spur	Spr	SPUR	–
Square	Square	Sq	SQ	–
State Forest Serv Road	St FS Rd	StFSR	–	–
State Highway	State Hwy	StHwy	–	–
State Link	St Link	StLk	–	–
State Loop	State Lp	StLp	–	–
State Road	State Rd	StRd	–	–
State Route	State Rte	SR	–	–
State Service Road	StSvRd	StSvR	–	–
State Spur	St Spr	StSpr	–	–
Station	Sta	–	STA	–
Strait	Strait	Strt	–	–
Stream	Stream	Str	STRM	–
Street	Street	St	ST	–
Strip	Strip	Strp	–	–
Swamp	Swamp	Swp	–	–
Tank	Tank	Tk	–	–
Tank Trail	Tk Trl	TkTrl	–	–
Terminal	Term	–	–	–
Terrace	Ter	–	TER	–
Thoroughfare	Thoro	Thfr	–	–
Throughway	Thwy	–	–	–

Feature Type	Abbreviations			Translation
	Standard	Short	USPS	
Tower	Tower	Twr	–	–
Town Highway	Town Hwy	TwnHy	–	–
Town Road	Town Rd	TwnRd	–	–
Township Highway	Twp Hwy	TwpHy	–	–
Township Road	Twp Rd	TwpRd	–	–
Trafficway	Tfwy	–	TRFY	–
Trail	Trail	Trl	TRL	–
Trailer Park	Trlr Pk	TrlPk	–	–
Tributary	Trib	–	–	–
Tunel	Tunel	Tunl	–	Tunnel
Tunnel	Tunnel	Tunl	TUNL	–
Turnpike	Tpke	–	TPKE	–
US Forest Service Road	USFS Rd	USFSR	–	–
Underpass	Unps	Unp	–	–
United States Highway	US Hwy	USHwy	–	–
United States Loop	US Loop	USLp	–	–
United States Route	US Rte	USRte	–	–
Universidad	Univd	Uni	–	University
University	Univ	–	–	–
Unnamed Road	Un Rd	UnRd	–	–
Valley	Valley	VI	VLY	–
Vereda	Vereda	Vrda	VER	Trail
Via	Via	–	–	Way
Village	Vlge	Vlg	VLG	–
Walk	Walk	Wk	WALK	–
Walkway	Wlkwy	Wkwy	–	–
Wall	Wall	WI	–	–
Wash	Wash	Ws	–	–
Waterway	Wtrwy	Wwy	–	–
Way	Way	Wy	WAY	–
Wetland Mgmt District	Wetland Dist	WMD	–	–
Wharf	Wharf	Whf	–	–
Wild River	Wild Rvr	WldR	–	–
Wild and Scenic River	W&S Rvr	W&SR	–	–

Feature Type	Abbreviations			Translation
	<i>Standard</i>	<i>Short</i>	<i>USPS</i>	
Wildlife Mgmt Area	Wildlife Area	WMA	-	-
Yard	Yard	Yd	-	-
Yards	Yards	Yds	-	-
Zanja	Zanja	Znja	-	Ditch

Appendix E—Place Description Codes

Code	Description
1	Incorporated place/consolidated city that is a central city ¹ of an MSA/PMSA/CMSA, but not a central place of a UA
2	Incorporated place/consolidated city that is a central place ² of a UA, but not a central city of an MSA/PMSA/CMSA
3	Incorporated place/consolidated city that is a central city ³ of an MSA/PMSA/CMSA and a central place of a UA
4	Incorporated place/consolidated city that is not a central city of an MSA/PMSA/CMSA and not a central place of a UA
5	Incorporated place/consolidated city that is a central city ¹ of an MSA/PMSA/CMSA and a central place of a UA, but part of the place/city extends outside of its MSA/PMSA/CMSA
6	Incorporated place/consolidated city that is a central city ³ of an MSA/PMSA/CMSA, but not a central place of a UA and part of the place/city extends outside of its MSA/PMSA/CMSA
7	Minor civil division that is a central city ¹ of an MSA/PMSA/CMSA, but not a central place of a UA
8	Minor civil division that is a central place ² of a UA, but not a central city of a MSA/PMSA/CMSA (<i>no entities had this code in 1990</i>)
9	Minor civil division that is a central city ³ of a MSA/PMSA/CMSA and a central place of a UA (<i>no entities had this code in 1990</i>)
0	Minor civil division that is not a central city of a MSA/PMSA/CMSA and/or a central place of a UA (<i>no entities had this code in 1990</i>)
A	Census designated place (CDP) that is the central place ³ of a UA, but not a central city of an MSA/PMSA/CMSA
B	CDP that is the central city ³ of an MSA/PMSA/CMSA but not a central place of a UA (<i>no entities had this code in 1990</i>)
C	CDP that is the central city ³ of an MSA/PMSA/CMSA and a central place of a UA (<i>no entities had this code in 1990</i>)

Code	Description
D	CDP that was in a 1980 UA and is not a central city of an MSA/PMSA/CMSA and/or a central place of a UA. These CDPs must have a 1990 population of at least 300 in Hawaii and the outlying areas (also see code J), and 2,500 elsewhere to qualify for publication.
E	CDP not classified elsewhere. These CDPs must meet the following minimum population requirements to qualify for publication: 300 in Hawaii, the Virgin Islands of the United States, Guam, and the Northern Mariana Islands; 25 in Alaska; 1000 in all other states and statistical equivalents.
F	Zona urbana that is the central place of a UA in Puerto Rico, but not a central city of an MSA/PMSA/CMSA
G	Zona urbana that is the central city of an MSA/PMSA/CMSA in Puerto Rico, but not of a central place of a UA
H	Zona urbana that is the central city of an MSA/PMSA/CMSA and a central place of a UA
I	Zona urbana in Puerto Rico that is not a central city of an MSA/PMSA/CMSA and/or a central place of a UA; qualifies regardless of the population size
J	CDP that is the capital of an outlying area; qualifies regardless of population size (<i>applies only to Agana, Guam</i>)
K	CDP that is the capital of an outlying area and is the central city of an MSA/PMSA/CMSA and a central place of a UA; qualifies regardless of population size (<i>no entities had this code in 1990</i>)
L	CDP entirely within an American Indian reservation or Alaska Native Area and entirely outside of a 1980 urbanized area. These CDPs must have a 1990 population of at least 25 in Alaska and 250 elsewhere to qualify for publication.

¹ Places recognized as the central cities of metropolitan statistical areas include:

- The place with the largest population in the metropolitan area.
- Each additional city with a population of at least 250,000 or with at least 100,000 persons working within its limits.
- Each additional city with a population of at least 25,000, an employment/residence ratio of at least 0.75, and out-commuting of fewer than 60 percent of its resident employed workers.

