

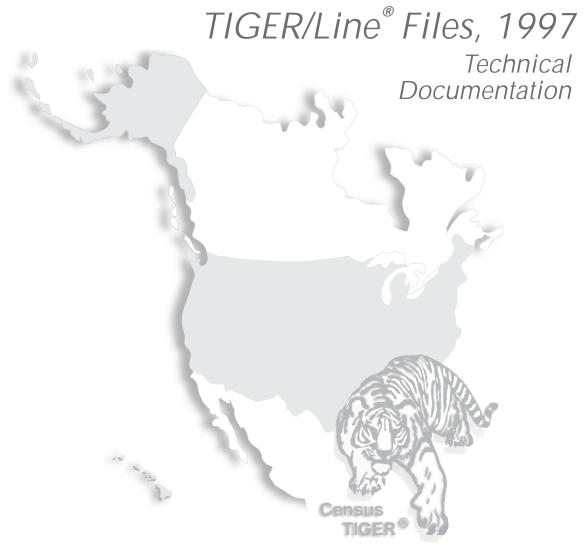
US Department of Commerce Economics and Statistics Administration BUREAU OF THE CENSUS

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## **Table of Contents**

Changes in the 1994, 1995, and 1997 TIGER/Line® File Versions	<b>I</b> -2
1994 TIGER/Line <sup>®</sup> Files	<b>I</b> -2
New Record Types	<b>I</b> -2
Deleted Record Types	
Field Definition Changes	
Address Ranges and ZIP Codes <sup>®</sup>	
Coordinates	I-4
1995 TIGER/Line <sup>®</sup> Files	<b>I</b> -4
Field Definition Changes	
Address Ranges and ZIP Codes <sup>®</sup>	<b>I</b> -5
Boundary and Area Changes	<b>I</b> -5
Coordinates	I-5
1997 TIGER/Line <sup>®</sup> Files	I-6
Field Definition Changes	<b>I</b> -6
Address Ranges and ZIP Codes <sup>®</sup>	I-7
Boundary and Area Changes	I-7
Change in Naming Standards for Record Type 1	I-7
Known Problems and Anomalies in TIGER/Line <sup>®</sup> 1997	<b>I</b> -8
Missing ZIP+4 <sup>®</sup> Records	I-8
Address Anomalies in Puerto Rico and Queens County, N.Y.	
Road Feature Anomalies	I-9
How to Use This Documentation	<b>I</b> -10
Chapter 1	<b>I</b> -11
Chapter 2	<b>I</b> -11
Chapter 3	<b>I</b> -11
Chapter 4	
Chapter 5	
Chapter 6	
How to Obtain Products and Information	I-12

## **Chapter 1: Overview and Geographic Concepts**

Overview	1-1
What is TIGER <sup>®</sup> ?	1-1
TIGER <sup>®</sup> Data Base Extracts	1-1
Relationship of TIGER/Line <sup>®</sup> to 1990 Census Statistical Data	1-2
1997 TIGER/Line <sup>®</sup> Files	.1-2

Related Files	. 1-3
Summary Tape Files (STFs)	. 1-3
PL 94-171 Program	. 1-3
TIGER/SDTS <sup>®</sup>	
The TIGER/Line <sup>®</sup> 103 <sup>rd</sup> Congressional District File	1-3
TIGER/Line <sup>®</sup> 1990 County Files	
TIGER/Line <sup>®</sup> 1990 Census Tract/Block Numbering Area Files	
North American Statistical Areas Boundary Files (Prototype)	
TIGER/Line <sup>®</sup> American Indian/Alaska Native Areas File	
TIGER/Line <sup>®</sup> 1990 County Subdivision Files	
TIGER/Line <sup>®</sup> 1990 Place Files	
County-Based Files	
The Data Content of the TIGER/Line <sup>®</sup> Files	
Topology and Spatial Objects in the TIGER/Line <sup>®</sup> Files	
Spatial Objects in the TIGER/Line <sup>®</sup> Files	
Topology	
Terminology	
Node	
Entity Point	
Complete Chain	
Network Chains	
GT-Polygon	
Spatial Objects	
Features	
Left- and Right-Side Data Fields	
Single-Layer Topology	
Introduction to the TIGER/Line <sup>®</sup> File Structure	
1997 TIGER/Line <sup>®</sup> File Record Types	1-12
Record Type 1—Complete Chain Basic Data Record	
Record Type 2—Complete Chain Shape Coordinates	1-12
Record Type 3—Complete Chain Geographic Entity Codes	1-12
Record Type 4—Index to Alternate Feature Identifiers	1-13
Record Type 5—Complete Chain Feature Identifiers	
Record Type 6—Additional Address Range and ZIP Code <sup>®</sup> Data	1-13
Record Type 7—Landmark Features	
Record Type 8—Polygons Linked to Area Landmarks	1-14
Record Type 9—Key Geographic Location Features	
Record Type A—Polygon Geographic Entity Codes	
Record Type C—Geographic Entity Names	
Record Type H—TIGER/Line <sup>®</sup> ID History	1-15

Record Type I—Link Between Complete Chains and Polygons	1-15
Record Type P—Polygon Internal Point	1-15
Record Type R—TIGER/Line <sup>®</sup> ID Record Number Range	1-16
Record Type S—Polygon Additional Geographic Entity Codes	1-16
Record Type Z—ZIP+4 <sup>®</sup> Codes	1-16
The Relationship Between Spatial Objects and TIGER/Line® Record	Types 1-17
Linkages Between Record Types	1-17