- Each city of 15,000 to 25,000 population that is at least one-third as large as the largest central city, has an employment/residence ratio of at least 0.75, and has out-commuting of fewer than 60 percent of its resident employed workers.
- ² The central places of 1990 urbanized areas include:
- All the central cities included in the UA of a metropolitan area.
 - If no central cities of a metropolitan area are in the UA, the largest incorporated place of at least 2,500 population and up to two additional incorporated places of at least 15,000 population at least one-third the size of the largest incorporated place.
 - If no incorporated place of at least 2,500 population is in the UA, the largest non-military census designated place.
- ³ Must meet the criteria for both metropolitan area central cities and urbanized area central places.

Appendix F—Number of Geographic Entities

	1990	1998
Legal and Administrative Entities		
United States	1	1
Regions of the United States	4	4
Divisions of the United States	9	9
States and equivalent entities¹	57	57
States	50	50
District of Columbia	1	1
Outlying Areas ¹	6	6
Counties, parishes, boroughs, municipios, and equivalent entities¹	3,248	3,234
County Subdivisions and Places	49,902	49,961
Minor Civil Divisions (MCDs) ¹	30,386	30,367
Sub-MCDs ¹	145	145
Incorporated Places	19,365	19,467
Consolidated Cities	6	8
American Indian and Alaska Native Areas	326	326
American Indian Reservations (AIRs)	310	310
—American Indian Reservations With Trust Lands	(48)	(50)
American Indian Entities With Only Trust Lands	4	4
Alaska Native Villages (ANVs)	—	—
Alaska Native Regional Corporations (ANRCs)	12	12
Metropolitan Areas	362	353
Metropolitan Statistical Areas	268	258
Consolidated Metropolitan Statistical Areas	21	19
Primary Metropolitan Statistical Areas	73	76
Special Purpose Entities	337,587	336,344
Congressional Districts (CDs)	435	435
Voting Districts (VTDs)	148,872	149,030
School Districts ⁵	15,274	Not Available
Traffic Analysis Zones (TAZs) ⁵	143,537	Not Available
ZIP Codes ²	29,469	28,759

	1990	1998
Statistical Entities		
<i>Urbanized Areas (UAs)</i>	405	406
<i>American Indian and Alaska Native Areas</i>		
Tribal Jurisdiction Statistical Areas (TJSAs)	17	17
Tribal designated Statistical Areas (TDSAs)	19	19
Alaska Native Village Statistical Areas (ANVSAs)	217	217
<i>County Subdivisions¹</i>	5,903	5,909
Census County Divisions (CCDs)	5,581	5,581
Unorganized Territories (UTs)	282	286
Other Statistical Entities	40	42
<i>Census Designated Places (CDPs)³</i>	4,423	4,330
<i>Census Tracts and Block Numbering Areas⁴</i>	62,276	<i>Not Available</i>
Census Tracts	50,690	<i>Not Available</i>
Block Numbering Areas (BNAs) ¹	11,586	<i>Not Available</i>
<i>Block Groups (BGs)¹</i>	229,192	<i>Not Available</i>
<i>Blocks¹</i>	7,017,427	<i>Not Available</i>

¹ The number of entities does not include Midway Island. The Republic of Palau, which attained free association status in October 1994, is no longer a state equivalent and is not included in the 1998 totals.

² The number of 1990 ZIP Codes[®] was based on a commercial block to ZIP Code[®] equivalency file and included only those residential ZIP Codes[®] for which the Census Bureau tabulated data, not the total number of ZIP Codes[®] used by the US Postal Service for mail delivery. The 1998 number represents those ZIP Codes[®] currently in the TIGER data base.

³ The decreased number of CDPs in 1998 is due in part to the absorption of CDPs by other entities and to a change in the status of CDPs resulting from incorporation. Also, The Republic of Palau, which attained free association status in October 1994, is no longer a state equivalent and is not included in the 1998 totals.

⁴ Figures include census tracts, block numbering areas and block groups that are not water.

⁵ 1998 counts are not available for these entities.

Appendix G–1990 Urbanized Area Codes and Names

Code	Urbanized Area Name	Code	Urbanized Area Name
0040	Abilene, TX	1010	Bismarck, ND
0080	Akron, OH	1020	Bloomington, IN
0120	Albany, GA	1040	Bloomington–Normal, IL
0160	Albany–Schenectady–Troy, NY	1080	Boise City, ID
0200	Albuquerque, NM	1120	Boston, MA
0220	Alexandria, LA	1125	Boulder, CO
0240	Allentown–Bethlehem–Easton, PA–NJ	1150	Bremerton, WA
0275	Alton, IL	1160	Bridgeport–Milford, CT
0280	Altoona, PA	1170	Bristol, CT
0320	Amarillo, TX	1180	Bristol, TN–Bristol, VA
0380	Anchorage, AK	1200	Brockton, MA
0400	Anderson, IN	1239	Brownsville, TX
0405	Anderson, SC	1250	Brunswick, GA
0435	Annapolis, MD	1260	Bryan–College Station, TX
0440	Ann Arbor, MI	1282	Buffalo–Niagara Falls, NY
0450	Anniston, AL	1300	Burlington, NC
0457	Antioch–Pittsburg, CA	1305	Burlington, VT
0459	Appleton–Neenah, WI	1320	Canton, OH
0480	Asheville, NC	1350	Casper, WY
0500	Athens, GA	1360	Cedar Rapids, IA
0520	Atlanta, GA	1400	Champaign–Urbana, IL
0560	Atlantic City, NJ	1440	Charleston, SC
0580	Auburn–Opelika, AL	1480	Charleston, WV
0600	Augusta, GA–SC	1510	Charlotte, NC
0619	Aurora, IL	1540	Charlottesville, VA
0640	Austin, TX	1560	Chattanooga, TN–GA
0680	Bakersfield, CA	1580	Cheyenne, WY
0720	Baltimore, MD	1601	Chicago, IL–Northwestern Indiana
0730	Bangor, ME	1620	Chico, CA
0760	Baton Rouge, LA	1640	Cincinnati, OH–KY
0780	Battle Creek, MI	1659	Clarksville, TN–KY
0800	Bay City, MI	1680	Cleveland, OH
0839	Beaumont, TX	1720	Colorado Springs, CO
0860	Bellingham, WA	1740	Columbia, MO
0865	Beloit, WI–IL	1760	Columbia, SC
0870	Benton Harbor, MI	1800	Columbus, GA–AL
0880	Billings, MT	1840	Columbus, OH
0920	Biloxi–Gulfport, MS	1880	Corpus Christi, TX
0960	Binghamton, NY	1897	Crystal Lake, IL
1000	Birmingham, AL	1900	Cumberland, MD–WV