## Chapter 2: Version Code and Identification Numbers

Version Code	2-1
TIGER/Line <sup>®</sup> Identification Number (TLID)	2-1
TLID Codes	2-1
TLID Record Locations	2-2
TLID Record Linkages	2-2
TLID Sort Sequence	2-3
User-Defined Changes to the TIGER/Line® Files	2-3
TLID as a Standard Identification Number	2-3
Feature Changes	2-3
TIGER/Line <sup>®</sup> Polygon Identification Numbers (CENID, POLYID)	2-4
CENID and POLYID Codes	2-4
CENID and POLYID Record Locations	2-5
CENID and POLYID Record Linkages	2-5
CENID and POLYID Sort Sequence	2-6
TIGER/Line <sup>®</sup> Landmark Identification Numbers (LAND)	2-6
LAND Codes	2-7
LAND Record Locations	2-7
LAND Record Linkages	2-7
LAND Sort Sequence	2-7

## Chapter 3: Attributes of Geographic Objects

Line Features	3-1
Feature Identifiers	3-1
Feature Identifier Record Locations	3-4
Feature Identifier Codes	3-4
Data Limitations and Notes	3-5
Corporate Corridors and Corporate Offset Boundaries	3-5
Feature Identifier Record Linkage	3-6
Feature Identification Numbers Record Locations	
Feature Identification Code	3-7

Address Ranges and ZIP Codes <sup>®</sup>	3-7
Address Ranges	3-8
Imputed Address Ranges	3-14
ZIP Codes <sup>®</sup>	3-15
Postal Add-On Code	3-18
Address Information and Key Geographic Locations (KGLs)	3-19
Address Information Methodology	3-20
Pre-1992 Census Address Ranges	
1992 TIGER/Line <sup>®</sup> Expanded Addresses	3-20
Post-1992 Expanded Addresses	3-21
Address Range Record Locations	3-23
Impute Flag Record Locations	
ZIP Code <sup>®</sup> Record Locations	3-23
Address Ranges and Impute Flag Codes	3-24
Address Ranges	3-24
Impute Flags	3-24
ZIP Codes <sup>®</sup>	3-24
Limitations	3-24
Corporate Corridors and Corporate Limit Offset Boundaries	3-24
Record Linkages	3-25
Boundaries of Geographic Entities	3-26
Record Linkages and Boundary Extraction	3-26
Single-Side Flags and County Boundaries	
Single-Side Flag Record Location	
Single-Side Flag Codes	3-28
Census Feature Class Codes (CFCCs)	3-28
Feature Class A, Road	
Primary Highway With Limited Access	3-29
Primary Road Without Limited Access	3-29
Secondary and Connecting Road	
Local, Neighborhood, and Rural Road	
Vehicular Trail	
Road With Special Characteristics	
Road as Other Thoroughfare	
Feature Class B, Railroad	
Railroad With Major Category Unknown	
Railroad Main line	
Railroad Spur	
Railroad Yard Railroad With Special Characteristics	
Railroad with special characteristics Railroad as Other Thoroughfare	
Nalii uau as Other Thuruuyi IIare	5-33

Feature Class C, Miscellaneous Ground Transportation	3-33
Miscellaneous Ground Transportation With Category Unknown	
Pipeline	
Power Transmission Line	3-34
Miscellaneous Ground Transportation With Special Characteristics	3-34
Feature Class D, Landmark	3-34
Landmark With Category Unknown	
Military Installation	
Multihousehold or Transient Quarters	
Custodial Facility	3-35
Educational or Religious Institution	
Transportation Terminal	
Employment Center	
Tower	3-36
Open Space	3-36
Special Purpose Landmark	
Feature Class E, Physical Feature	3-37
Physical Feature With Category Unknown	
Fence	
Topographic Feature	3-37
Feature Class F, Nonvisible Features	3-38
Nonvisible Boundary With Classification Unknown or Not Elsewhere Classified	3-38
Nonvisible Legal or Administrative Boundary	
Nonvisible Features for Data Base Topology	
Point-to-Point Line	3-39
Property Line	3-39
ZIP Code <sup>®</sup> Boundary	3-39
Map Edge	3-39
Nonvisible Statistical Boundary	3-39
Nonvisible Other Tabulation Boundary	3-40
Feature Class H, Hydrography	3-40
Basic Hydrography	3-40
Naturally Flowing Water Features	3-40
Man-Made Channel to Transport Water	3-40
Inland Body of Water	3-40
Man-Made Body of Water	3-41
Seaward Body of Water	3-41
Body of Water in a Man-Made Excavation	3-41
Nonvisible Definition Between Water Bodies	3-41
Special Water Feature	3-41
Feature Class X, Not Yet Classified	3-42
Classification Unknown or Not Elsewhere Classified	3-42
CFCC Record Location	3-42

Points Describing the Complete Chain	3-42
Nodes	
Shape Points	3-43
Coordinates for Nodes and Shape Points	3-43
Coordinate Values	3-44
Record Locations for Nodes and Shape Point Coordinates	3-44
Record Linkages/Feature Chaining	3-44
Polygon Features	3-45
Geographic Entity Codes	3-46
Internal Points	3-46
GT-Polygon Internal Point Coordinates Record Locations	. 3-47
Record Linkages	3-47
Landmark Features	3-48
Point, Line, and Area Landmark CFCCs	3-49
Landmark CFCC Record Locations	
Landmark CFCC Codes	3-49
Landmark Feature and KGL Names	
Landmark Feature Record Locations	
Landmark Feature Name Codes	
Point Landmark Locations	
Coordinates	
Point Landmark Coordinate Record Locations	
Coordinate Values	
Area Landmark Locations	
KGLs	3-54

## Chapter 4: Geographic Entities

Overview	4-1
Boundary and Area Changes	4-2
Codes for Entities	4-5
Entity Type Codes	4-6
Geographic Entities	4-6
American Indian/Alaska Native Areas (AIANAs)	4-6
Legal Entities	
Statistical Entities	4-7
AIANA Code Record Locations	4-8
AIANA Codes	4-9
Block Groups (BGs)	4-9
Geographic BGs	4-9
Tabulation BGs	4-9
Block Group Number Record Locations	

Census Blocks	. 4-10
Census Block Numbers	. 4-11
Water Blocks	. 4-11
Current Geography	. 4-12
Census Block Number Record Locations	. 4-12
Census Block Codes	. 4-15
Tabulation Block Suffix	. 4-15
Census Tracts and Block Numbering Areas (BNAs)	. 4-15
Census Tracts	
BNAs	. 4-16
Numbering	. 4-16
Boundaries and Boundary Changes	. 4-17
Relationship to Other Geographic Entities	. 4-17
Census Tract/BNA Code Record Locations	.4-18
Census Tract/BNA Codes	. 4-18
Counties and Statistically Equivalent Entities	. 4-18
County and County Equivalents Code Record Locations	. 4-19
County Subdivisions	.4-19
Legal Entities	.4-20
Statistical Entities	. 4-20
County Subdivision Code Record Locations	. 4-21
Congressional Districts	
Congressional District Record Locations	
Congressional District Codes–105 <sup>th</sup> Congress	
Consolidated Cities	
Consolidated City Code Record Locations	
Crews-of-Vessels	
Metropolitan Areas	
Metropolitan Area Code Record Locations	
Metropolitan Area Codes	
Places	
Legal Entities	
Statistical Entities	
Dependent and Independent Places	
Corporate Corridors and Offset Corporate Boundaries	
Incorporated Place/CDP Code Record Locations	
School Districts	
School District Code Record Locations	
School District Codes	
States and Statistically Equivalent Entities	
State Code Record Locations	

Sub-Minor Civil Divisions (Sub-MCDs)	4-33
Sub-MCD Code Record Locations	
Traffic Analysis Zone (TAZ)	
TAZ Code Record Locations	
Urbanized Areas (UAs)	4-34
UA Code Record Locations	4-35
Urban/Rural (U/R) Designation	
U/R Flag Record Locations	
Voting Districts (VTDs)	4-36
VTD Code Record Locations	

## Chapter 5: Data Quality

## Chapter 6: Data Dictionary

Record Type 1—Complete Chain Basic Data Record	6-1
Record Type 2—Complete Chain Shape Coordinates	6-3
Record Type 3—Complete Chain Geographic Entity Codes	6-4
Record Type 4—Index to Alternate Feature Identifiers	6-5

Record Type 5—Complete Chain Feature Identifiers	
Record Type 6—Additional Address Range and ZIP Code® Data	6-7
Record Type 7—Landmark Features	6-8
Record Type 8—Polygons Linked to Area Landmarks	6-9
Record Type 9—Key Geographic Location Features	6-10
Record Type A—Polygon Geographic Entity Codes	6-11
Record Type C—Geographic Entity Names	6-12
Record Type H—TIGER/Line® ID History	6-13
Record Type I—Link Between Complete Chains and Polygons	6-14
Record Type P—Polygon Internal Point	6-15
Record Type R—TIGER/Line® ID Record Number Range	6-16
Record Type S—Polygon Additional Geographic Entity Codes	6-17
Record Type Z—ZIP+4 <sup>®</sup> Codes	6-18

## Appendices

Appendix A—Recode of the Census Identification Code	A-1
Appendix B—FIPS Class Code Definitions	B-1
Appendix C—Field Name Changes	C-1
Appendix D—Standard Abbreviations	D-1
Appendix E—Place Description Codes	E-1
Appendix F—Number of Geographic Entities	F-1
Appendix G—Urbanized Area Codes and Names	G-1
Appendix H—Legal/Administrative/Statistical Area Codes	H-1
Glossary	Glossary-1

## Introduction

The TIGER/Line<sup>®</sup> files are extracts, from the Census TIGER<sup>®</sup> (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<sup>®</sup> 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. 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<sup>®</sup> files contain data only and do not include display or mapping software. The TIGER/Line<sup>®</sup> files are typically used in conjunction with geographic information system, or similar, software.

The US Bureau of the Census first released the TIGER/Line<sup>®</sup> 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 and 1995 TIGER/Line<sup>®</sup> files, and the 1997 TIGER/Line<sup>®</sup> files are summarized below.

Census TIGER<sup>®</sup>, TIGER<sup>®</sup>, TIGER/Line<sup>®</sup>, TIGER/SDTS<sup>®</sup>, TIGER/Census Tract Street Index<sup>®</sup>, TIGER/CTSI<sup>®</sup>, CTSI<sup>®</sup>, TIGER/Census Tract Comparability<sup>®</sup>, and TIGER/GICS<sup>®</sup> are registered trademarks 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<sup>®</sup> 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 <sup>®</sup> (registered) symbol, where convenient.

# Changes in the 1994, 1995, and 1997 TIGER/Line<sup>®</sup> File Versions 1994 TIGER/Line<sup>®</sup> Files

The format and structure of the TIGER/Line<sup>®</sup> files changed between the 1992 and the 1994 versions. In the 1994 TIGER/Line<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>TM</sup> 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<sup>®</sup> 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<sup>®</sup> 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 103<sup>rd</sup>) 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 101<sup>st</sup> and 103<sup>rd</sup> Congressional District codes in Record Type A were replaced with those designated for the 106<sup>th</sup> and 108<sup>th</sup>. However, these fields were blank in the 1994 TIGER/Line<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> The 1994 TIGER/Line<sup>®</sup> files contained improvements in address information. Address ranges were edited for overlaps or other inconsistencies and ZIP Codes<sup>®</sup> were updated in selected areas.