Code	Urbanized Area Name	Code	Urbanized Area Name
1922	Dallas–Fort Worth, TX	2700	Fort Myers–Cape Coral, FL
1930	Danbury, CT–NY	2710	Fort Pierce, FL
1950	Danville, VA	2720	Fort Smith, AR–OK
1960	Davenport–Rock Island–Moline, IA–IL	2750	Fort Walton Beach, FL
1979	Davis, CA	2760	Fort Wayne, IN
2000	Dayton, OH	2820	Frederick, MD
2020	Daytona Beach, FL	2825	Fredericksburg, VA
2030	Decatur, AL	2840	Fresno, CA
2040	Decatur, IL	2880	Gadsden, AL
2071	Deltona, FL	2900	Gainesville, FL
2075	Denton, TX	2919	Galveston, TX
2080	Denver, CO	2970	Gastonia, NC
2120	Des Moines, IA	2975	Glens Falls, NY
2160	Detroit, MI	2980	Goldsboro, NC
2180	Dothan, AL	2985	Grand Forks, ND–MN
2190	Dover, DE	2995	Grand Junction, CO
2200	Dubuque, IA–IL	3000	Grand Rapids, MI
2240	Duluth, MN–WI	3040	Great Falls, MT
2280	Durham, NC	3060	Greeley, CO
2290	Eau Claire, WI	3080	Green Bay, WI
2297	Elgin, IL	3115	Greensboro, NC
2300	Elkhart–Goshen, IN	3150	Greenville, NC
2310	Elmira, NY	3155	Greenville, SC
2320	El Paso, TX–NM	3180	Hagerstown, MD–PA–WV
2360	Erie, PA	3199	Hamilton, OH
2400	Eugene–Springfield, OR	3235	Harlingen, TX
2440	Evansville, IN–KY	3239	Harrisburg, PA
2467	Fairfield, CA	3280	Hartford–Middletown, CT
2480	Fall River, MA–RI	3285	Hattiesburg, MS
2520	Fargo–Moorhead, ND–MN	3288	Hemet–San Jacinto, CA
2560	Fayetteville, NC	3289	Hesperia–Apple Valley–Victorville, CA
2580	Fayetteville–Springdale, AR	3290	Hickory, NC
2600	Fitchburg–Leominster, MA	3300	High Point, NC
2620	Flagstaff, AZ*	3317	Holland, MI
2640	Flint, MI	3320	Honolulu, HI
2650	Florence, AL	3350	Houma, LA
2655	Florence, SC	3360	Houston, TX
2669	Fort Collins, CO	3400	Huntington–Ashland, WV–KY–OH
2680	Fort Lauderdale–Hollywood– Pompano Beach, FL	3440	Huntsville, AL

* Flagstaff, AZ became an urbanized area in 1996

Code	Urbanized Area Name	Code	Urbanized Area Name
3455	Hyannis, MA	4246	Lewisville, TX
3460	Idaho Falls, ID	4280	Lexington-Fayette, KY
3480	Indianapolis, IN	4320	Lima, OH
3487	Indio–Coachella,CA	4360	Lincoln, NE
3500	Iowa City, IA	4400	Little Rock–North Little Rock, AR
3510	Ithaca, NY	4403	Lodi, CA
3520	Jackson, MIY	4405	Logan, UT
3560	Jackson, MS	4407	Lompoc, CA
3580	Jackson, TN	4411	Longmont, CO
3600	Jacksonville, FL	4413	Longview, TX
3605	Jacksonville, NC	4415	Longview, WA–OR
3619	Janesville, WI	4440	Lorain–Elyria, OH
3659	Johnson City, TN	4480	Los Angeles, CA
3680	Johnstown, PA	4520	Louisville, KY–IN
3690	Joliet, IL	4560	Lowell, MA–NH
3710	Joplin, MO	4600	Lubbock, TX
3717	Kailua, HI	4640	Lynchburg, VA
3720	Kalamazoo, MI	4660	McAllen–Edinburg–Mission, TX
3740	Kankakee, IL	4679	Macon, GA
3750	Kannapolis, NC	4720	Madison, WI
3760	Kansas City, MO–KS	4760	Manchester, NH
3800	Kenosha, WI	4800	Mansfield, OH
3809	Killeen, TX	4890	Medford, OR
3815	Kingsport, TN–VA	4899	Melbourne–Palm Bay, FL
3833	Kissimmee, FL	4920	Memphis, TN–AR–MS
3840	Knoxville, TN	4940	Merced, CA
3850	Kokomo, IN	5000	Miami–Hialeah, FL
3870	La Crosse, WI–MN	5025	Middletown, OH
3880	Lafayette, LA	5040	Midland, TX
3920	Lafayette–West Lafayette, IN	5080	Milwaukee, WI
3960	Lake Charles, LA	5120	Minneapolis–St. Paul, MN
3979	Lakeland, FL	5140	Missoula, MT
4000	Lancaster, PA	5160	Mobile, AL
4010	Lancaster–Palmdale, CA	5170	Modesto, CA
4040	Lansing–East Lansing, MI	5187	Monessen, PA
4080	Laredo, TX	5200	Monroe, LA
4100	Las Cruces, NM	5240	Montgomery, AL
4120	Las Vegas, NV	5280	Muncie, IN
4150	Lawrence, KS	5320	Muskegon, MI
4160	Lawrence–Haverhill, MA–NH	5330	Myrtle Beach, SC
4200	Lawton, OK	5343	Napa, CA
4240	Lewiston–Auburn, ME	5345	Naples, FL

Code	Urbanized Area Name	Code	Urbanized Area Name
5350	Nashua, NH	6454	Pottstown, PA
5360	Nashville, TN	6460	Poughkeepsie, NY
5395	Newark, OH	6480	Providence-Pawtucket, RI-MA
5400	New Bedford, MA	6520	Provo-Orem, UT
5440	New Britain, CT	6560	Pueblo, CO
5465	Newburgh, NY	6580	Punta Gorda, FL
5480	New Haven-Meriden, CT	6600	Racine, WI
5520	New London-Norwich, CT	6639	Raleigh, NC
5560	New Orleans, LA	6660	Rapid City, SD
5570	Newport, RI	6680	Reading, PA
5601	New York, NY-Northeastern NJ	6690	Redding, CA
5720	Norfolk-Virginia Beach-Newport News, VA	6720	Reno, NV
5760	Norwalk, CT	6740	Richland-Kennewick-Pasco, WA
5790	Ocala, FL	6759	Richmond, VA
5800	Odessa, TX	6780	Riverside-San Bernardino, CA
5840	Ogden, UT	6800	Roanoke, VA
5880	Oklahoma City, OK	6820	Rochester, MN
5910	Olympia, WA	6840	Rochester, NY
5920	Omaha, NE-IA	6880	Rockford, IL
5960	Orlando, FL	6885	Rock Hill, SC
5973	Oshkosh, WI	6895	Rocky Mount, NC
5990	Owensboro, KY	6900	Rome, GA
6000	Oxnard-Ventura, CA	6911	Round Lake Beach-McHenry, IL-WI
6012	Palm Springs, CA	6920	Sacramento, CA
6015	Panama City, FL	6959	Saginaw, MI
6020	Parkersburg, WV-OH	6980	St. Cloud, MN
6025	Pascagoula, MS	7000	St. Joseph, MO-KS
6080	Pensacola, FL	7040	St. Louis, MO-IL
6120	Peoria, IL	7080	Salem, OR
6140	Petersburg, VA	7119	Salinas, CA
6160	Philadelphia, PA-NJ	7159	Salt Lake City, UT
6200	Phoenix, AZ	7200	San Angelo, TX
6240	Pine Bluff, AR	7240	San Antonio, TX
6282	Pittsburgh, PA	7320	San Diego, CA
6320	Pittsfield, MA	7360	San Francisco-Oakland, CA
6340	Pocatello, ID	7400	San Jose, CA
6377	Port Arthur, TX	7460	San Luis Obispo, CA
6390	Port Huron, MI	7479	Santa Barbara, CA
6400	Portland, ME	7485	Santa Cruz, CA
6442	Portland-Vancouver, OR-WA	7490	Santa Fe, NM
6450	Portsmouth-Dover-Rochester, NH-ME	7497	Santa Maria, CA
		7500	Santa Rosa, CA