Coordinates In the 1994 TIGER/Line<sup>®</sup> 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<sup>®</sup> Files

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

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

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

Boundary and Area Changes The 1994 TIGER/Line<sup>®</sup> 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<sup>®</sup> files may have differed from earlier versions of the TIGER/Line<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> files have the same structure as the 1995 TIGER/Line<sup>®</sup> files; there are no record additions or deletions. However, there are 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 will be a number that represents a fixed version that can be referenced nationwide. The version code will be a four-digit number that represents the month and year (mmyy) the file is extracted from the Census TIGER<sup>®</sup> data base. Adjacent counties in a state may have different version codes if they are extracted at different points in time.

There have been several changes to the fields on Record Type 3. The reserved spaces one through four in the 1995 TIGER/Line<sup>®</sup> files contain four 1990 American Indian and Alaska Native area census code and American Indian trust land flag fields in the 1997 TIGER/Line<sup>®</sup> 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<sup>®</sup> files are 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 fills columns 86 through 107 of the 1997 TIGER/Line<sup>®</sup> files and the reserved space fields on the record have been 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<sup>®</sup> files was eliminated and replaced with Reserved Space1 in the 1997 TIGER/Line<sup>®</sup> files. Reserved Space 9 in the 1995 TIGER/Line<sup>®</sup> files (columns 95 through 98) has been replaced with the Census American Indian/Alaska Native Area Code, 1990 in the 1997 TIGER/Line<sup>®</sup> files. The length of the RS 9 field in Record Type A has been changed from nine characters to four characters. The five characters freed by this change are now used for the 1990 state and county codes and are the source for determining the 1990 census tabulation codes.

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

We have standardized the file suffix names that will appear inside the zipped archive. This suffix now will 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<sup>®</sup> Address ranges were edited for overlaps or other inconsistencies and ZIP Codes<sup>®</sup> were updated in selected areas. Because of time constraints during the various operations needed to create the 1997 TIGER/Line<sup>®</sup> files, the Census Bureau has not added new ZIP+4<sup>®</sup> information.

Boundary and Area Changes Since the 1990 census, the Census Bureau has shifted and reshaped some line features, including boundary lines. The shape and area of the geographic entities depicted in the 1997 TIGER/Line<sup>®</sup> files may differ from earlier versions of the TIGER/Line<sup>®</sup> 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<sup>®</sup> products, directional prefixes and suffixes could

appear for any type of line feature. For the TIGER/Line<sup>®</sup> 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<sup>®</sup> 1997 Missing ZIP+4<sup>®</sup> Records In the current release of the TIGER/Line<sup>®</sup> files, data users may note a significant reduction in the number of ZIP+4<sup>®</sup> Add On Codes in Record Type Z (ZIP4L and ZIP4R fields) for some areas. This reduction occurs as a result of operations to update the TIGER<sup>®</sup> data base in preparation for Census 2000. These operations may replace address ranges or change the 5-digit ZIP Code<sup>®</sup>, but do not automatically update or transfer the ZIP+4<sup>®</sup> codes to the new ranges. Because the Add On codes are valid for specific 5-digit ZIP Codes<sup>®</sup> and address ranges, the previous Add On codes may no longer apply to the new address ranges.

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

Address Anomalies in Puerto Rico and Queens County, N.Y. The TIGER/Line<sup>®</sup> 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 does not show a consistent use of hyphenated and non-hyphenated addressing. The Census Bureau intends to correct this in future versions of TIGER<sup>®</sup> products.

Road Feature Anomalies The Census Bureau extracts TIGER/Line<sup>®</sup> files from the TIGER<sup>®</sup> data base which is continually updated. During the update process for some 1997 TIGER/Line<sup>®</sup> 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<sup>®</sup> 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 versions of TIGER<sup>®</sup> products.

anomai	103.		
FIPS	County name, State	FIPS	County name, State
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

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

### 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<sup>®</sup> data base and the TIGER/Line<sup>®</sup> products. It discusses the topology in the Census TIGER<sup>®</sup> data base, the terminology used to describe the geographic data, and the record types that make up the TIGER/Line<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> data base using the SDTS quality modules.

#### Chapter 6

Chapter 6 lists the contents of the TIGER/Line<sup>®</sup> 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<sup>®</sup> files.

## How to Obtain Other Products and Information

If you purchased the TIGER/Line<sup>®</sup> files directly from the U.S. Bureau of the Census and need further information concerning the subject matter of the 1997 TIGER/Line<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup>?

The Bureau's Census TIGER<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> Data Base Extracts

In order for others to use the information in the Census TIGER<sup>®</sup> 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<sup>®</sup> files, to the public. Various versions of the TIGER/Line<sup>®</sup> files have been released; previous versions include the 1990 Census TIGER/Line<sup>®</sup> files, and the 1992, 1994, and 1995 TIGER/Line<sup>®</sup> files. The 1992 TIGER/Line<sup>®</sup> 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<sup>®</sup> files. The 1994 TIGER/Line<sup>®</sup> files were produced to support the programs of the US Department of Transportation, Bureau of Transportation Statistics. The 1995 TIGER/Line<sup>®</sup> files were originally produced to support Phase I of the Census 2000 Redistricting Data Program.

Relationship of TIGER/Line<sup>®</sup> to 1990 Census Statistical Data What makes the TIGER<sup>®</sup> 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<sup>®</sup> data base extracts. The digital description in the TIGER<sup>®</sup> data base of the Nation's legal and statistical entities includes Federal Information Processing Standards (FIPS) codes and 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.

#### 1997 TIGER/Line® Files

The 1997 TIGER/Line<sup>®</sup> files include files for all counties and statistically equivalent entities in the United States, Puerto Rico, and the Island Areas. The 1994 TIGER/Line<sup>®</sup> files are provided for American Samoa because no updates have been received since 1994.

The 1997 TIGER/Line<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> files. These files are available on tape and CD-ROM.

TIGER/SDTS<sup>®</sup> is a data file following the FIPS spatial data transfer standard (SDTS). These files will provide data equivalent to the TIGER/Line<sup>®</sup> files with additional relational data linkages and data content more similar to the Census TIGER<sup>®</sup> data base. The present product is an early prototype, and any subsequent version is likely to be substantially modified.

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

TIGER/Line<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> files and covers the Nation.

TIGER/Line<sup>®</sup> 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<sup>®</sup> files.

TIGER/Line<sup>®</sup> 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<sup>®</sup> files.

#### **County-Based Files**

The geographic coverage for a TIGER/Line<sup>®</sup> 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<sup>®</sup> data base represents a seamless national file with no overlaps or gaps between parts, the county-based TIGER/Line<sup>®</sup> 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<sup>®</sup> Files

The TIGER/Line<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> Files Spatial Objects in the TIGER/Line<sup>®</sup> Files

The Census TIGER<sup>®</sup> 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<sup>®</sup> files contain information about the spatial objects distributed over a series of record types. Users of the TIGER/Line<sup>®</sup> 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<sup>®</sup> data base. The Census TIGER<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> file documentation uses the terminology from the Spatial Data Transfer Standard (SDTS).

Since the first release of the TIGER/Line<sup>®</sup> 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<sup>®</sup> files do not follow the SDTS format, the TIGER/Line<sup>®</sup> 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<sup>®</sup> 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

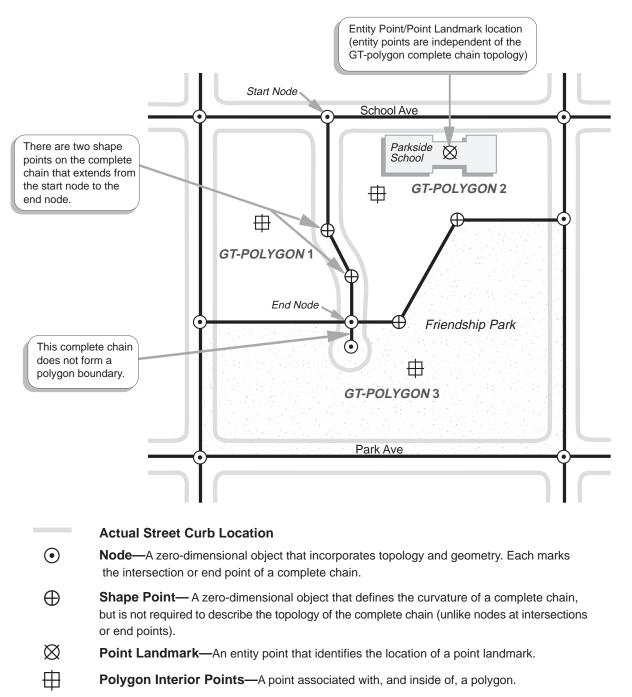
The spatial objects in the TIGER/Line<sup>®</sup> files embody both geometry (coordinate location and shape) and topology (the relationship between points, line objects, and polygons) and therefore belong to the geometry and topology (GT) class of objects in the SDTS. In the SDTS, nodes represent point 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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.



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<sup>®</sup> files are associated with one, or a set of GT-polygons.

The TIGER/Line<sup>®</sup> files contain point landmark data that are not included in the Census TIGER<sup>®</sup> 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 $^{\mbox{\tiny B}}$  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<sup>®</sup> 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<sup>®</sup> 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 rightside of the complete chain corresponds to GT-polygon 1 and the leftside 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<sup>®</sup> 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 1997 TIGER/Line<sup>®</sup> files are extracts of selected information from the Census TIGER<sup>®</sup> data base, organized as topologically consistent networks. The records in these TIGER/Line<sup>®</sup> 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 1997 TIGER/Line<sup>®</sup> files consist of 17 record types that collectively contain geographic information (attributes) such as address ranges and ZIP Codes<sup>®</sup> 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. A separate file exists for each of the 17 record types for each county or county equivalent.

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 TIGER/Line<sup>®</sup> 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 1997 TIGER/Line<sup>®</sup> file record types.

# 1997 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<sup>®</sup> files. The basic data record contains the end nodes for the complete chain. This record also contains address ranges and ZIP Codes<sup>®</sup> (for most areas of the country where a street name/house numbering system existed at the time of data extraction from the Census TIGER<sup>®</sup> data base) and the current census geographic entity codes for each side of the complete chain. Additional feature identifier, address range, and ZIP Code<sup>®</sup> 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. See the Introduction chapter for information about changes and anomalies in this version of the TIGER/Line<sup>®</sup> files.

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<sup>®</sup> 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-toone 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<sup>®</sup> files. Each name (or feature identifier) has an identification code number (FEAT). Record Type 5 has a oneto-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<sup>®</sup> 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<sup>®</sup> information in the Census TIGER<sup>®</sup> 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-toone relationship with Record Type Z. See the Introduction chapter for information about changes in the 1997 TIGER/Line<sup>®</sup> files.

## Record Type 7 — Landmark Features

Record Type 7 contains the area and point landmarks from the Census TIGER<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> data base that have an actual or imputed address and a ZIP+4<sup>®</sup> 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<sup>®</sup> 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 106<sup>th</sup> and 108<sup>th</sup> Congressional Districts (which are blank for this release).

# Record Type C — Geographic Entity Names

Record Type C provides information previously supplied in the TIGER/Geographic Name<sup>™</sup> 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: 90 for geographic names and codes valid for the 1990 census, 9n (where 9n is the year of extraction from the Census TIGER<sup>®</sup> 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<sup>®</sup> ID History

Record Type H provides the history of each TIGER/Line<sup>®</sup> 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-toone 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<sup>®</sup> 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<sup>®</sup> files include all complete chains and polygons in the Census TIGER<sup>®</sup> data base. The topology of the Census TIGER<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> file consists of an entire county or statistical equivalent. In the Census TIGER<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> Codes

Record Type Z provides Postal +4 Add-On codes that make ZIP+4<sup>®</sup> codes out of the ZIP Codes<sup>®</sup> 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. See the Introduction chapter for information on missing ZIP+4 $^{\textcircled{R}}$  records.