Code	Urbanized Area Name	Code	Urbanized Area Name
7511	Sarasota–Bradenton, FL	8600	Tuscaloosa, AL
7520	Savannah, GA	8640	Tyler, TX
7560	Scranton–Wilkes-Barre, PA	8680	Utica–Rome, NY
7572	Seaside–Monterey, CA	8694	Vacaville, CA
7600	Seattle, WA	8740	Vero Beach, FL
7610	Sharon, PA–OH	8750	Victoria, TX
7620	Sheboygan, WI	8760	Vineland–Millville, NJ
7640	Sherman–Denison, TX	8779	Visalia, CA
7680	Shreveport, LA	8800	Waco, TX
7702	Simi Valley, CA	8835	Warner Robins, GA
7720	Sioux City, IA–NE–SD	8840	Washington, DC–MD–VA
7760	Sioux Falls, SD	8880	Waterbury, CT
7767	Slidell, LA	8920	Waterloo–Cedar Falls, IA
7800	South Bend–Mishawaka, IN–MI	8929	Watsonville, CA
7820	Spartanburg, SC	8940	Wausau, WI
7840	Spokane, WA	8960	West Palm Beach–Boca Raton– Delray Beach, FL
7880	Springfield, IL	9000	Wheeling, WV–OH
7920	Springfield, MO	9040	Wichita, KS
7960	Springfield, OH	9080	Wichita Falls, TX
8000	Springfield, MA–CT	9140	Williamsport, PA
8020	Spring Hill, FL	9160	Wilmington, DE–NJ–MD–PA
8040	Stamford, CT–NY	9200	Wilmington, NC
8050	State College, PA	9220	Winston-Salem, NC
8080	Steubenville–Weirton, OH–WV–PA	9227	Winter Haven, FL
8120	Stockton, CA	9240	Worcester, MA–CT
8130	Stuart, FL	9260	Yakima, WA
8140	Sumter, SC	9280	York, PA
8160	Syracuse, NY	9320	Youngstown–Warren, OH
8200	Tacoma, WA	9340	Yuba City, CA
8240	Tallahassee, FL	9360	Yuma, AZ–CA
8280	Tampa–St Petersburg–Clearwater, FL		
8300	Taunton, MA		
8312	Temple, TX		<i>Puerto Rico</i>
8320	Terre Haute, IN	0060	Aguadilla, PR
8360	Texarkana, TX–Texarkana, AR	0470	Arecibo, PR
8382	Texas City, TX	1310	Caguas, PR
8395	Titusville, FL	1355	Cayey, PR
8400	Toledo, OH–MI	3380	Humacao, PR
8440	Topeka, KS	4840	Mayaguez, PR
8480	Trenton, NJ–PA	6360	Ponce, PR
8520	Tucson, AZ	7440	San Juan, PR
8560	Tulsa, OK	8730	Vega Baja–Manati, PR

Appendix H—Legal/Administrative/Statistical Area Codes

Code	Description	Status Title	Applicability
01	State or State Equivalent	—	State or State Equivalent
04	Borough	Borough	County Equivalent in Alaska
05	Census Area	Census Area	County Equivalent in Alaska
06	County	County	County in 48 States
07	District	District	County Equivalent in American Samoa
08	Independent City	city	County Equivalent in Maryland, Missouri, and Virginia
09	Independent city	—	County Equivalent in Nevada
10	Island	Island	County Equivalent in Virgin Islands
11	Island	—	County Equivalent in American Samoa
12	Municipality	Municipality	County Equivalent in the Northern Mariana Islands
13	Municipio	Municipio	County Equivalent in Puerto Rico
14	—	—	County Equivalent (used for District of Columbia, and Guam)
15	Parish	Parish	County Equivalent in Louisiana
19	Reservation	Reservation	MCD in Maine and New York (coextensive with an American Indian reservation)
20	Barrio	barrio	MCD in Puerto Rico
21	Borough	borough	MCD in New York; MCD Equivalent in New Jersey and Pennsylvania
22	Census County Division	division	MCD Equivalent in 21 States
23	Census Subarea	census subarea	MCD Equivalent in Alaska

Code	Description	Status Title	Applicability
24	Census Subdistrict	subdistrict	MCD Equivalent in the Virgin Islands
25	City	city	MCD Equivalent in 20 States and the District of Columbia
26	County	county	MCD in American Samoa
27	District (election magisterial, or municipal, or road)	district	MCD in Virginia, West Virginia, Guam, and the Northern Mariana Islands
28	District (assessment, election, magisterial, supervisor's, parish governing authority, or municipal)	—	MCD in Louisiana, Maryland, Mississippi, Virginia, West Virginia, and the Northern Mariana Islands
29	Election precinct	precinct	MCD in Illinois, Nebraska
30	Election precinct	—	MCD in Illinois, Nebraska
31	Gore	gore	MCD in Maine, Vermont
32	Grant	grant	MCD in New Hampshire, Vermont
33	Independent City	city	MCD Equivalent in Maryland, Missouri, and Virginia
34	Independent city	—	MCD Equivalent in Nevada
35	Island	—	MCD in American Samoa
36	Location	location	MCD in New Hampshire
38	—	—	MCD Equivalent for Arlington County, VA
39	Plantation	plantation	MCD in Maine
41	Barrio-Pueblo	barrio-pueblo	MCD in Puerto Rico
42	Purchase	purchase	MCD in New Hampshire

Code	Description	Status Title	Applicability
43	Town	town	MCD in 10 States; MCD Equivalent in New Jersey, North Carolina, Pennsylvania, and South Dakota
44	Township	township	MCD in 16 States
45	Township	—	MCD in Kansas, Nebraska, North Carolina
46	Unorganized Territory	unorg.	MCD in 11 States (in Kansas only applicable to 1990 data products; in Indiana and Ohio only applicable to corrected and post-1990 data products)
47	Village	village	MCD Equivalent in New Jersey, Ohio, South Dakota, and Wisconsin
49	Charter Township	charter township	MCD in Michigan
51	Subbarrio	subbarrio	Sub-MCD in Puerto Rico
55	Comunidad	comunidad	Place (CDP) in Puerto Rico
56	Borough	borough	Place in Connecticut, New Jersey, and Pennsylvania
57	Census Designated Place	CDP	Place
58	City	city	Place in 49 States and District of Columbia
59	City	—	Place (with unique description, no description, or description included with name)
60	Town	town	Place in 30 States and the US Virgin Islands
61	Village	village	Place in 19 States and American Samoa
62	Zona Urbana	zona urbana	Place (CDP) in Puerto Rico