# The Relationship Between Spatial Objects and TIGER/Line<sup>®</sup> Record Types

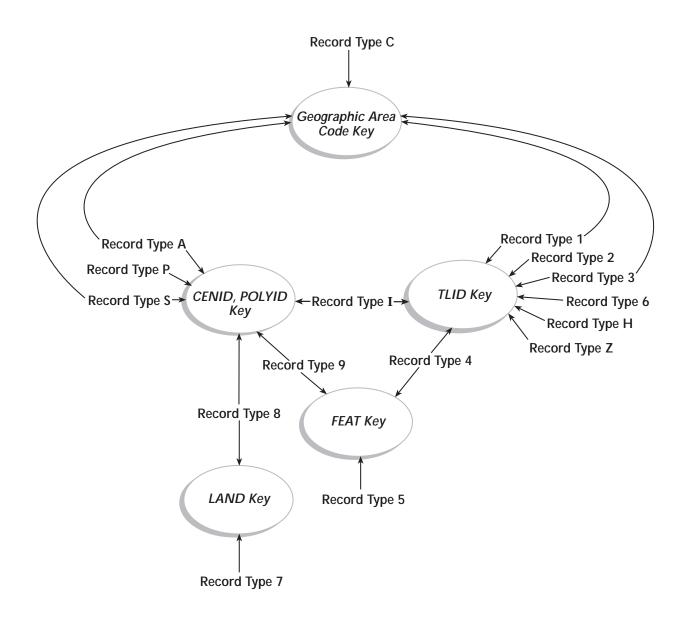
The TIGER/Line<sup>®</sup> files do not have specific record types for each spatial object. Nodes, for example, do not have a separate record type; node coordinates appear with other data in Record Type 1. Defining a complete chain requires information from Record Types 1, 2, and I. Record Types 1 and 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<sup>®</sup> file can be navigated using the record linkage keys.

Linkages may be made to data external to a TIGER/Line<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> files. All record types have a 4-character field for the version code.

For releases after TIGER/Line<sup>®</sup> 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. This will make it easier for users to determine the latest version of the data if they have several versions of the TIGER/Line<sup>®</sup> files for a county. The version codes for earlier releases of the TIGER/Line<sup>®</sup> files are as follows:

```
0000 — TIGER/Line® Precensus File, 1990
```

```
0002 — TIGER/Line<sup>®</sup> Initial Voting District Codes File, 1990
```

```
0003 — TIGER/Line<sup>®</sup> Census File, 1990
```

- 0005 TIGER/Line<sup>®</sup> File, 1992
- 0021 TIGER/Line® File, 1994
- 0024 TIGER/Line® File, 1995

# TIGER/Line® Identification Number (TLID)

The TIGER/Line<sup>®</sup> files use a permanent 10-digit TIGER/Line<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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 6
- Record Type 2
- Record Type I
- Record Type 3
- Record Type Z
- Record Type 4

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<sup>®</sup> 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<sup>®</sup> files. The record and version numbers of each complete chain provide an important link to the corresponding complete chain in the Census TIGER<sup>®</sup> data base. This key will allow users to transfer new information from later Census Bureau TIGER/Line<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> data base. Since the partitions may include only a portion of a county, the TIGER/Line<sup>®</sup> files may contain multiple CENIDs.

The polygon identification number (POLYID) is a temporary number assigned to every polygon in the Census TIGER<sup>®</sup> 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<sup>®</sup> files. The Census TIGER<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> files, the CENID is a 5-digit numeric code. In the 1995 TIGER/Line<sup>®</sup> files and the 1997 TIGER/Line<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> county file. POLYID numbers also may duplicate in a single TIGER/Line<sup>®</sup> file as they are unique only within CENID. A single TIGER/Line<sup>®</sup> 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<sup>®</sup> files.
- Record Type S Records exist for all GT-polygons

## **CENID and POLYID Record Linkages**

The TIGER/Line<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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 (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<sup>®</sup> files to avoid confusion; for example, US Hwy 1. The Census TIGER<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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**

Record Type	Field Name	Description
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.

Abbreviation	Explanation
(blank)	No Direction
Ν	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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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

Record Type	Field Name	Description
1	TLID	TIGER/Line <sup>®</sup> ID, Permanent Record Number
4	TLID	TIGER/Line <sup>®</sup> 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.)

Record Type	Field Name	Description
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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup>; for example, 213 Main St 90210. In the TIGER/Line<sup>®</sup> files, the ZIP Codes<sup>®</sup> 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<sup>®</sup> that includes the USPS's 4-digit ZIP+4<sup>®</sup> Add-On code. The Census Bureau has added the Postal Add-On code to the Census TIGER<sup>®</sup> data base using an automated match to the USPS's AMS II ZIP+4<sup>®</sup> file. The codes in the TIGER/ Line<sup>®</sup> 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<sup>®</sup> file may provide the more specific codes. However, the TIGER/Line<sup>®</sup> files contain only the more general codes.

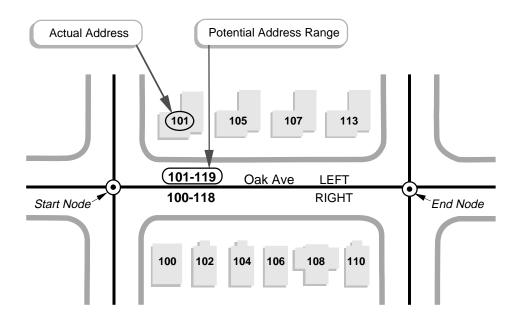
Usually the ZIP+4<sup>®</sup> Add-On code is not required to uniquely identify an address range. There are a few situations where a street name and address range legitimately appear more than once in the same 5-digit ZIP Code<sup>®</sup>. Usually the USPS distinguishes these duplicates by using different 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<sup>®</sup>. To resolve this problem, the USPS added an additional line to the address to identify the urbanizacion. The 9-digit ZIP Code<sup>®</sup> also may serve to uniquely identify these address ranges. We do not yet have all of these 9-digit ZIP Code<sup>®</sup> in the Census TIGER<sup>®</sup> data base.