Code	Description	Status Title	Applicability
65	Consolidated City	city	Consolidated City in Connecticut, Florida, Georgia, and Indiana
66	Consolidated City	—	Consolidated City (with unique description or no description)
68	Census Region	—	Census Region
69	Census Division	—	Census Division
71	Consolidated Metropolitan Statistical Area	CMSA	CMSA
72	Metropolitan Statistical Area	MSA	MSA
73	Primary Metropolitan Statistical Area	PMSA	PMSA
75	Urbanized Area (UA)	—	UA
77	Alaska Native Regional Corporation	—	Alaska Native Regional Corporation
79	Alaska Native Village	—	Alaska Native Village Statistical Area
80	Tribal Designated Statistical Area	TDSA	Statistical Area for Non-Land-Based Tribes Outside Oklahoma
81	Colony	Colony	American Indian Reservation
82	Community	Community	American Indian Reservation
83	Joint Area	joint area	American Indian Reservation Equivalent
84	Pueblo	Pueblo	American Indian Reservation
85	Ranchería	Rancheria	American Indian Reservation
86	Reservation	Reservation	American Indian Reservation
87	Reserve	Reserve	American Indian Reservation

Code	Description	Status Title	Applicability
88	Tribal Jurisdiction Statistical Area	TJSA	Statistical Area for Tribes in Oklahoma
89	Trust Lands	—	American Indian Reservation Equivalent
90	—	—	American Indian Reservation (with unique or no description)

Glossary

ACF *See Address Control File*

Address Control File A computer data base developed by the Census Bureau to control enumeration in areas with city-style addresses during the 1990 census.

Administrative entity A geographic area, usually with legally defined boundaries but often without elected officials, created to administer elections and other governmental functions. Administrative areas include school districts, voting districts, ZIP Codes®, and nonfunctioning MCDs such as election precincts, election districts, and assessment districts.

AIANA *See American Indian and Alaska Native area.*

AIR *See American Indian reservation.*

Alaska Native Regional Corporation (ANRC) A corporate entity established by the Alaska Native Claims Settlement Act. Twelve ANRCs have specific boundaries that together cover the state of Alaska except for the Annette Islands Reserve (an American Indian reservation). A thirteenth corporation represents Alaska Natives not resident in Alaska who do not identify with any of the other 12 corporations.

Alaska Native village (ANV) 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 Alaska Native Claims Settlement Act. The Census Bureau tabulated statistical data for ANVs for the 1980 census. ANVs do not have legally defined boundaries.

Alaska Native village statistical area (ANVSA) A 1990 census statistical entity that represents the densely settled extent of an ANV as delineated for the Census Bureau by officials of the ANRC in which the ANVSA is located, or by other appropriate officials, for the purpose of presenting decennial census data.

American Indian and Alaska Native area (AIANA) A Census Bureau term referring to these entity types: American Indian reservation, American Indian subreservation area, American Indian trust land, tribal jurisdictional statistical area, tribal designated statistical area, Alaska Native Regional Corporation, Alaska Native village, and Alaska Native village statistical area.

American Indian reservation (AIR) An American Indian entity with boundaries established by treaty, statute, and/or executive or court order. Federal and individual state governments have established reservations as territory over which American Indians have governmental jurisdiction. These entities are designated as colonies, communities, pueblos, rancherias, reservations, and reserves. The Federally recognized reservations, their names, and their boundaries were identified for the Census Bureau for the 1990 census by the Bureau of Indian Affairs (BIA), an agency in the US Department of the Interior; state governments identify the names and boundaries of state reservations.

American Indian trust land Land held in trust by the Federal government for either a tribe (tribal trust land) or an individual member of that tribe (individual trust land). Such land always is associated with a specific Federally recognized reservation or tribe, but may be located on or off the reservation. The Census Bureau recognizes and tabulates data separately only for off-reservation trust lands. The BIA identified and provided maps of these areas for use by the Census Bureau for the 1990 census.

ANRC *See Alaska Native Regional Corporation.*

ANV *See Alaska Native village.*

ANVSA *See Alaska Native village statistical area.*

BAS *See Boundary and Annexation Survey.*

BG *See block group.*

BIA *See Bureau of Indian Affairs.*

Block *See census block.*

Block boundary A census map feature, visible or nonvisible, that delimits a census block. Usually, it takes two or more features to delimit a census block, but a single feature may delimit a census block in the case of an island or a circumferential street.

Block group (BG) A combination of census blocks that is a subdivision of a census tract or BNA. A BG consists of all blocks whose numbers begin with the same digit in a given census tract or BNA; for example, BG 3 within a census tract or BNA includes all blocks numbered between 301 and 399. The BG is the lowest level of geography for which the Census Bureau has tabulated sample data in the 1990 census; it was used to tabulate sample data in the 1970 and 1980 censuses only for those areas that had block numbers. *See also block number.*

Block number A three-digit number, which may have a one- or two-letter alphabetic suffix for the 1990 census, that identifies a specific census block on census maps and Summary Tape Files (STFs). 1990 block numbers are not repeated within a census tract or BNA. *See also collection block number.*

Block numbering area (BNA) An area delineated by state officials or (lacking state participation) by the Census Bureau, following Census Bureau guidelines, for the purpose of grouping and numbering decennial census blocks for the 1990 census in counties or statistically equivalent entities in which census tracts had not been established. A BNA is equivalent to a census tract in the Census Bureau's 1990 census geographic hierarchy. *See also block numbering area number, census tract.*

Block numbering area (BNA) number A four-digit number, possibly with a two-digit suffix, used to identify a BNA within a county for the 1990 census. BNA numbers range from 9501 to 9989.

BNA *See block numbering area.*

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. In New York, a functioning MCD; the boroughs are the five entities, one for each county, that together constitute New York city. In Connecticut, New Jersey, and Pennsylvania, an incorporated place; in New Jersey and Pennsylvania, also a county subdivision. *See also census area, county subdivision, dependent place, incorporated place, and independent place.*

Boundary and Annexation Survey (BAS) A Census Bureau survey of a specified universe of counties (and legally equivalent entities), MCDs, and incorporated places. The purpose of the BAS is to determine the inventory of legally defined entities and the correct names, political descriptions, and legal boundaries of counties, MCDs, and incorporated places as of January 1 of the year of the survey. The survey also collects specific information on the legal actions that affect boundary changes.

Bureau of Indian Affairs (BIA) The Federal Government agency, located in the Department of the Interior, responsible for the historic and legal relationships between the Federal Government and American Indian communities.

CCD *See census county division.*

CD *See congressional district.*

CDP *See census designated place.*

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. *See also borough.*

Census block The smallest entity for which the Census Bureau collects and tabulates decennial census information; bounded on all sides by visible and nonvisible features shown on Census Bureau maps. *See also collection block.*

Census county division (CCD) A statistical subdivision of a county, established cooperatively by the Census Bureau and state and local government authorities, for the presentation of decennial census data in 21 states that do not have well-defined MCDs; that is, where MCDs have not been legally established, do not serve a legal or administrative governmental purpose, are not well known, have poorly defined boundaries, and/or have frequent boundary changes. A CCD boundary normally follows visible features and county lines, but may follow corporate boundaries and other nonvisible features in selected instances. *See also county subdivision, minor civil division.*

Census designated place (CDP) A statistical entity, defined for each decennial census according to Census Bureau guidelines, comprising a densely settled concentration of population that is not within an incorporated place, but is locally identified by a name. CDPs are delineated cooperatively by state and local officials and the Census Bureau, following Census Bureau guidelines. These entities were called unincorporated places for the 1940 through 1970 censuses. *See also comunidad.*

Census feature class code (CFCC) Developed by the Census Bureau to identify the most prominent characteristics of a feature. The CFCC, as used in the TIGER/Line[®] files, is a three-character code. The first character is a letter describing the feature class; the second and third characters are numbers representing the major and minor categories.

Census tract A small, relatively permanent statistical subdivision of a county in a metropolitan area (MA) or a selected nonmetropolitan county, delineated by a local committee of census data users for the purpose of presenting decennial census data. Census tract boundaries normally follow visible features, but may follow governmental unit boundaries and other nonvisible features in some instances; they always nest within counties. Designed to be relatively homogeneous units with respect to population characteristics, economic status, and living conditions at the time data users established them, census tracts usually contain between 2,500 and 8,000 inhabitants. They may be split by any subcounty geographic entity. *See also block numbering area, census tract number.*

Census tract number A four-digit number, possibly with a two-digit suffix, used to identify a census tract. Census tract numbers are always unique within a county and usually unique within an MA. Almost all census tract numbers for the 1990 census range from 0001 to 9499. Leading zeros are not shown on the Census Bureau's maps or in its printed reports.

Central city The largest city of an MA or, from the 1950 through 1980 censuses, an urbanized area (UA); also included as central cities are the CDP of Honolulu in Hawaii, highly urban MCDs in Massachusetts and New Jersey, and several zonas urbanas in Puerto Rico. Central cities are a basis for establishment of an MA, and prior to the 1990 census, a UA. Additional cities that meet specific criteria also are identified as central city(ies). In a number of instances, only part of a city qualifies as central, because another part of the city extends beyond the MA boundary. *See also central place.*

Central place The core incorporated place(s) or CDP(s) of a UA, usually consisting of the most populous place(s) in the UA. If a central place also is defined as an extended city, only the portion of the central place contained within the UA is recognized as the central place. The term was first used for the 1990 census to recognize a CDP as the most populous place in a UA. *See also central city.*

CFCC *See census feature class code.*

City A type of incorporated place in 49 states and the District of Columbia. In 23 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. *See also county subdivision, dependent place, incorporated place, independent place.*

City-style address An address consisting of a structure number and street name; for example, 201 Main St.

CMSA *See consolidated metropolitan statistical area.*

Collection block A census block that is part of the set of collection geographic areas used in Census 2000 for canvassing and administering the census. *See also census block, block number, and collection block number.*

Collection block number A four- or five-character number that identifies a specific Census 2000 collection block. Collection block numbers are unique within collection state and county; they are not unique within census tract. *See also census block, block number, and collection block.*

Collection geography The set of collection geographic areas used for canvassing and administering Census 2000. *See also collection block and collection block number.*

Comunidad A CDP in Puerto Rico for the 1990 census; formerly called an aldea. *See also census designated place.*

Congressional district (CD) An area established by state officials or the courts for the purpose of electing a person to the US House of Representatives. Within each state, these areas must contain, as nearly as possible, an equal number of inhabitants. The number of CDs in each state may change after each decennial census, and the boundaries may be changed more than once during a decade.

Consolidated city 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.

Consolidated metropolitan statistical area (CMSA) A geographic entity defined by the Federal Office of Management and Budget (OMB) for use by Federal statistical agencies. An area becomes a CMSA if it meets the requirements to qualify as a metropolitan statistical area (MSA), has a population of 1,000,000 or more, if component parts are recognized as primary metropolitan statistical areas (PMSAs), and local opinion favors the designation. Whole counties are components of CMSAs outside of New England, where they are composed of cities and towns instead.

Corporate corridor A narrow strip of land, generally consisting of all or part of the right-of-way of a road, proposed road, power line, or similar feature, that is part of an incorporated place; a corridor also may exist without relation to any accompanying visible feature.

County A type of governmental unit that is the primary legal subdivision of every state except Alaska and Louisiana; also, a type of functioning MCD found in American Samoa. *See also borough, county equivalent, parish.*

County code A three-digit code assigned by the National Institute of Standards and Technology (NIST) to identify each county and statistically equivalent entity within a state. The NIST assigns the codes based on the alphabetic sequence of county names; it documents these codes in a FIPS publication (FIPS PUB 6). The Census Bureau also documents these codes in its Geographic Identification Code Scheme. The NIST leaves gaps in the numbering system to accommodate new counties or statistically equivalent entities. *See also Federal Information Processing Standard, Geographic Identification Code Scheme.*

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 presentation. *See also borough, census area, independent city, municipio, parish, state.*

County subdivision A legal or statistical division of a county recognized by the Census Bureau for data presentation. *See also census county division, city, minor civil division, town, township, unorganized territory.*

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; the statistical data for the place also are tabulated as part of the total for the county(ies) and/or county subdivision(s) that these data are part of. 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. *See also incorporated place, independent place.*

Digital Line Graph (DLG) A computer-readable file, produced by the USGS, of geographic information that covers the same extent as a quadrangle map.

DLG *See Digital Line Graph.*

Elementary school district A school district inclusive of kindergarten through either the eighth or ninth grade or the first through either the eighth or the ninth grade. For the data tabulations from the 1980 and 1990 decennial censuses, this term includes both elementary and intermediate/middle districts. *See also school district, secondary school district, unified district.*

FEAT The TIGER/Line® file field name for the alternate feature identification code used as a pointer between record types. The FEAT links geographic objects to an alternate or secondary name.