#### **Address Ranges**

Complete chains in the TIGER/Line<sup>®</sup> 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<sup>®</sup> Address Range Basics

The TIGER/Line<sup>®</sup> 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.

Re	ecord Type	1		Address Range						
				Left	side	Right	t Side			
				Start	End	Start	End			
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<sup>®</sup>. The TIGER/Line<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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

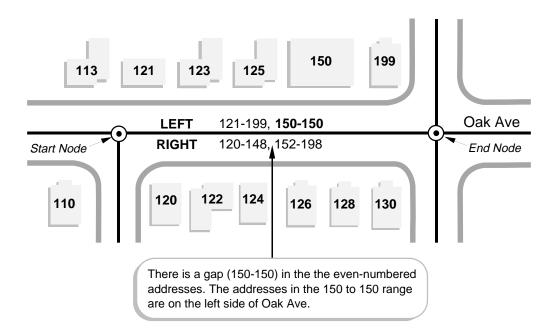
range 2-98. As before, 10-10 would become an additional range added to the complete chain with the range 100-198, and the address range 2-98 would become two ranges, 2-8 and 12-98. Because include address ranges require complex edits that may involve several complete chains, the Census Bureau cannot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

Some basic characteristics of address ranges are as follows:

- The TIGER/Line<sup>®</sup> 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<sup>®</sup> files do include address ranges and ZIP Codes<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> Multiple and Out-of-Sequence Address Ranges

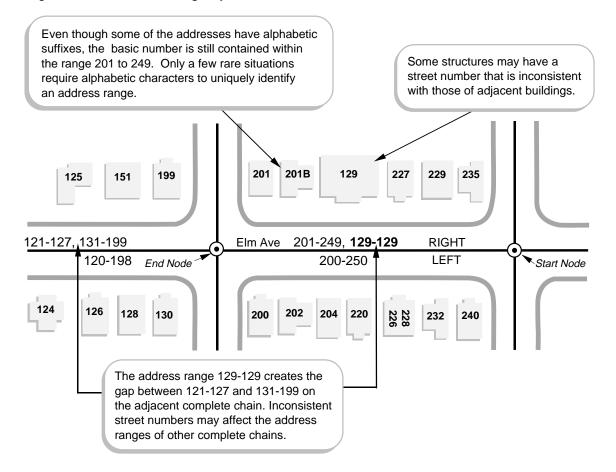
The TIGER/Line<sup>®</sup> files can accommodate complex address situations by using more than one address range. A complete chain may contain both odd and even ranges, provided the ranges are not duplicated elsewhere. Whenever there is more than one address range per side for a complete chain, the additional 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.



Re	ecord Type	1		Address Range					
				Left	side	Righ	t Side		
				Start	End	Start	End		
RT	TLID	FENAME	FETYPE	FRADDL	TOADDL	FRADDR	TOADDR		
1	0007654321	0ak	Ave	121	199	120	148		

Record Type 6	Record Type 6 Address Range								
	side	Right Side							
		Start	End	Start	End				
RT TLID	RTSQ	FRADDL	TOADDL	FRADDR	TOADDR				
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			
		Left	side	Righ	t Side
		Start	End	Start	End
RT TLID F	FENAME FETYPE	FRADDL	TOADDL	FRADDR	TOADDR
1 0007654322 E	Elm Ave	250	200	249	201
1					
Record Type 6			Addres	ss Rang	e
		Left	side	Righ	t Side
		Start	End	Start	End
RT TLID	RTSQ	<i>Start</i> FRADDL	<i>End</i> TOADDL	<i>Start</i> FRADDR	<i>End</i> TOADDR
RT TLID 1 0007654322	RTSQ 1				

- Address ranges (consisting of a unique combination of structure number, ZIP Code<sup>®</sup>, 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> files contains four separate 1-character impute flag fields, one for each address range end.

#### ZIP Codes<sup>®</sup>

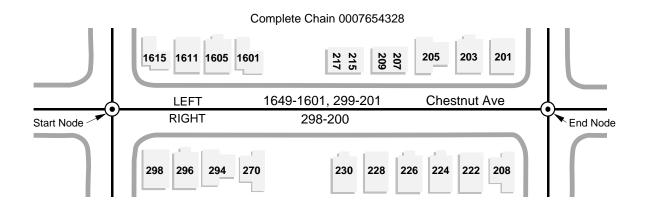
The ZIP Code<sup>®</sup> is an attribute of the address ranges. The TIGER/Line<sup>®</sup> files have a five-character ZIP Code<sup>®</sup> field containing a numeric code with leading zeros. Both the left- and right-side address ranges share the ZIP Code<sup>®</sup> that appears in the same Type 1 or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

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

If the complete chain had additional address ranges with a ZIP Code<sup>®</sup> 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<sup>®</sup> 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.