Federal Information Processing Standard (FIPS) Any of the standardized systems of numeric and/or alphabetic coding issued by the National Institute of Standards and Technology (NIST), an agency in the US Department of Commerce, for use by the Federal Government and others. Several series of FIPS identify standard geographic codes for states, counties, metropolitan areas, congressional districts, foreign geographic entities, and named populated and related locational entities. Geographic elements to be assigned codes are first alphabetized and then assigned codes serially, generally with systematic gaps that permit additions to the list. The basic geographic code formats published in FIPS publications (FIPS PUBs) are (1) states—two digits, (2) counties and county equivalents—three digits, (3) metropolitan areas—four digits; CMSAs and the former SCSAs also have two-digit codes, (4) congressional districts—two digits, (5) named populated places, primary county divisions, and other locational entities used to assign codes to places, county subdivisions, and AIANAs—five digits.

FIPS *See Federal Information Processing Standard.*

FIPS code One of a series of codes, issued by the NIST, assigned for the purpose of ensuring uniform identification during computer processes involving geographic entities throughout all Federal Government programs and agencies. *See also Federal Information Processing Standard.*

GBF/DIME-File (Geographic Base File/Dual Independent Map Encoding File)

A geographic base file created by the Census Bureau, usually in cooperation with local officials, representing the line segments and related geographic attributes that comprised all or part of the urban cores of all metropolitan areas. Created for the 80 smaller urban cores to supplement the ACG coverage for the 1970 census and support the place of work coding operation, this format was expanded to include all urban cores for the 1980 census by converting the ACGs in a program called the ACG Improvement Program. Each file contained the name of each segment of a mapped feature, its associated address range and ZIP Code if applicable, 1980 census geographic area information for both sides of each segment, node numbers that identified feature intersections and selected points of a curved line, and x,y coordinate information for each node in the file. The file contained information describing the street network in the major urban centers, and was used to build the TIGER® data base.

Geographic code One or more alphanumeric symbols used to identify a legal, administrative, or statistical entity. *See also Federal Information Processing Standard, GBF/DIME-File.*

Geographic Identification Code Scheme (GICS) A detailed listing of the geographic codes, associated names, and attributes that the Census Bureau used to identify the various legal, administrative, and statistical geographic entities of the United States in a specific census. *See also administrative entity, legal entity, statistical entity.*

Geographic Information System (GIS) Software that enables the processing and analysis of geographic information on a computer.

Geographic reference file (GRF) A generic term for a file that contains geographic information such as area names, geographic codes, and selected x,y coordinate values (entity centroid or internal point). Geographic reference files may be used for determining the name of a particular geographic entity when only its code is known (or vice versa), and for control of geographic operations, computer mapping, and entity name placement, depending on the information contained in the specific file. *See also Geographic Identification Code Scheme.*

Geometry The part of mathematics dealing with coordinate location and shape. *See also geometry and topology, topology.*

Geometry and Topology These combined characteristics are the logical, mathematical framework upon which geographic objects are manipulated in a GIS. *See also geometry, topology.*

GICS *See Geographic Identification Code Scheme.*

GIS *See Geographic Information System.*

GT *See Geometry and Topology.*

Incorporated place 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. *See also dependent place, independent place.*

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 MCD equivalent for data tabulation purposes. *See also incorporated place.*

Independent place An incorporated place that legally is not part of any MCD. The Census Bureau treats independent places as a primary division of a county and an MCD equivalent for data tabulation purposes. *See also dependent place, incorporated place.*

Indian reservation *See American Indian reservation.*

Internal point A coordinate value for a point that lies within its geographic area; where possible, the internal point also is a centroid.

LAND Landmark Feature Identification Number

Legal entity A geographic entity whose boundaries, name, origin, and political/statistical area description result from charters, laws, treaties, or other administrative or governmental action. In earlier censuses, often referred to as a political area or entity. Legal entities include states, counties, minor civil divisions, American Indian reservations, and Alaska Native Regional Corporations. *See also administrative entity, statistical entity.*

Legislative district An area from which a person is elected to serve in a state legislative body. *See also state legislative district, voting district.*

Linear feature A feature, such as a railroad, road, street, stream, pipeline, or boundary that can be represented by a line in a geographic data base.

MA *See metropolitan area.*

MA code The NIST issues numeric FIPS codes for MAs. FIPS codes MSAs and PMSAs (and NECMAs) are four-digit codes; CMSAs are assigned two-digit FIPS codes. NIST also has made available an alternative set of four-digit codes for CMSAs. *See also Federal Information Processing Standards, Geographic Identification Code Scheme.*

MCD *See minor civil division.*

Metropolitan area (MA) A collective term, established by the Federal OMB and used for the first time in 1990, to refer to metropolitan statistical areas (MSAs), consolidated metropolitan statistical areas (CMSAs), and primary metropolitan statistical areas (PMSAs). In addition, there is an alternative set of areas termed NECMAs.

Metropolitan statistical area (MSA) A geographic entity, defined by the Federal OMB for use by Federal statistical agencies, based on the concept of a core area with a large population nucleus, plus adjacent communities having a high degree of economic and social integration with that core. Qualification of an MSA requires the presence of a city with 50,000 or more inhabitants, or the presence of a UA and a total population of at least 100,000 (75,000 in New England). The county or counties containing the largest city and surrounding densely settled territory are central counties of the MSA. Additional outlying counties qualify to be included in the MSA by meeting certain other criteria of metropolitan character, such as a specified minimum population density or percentage of the population that is urban. MSAs in New England are defined in terms of cities and towns, following rules concerning commuting and population density. MSAs were first defined and effective June 30, 1983. *See also consolidated metropolitan statistical area, metropolitan area, metropolitan statistical area, primary metropolitan statistical area.*

Minor civil division (MCD) 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. The several types of MCDs are identified by a variety of terms, such as town, township, and district, and include both functioning and nonfunctioning governmental units. Many MCDs represent local, general-purpose governmental units, which makes them required areas for presentation of decennial census data. *See also census county division, county subdivision, incorporated place, independent place, unorganized territory.*

Minor civil division (MCD) code A five-digit numeric code assigned by the NIST to identify populated places, primary county divisions, and other locational entities within a state. The NIST assigns the codes based on the alphabetic sequence of the entity names; it documents these codes in FIPS 55. *See also Geographic Identification Coding Scheme, Federal Information Processing Standard.*

MSA *See metropolitan statistical area.*

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.

Parish A type of governmental unit that is the primary legal subdivision of Louisiana, similar to a county in other states.

PL *See Public Law.*

Place A concentration of population either legally bounded as an incorporated place, or identified by the Census Bureau as a CDP. Incorporated places have political/statistical descriptions of borough (except in Alaska and New York), city, town (except in New England, New York, and Wisconsin), or village. *See also census designated place, incorporated place.*

Place code A five-digit numeric code assigned by the NIST to identify populated places, primary county divisions, and other locational entities within a state. The NIST assigns the codes based on the alphabetic sequence of the entity names; it documents the codes in FIPS PUB 55. *See also Geographic Identification Code Scheme, Federal Information Processing Standard.*

PMSA *See primary metropolitan statistical area.*

POLYID Polygon Identification Number

Primary metropolitan statistical area (PMSA) A geographic entity defined by the Federal OMB for use by Federal statistical agencies. If an area meets the requirements to qualify as a metropolitan statistical area (MSA) and has a population of one million or more, two or more PMSAs may be defined within it if statistical criteria are met and local opinion is in favor. A PMSA consists of a large urbanized county, or a cluster of such counties (cities and towns in New England) that have substantial commuting interchange. When one or more PMSAs have been recognized, the balance of the original, larger area becomes an additional PMSA; the larger area of which they are components then is designated a consolidated metropolitan statistical area (CMSA). PMSAs were first defined and effective on June 30, 1983.

Public Law Laws of the United States that may be referenced by number, such as PL 94-171 (the 171 law passed by the 94th Congress).

Rural The population and territory outside any UA and the urban part of any place with a decennial census population of 2,500 or more. *See also place, urban, urban place, urbanized area.*

Rural place Any incorporated place or CDP located outside a UA and having fewer than 2,500 residents in the most recent decennial census. *See also census designated place, incorporated place, urban place.*

School district 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.

SDTS *See Spatial Data Transfer Standard.*

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). *See also elementary school district, school district, unified district.*

Spatial Data Transfer Standard Released by NIST as FIPS PUB 173, this standard governs the exchange of geographic information between federal agencies.

State/state A type of governmental unit that is the primary legal subdivision of the United States.

State code A two-digit FIPS code assigned by the NIST to identify each state and statistically equivalent entity. The NIST assigns the codes based on the alphabetic sequence of state names (Puerto Rico, the Virgin Islands, and the Pacific Island Territories appear at the end); it documents these codes in a FIPS publication (FIPS PUB 5). Also, a two-digit code assigned by the Census Bureau to identify each state within

its census geographic division (Puerto Rico, the Virgin Islands, and the Pacific Island Territories appear at the end). *See also Federal Information Processing Standard, Geographic Identification Code Scheme.*

State equivalent A type of governmental unit treated by the Census Bureau as if it were a state for 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, and the Commonwealth of the Northern Mariana Islands. *See also State/state.*

Statistical entity Any specially defined geographic entity or combination of entities, such as a block group, BNA, CCD, CDP, census tract, or UA, for which the Census Bureau tabulates data. Statistical entity boundaries are not legally defined and the entities have no governmental standing.

Statistically equivalent entity A type of geographic entity that, for purposes of data tabulation and presentation, the Census Bureau treats as the counterpart of a similar type of entity; for example, in Louisiana (which has no counties) the parish is the statistical equivalent of a county.

State Legislative District (SLD) Area from which members are elected to state legislatures. The SLDs include the upper (senate) and lower (house) bodies of the state legislature. *See also legislative district and voting district.*

STF *See Summary Tape File.*

Summary Tape File (STF) One of a series of computer files containing large amounts of decennial census data for the various levels of the Census Bureau's geographic hierarchy.

TAZ *See Traffic Analysis Zone.*

TDSA *See Tribal Designated Statistical Area.*

TIGER® Topologically Integrated Geographic Encoding and Referencing

TJSA *See Tribal Jurisdiction Statistical Area.*

TLID TIGER/Line® Record Identification Number

Topology One component of the science of mathematics dealing with geometric configurations (nodes, complete chains, and polygons) that do not vary when transformed through bending, stretching, or mapping at various scales. *See also geometry, geometry and topology.*

Town A type of functioning MCD found in the New England States, New York, and Wisconsin; a type of incorporated place in 30 states and the Virgin Islands of the United States. The Census Bureau treats all towns in New Jersey, Pennsylvania, and South Dakota, and some towns in North Carolina, as the equivalent of an MCD. *See also county subdivision, dependent place, incorporated place, independent place.*

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), and a type of county subdivision that can be functioning and nonfunctioning in Missouri. (There also are nonfunctioning survey townships in Maine, but these are not recognized by the Census Bureau for data tabulation purposes.) In states where land was subdivided under the public land survey system, many townships correspond to the survey townships. *See also county subdivision, minor civil division.*

Traffic analysis zone (TAZ) A special-purpose geographic entity delineated by a metropolitan planning organization for tabulating transportation statistics from the decennial census.

Tribal designated statistical area (TDSA) A statistical entity delineated for the 1990 decennial census by an American Indian tribe recognized by the Federal Government or a state government when that tribe does not have a land base (reservation). It encompasses the area that includes the American Indian population over which the tribe has jurisdiction. A TDSA cannot overlap with a federal or state reservation or American Indian trust land; it also cannot cross a state line, and must be delineated following census block boundaries. *See also tribal jurisdiction statistical area.*

Tribal jurisdiction statistical area (TJSA) A statistical area identified and delineated for the 1990 decennial census by American Indian tribal officials in Oklahoma. They encompass the area that includes the American Indian population over which the tribe has jurisdiction. TJSA's replaced the Historic Areas of Oklahoma recognized by the Census Bureau for the 1980 decennial census. *See also tribal designated statistical area.*

UA *See urbanized area.*

UA code A four-digit numeric code assigned by the Census Bureau to identify UAs. *See also Federal Information Processing Standards, Geographic Identification Code Scheme.*

Unified district A school district inclusive of kindergarten through twelfth grade. *See also school district.*

Unincorporated place *See census designated place.*

United States Geological Survey (USGS) The USGS is a bureau of the US Department of the Interior, and is the Nation's main topographic mapping agency.

United States Postal Service (USPS) An independent corporation of the US Government, the USPS provides mail processing and delivery services to individuals and businesses in the United States, Puerto Rico, the Virgin Islands, and the Pacific Island Territories.

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.

Urban All population and territory within the boundaries of UAs and the urban portion of places outside of UAs that have a decennial census population of 2,500 or more. *See also rural, urban place, urbanized area.*

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. Some urban places (extended cities) contain territory that is not designated as urban. *See also place, rural place, urbanized area.*

Urbanized area (UA) An area consisting of a central place(s) and adjacent urban fringe that together have a minimum residential population of at least 50,000 people and generally an overall population density of at least 1,000 people per square mile of land area. The Census Bureau uses published criteria to determine the qualification and boundaries of UAs. *See also urban, urban place.*

USGS *See United States Geological Survey.*

USPS *See United States Postal Service.*

UT *See Unorganized Territory.*

Voting district (VTD) Any of a variety of areas, such as election districts, precincts, legislative districts, or wards, established by states and local governments for voting purposes. The 1990 census term voting district replaces the 1980 term election precinct. *See also administrative entity.*

VTD *See Voting district.*

ZCTATM *See ZIP Code[®] Tabulation Area.*

ZIP Code[®] Tabulation Area (ZCTATM) Approximate area representations of US Postal Service ZIP Code[®] service areas created by the Census Bureau for statistical purposes.

ZIP (Zone Improvement Plan) Code[®] A five-, seven-, nine-, or eleven-digit code assigned by the US Postal Service to a section of a street, a collection of streets, an establishment, structure, or group of post office boxes, for the delivery of mail.