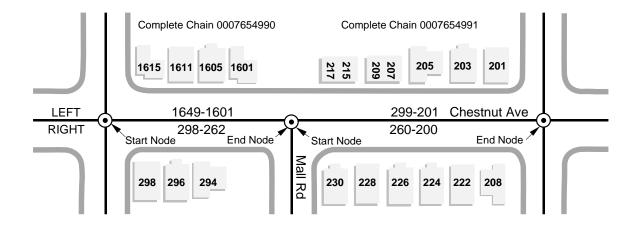


Record Type 1		Address Range				Impute Flags				
			Left side		Right side		Left side		Right side	
			Start	End	Start	End	Start	End	Start	End
RT TLID FE	NAME FI	ETYPE	FRADDL	TOADDL	FRADDR	TOADDR	FRIADDL	TOIADDL	FRIADDR	TOIADDR
1 0007654328 Ch	nestnut A	Ave	299	201	298	200	0	0	0	0

l	Record Type 6	ecord Type 6				je	Impute Flags			
1			Left	Left side		Right side		Left side		side
1			Start	End	Start	End	Start	End	Start	End
	RT TLID 6 0007654328	rtsq 1		TOADDL 1601	FRADDR	TOADDR	FRIADDL 0	TOIADDL 0	FRIADDR	TOIADDR

#### 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<sup>®</sup> 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	Left side Right side		Left side		Right side			
	Start	End	Start	End	Start	End	Start	End	
RT TLID FENAME FETYPE	FRADDL	TOADDL	FRADDR	TOADDR	FRIADDL	TOIADDL	FRIADDR	TOIADDR	
1 0007654990 Chestnut Ave	1649	1601	298	262	0	0	0	1	

Record Type		Addres	s Rang	ge	Impute Flags					
Complete Chain 000	ete Chain 0007654991			Left side		Right side		Left side		side
			Start	End	Start	End	Start	End	Start	End
RT TLID	FENAME	FETYPE	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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> in the TIGER/Line<sup>®</sup> 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<sup>®</sup>. See the Introduction chapter for information relating to the 1997 TIGER/Line<sup>®</sup> files.

#### Postal Add-On Code

The TIGER/Line<sup>®</sup> files have a 4-character Postal ZIP+4<sup>®</sup> 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. The first two characters of the 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<sup>®</sup> data base. The match utilized only the street type records from the AMS II ZIP+4<sup>®</sup> file. These records identify a single Add-On code for a range of addresses. The ZIP+4<sup>®</sup> 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<sup>®</sup> data base because it was not practical to add all of the building features to the Census TIGER<sup>®</sup> 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<sup>®</sup>, street name identifier, and address ranges for each feature in the Census TIGER<sup>®</sup> data base to the corresponding street type record in the AMS II ZIP+4<sup>®</sup> 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<sup>®</sup> 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. See the Introduction chapter for information on missing data.

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<sup>®</sup> files, each KGL usually has a street address, CFCC, KGL feature name, and ZIP Code<sup>®</sup>. 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> Expanded Addresses

In the 1992 TIGER/Line<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> files was modified for the 1994, 1995, and the 1997 versions of the files. The preexisting address ranges in the Census TIGER<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> data base was used to make the address range coverage more complete. The merged range is the address range in the 1997 TIGER/Line<sup>®</sup> 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<sup>®</sup>. 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<sup>®</sup> files. If overlapping addresses were geocoded to a different census block, none of these overlapping addresses were entered into the TIGER/Line<sup>®</sup> 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<sup>®</sup> 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; discontiguous 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<sup>®</sup> files, the Census Bureau conducted a general ZIP Code<sup>®</sup> clean-up and staff added new ZIP Codes<sup>®</sup> 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<sup>®</sup>, and clerical

operations began eliminating the scatter of incorrectly applied ZIP Codes<sup>®</sup>. Nearly all 3-digit ZIP Code<sup>®</sup> anomalies have been corrected.

#### Address Range Record Locations

Record Type	Field Name	Description
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

Record Type	Field Name	Description
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<sup>®</sup> Record Locations

Record Type	Field Name	Description
1	ZIPL	ZIP Code <sup>®</sup> , Left
1	ZIPR	ZIP Code <sup>®,</sup> Right
6	ZIPL	ZIP Code <sup>®,</sup> Left
6	ZIPR	ZIP Code <sup>®,</sup> 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<sup>®</sup> and Post Office Directory for a list of valid 5-digit ZIP Codes<sup>®</sup>. The 1997 TIGER/Line<sup>®</sup> files may not contain all delivery ZIP Codes<sup>®</sup> and contain few non-delivery ZIP Codes<sup>®</sup>. The distribution of ZIP Codes<sup>®</sup> in the TIGER/Line<sup>®</sup> files may not reflect the exact USPS ZIP Code<sup>®</sup> service area.

# Limitations

Users of the address ranges in the TIGER/Line<sup>®</sup> 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. See the list of anomalies in the Introduction chapter.

# **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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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 1997 TIGER/Line<sup>®</sup> 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 countyequivalent 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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

Record Type	Field Name	Description
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<sup>®</sup> 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<sup>®</sup> 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 rightof-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<sup>®</sup> 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 hardsurface (concrete or asphalt), and are usually undivided with singlelane 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.

#### Local, Neighborhood, and Rural Road (cont.)

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.

- 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.

- A61 Cul-de-sac, the closed end of a road that forms a loop or turn-around
- 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 limitedaccess 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

- 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
0100	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.

#### Railroad Spur (cont.)

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
- B52 Cog railroad, incline railway, or logging tram

# 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.

#### Miscellaneous Ground Transportation With Category Unknown (cont.)

#### CFCC Description

C00 Miscellaneous ground transportation, not road or railroad; major and minor categories unknown

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
C10	Pipeline; major category used alone

Power Transmission Line High voltage electrical line, on towers, situated on cleared right-of-way.

CFCC	Description
C20	Power transmission line; major category used alone

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
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
C31	Aerial tramway, monorail, or ski lift

# 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.

- 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
- D34 County home or poor farm
- D35 Orphanage
- D36 Jail or detention center
- D37 Federal penitentiary, state prison, or prison farm

#### **Educational or Religious Institution**

CFCC D40	<b>Description</b> 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
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
0.00	Dooonption

- 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

- 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.

#### Open Space (cont.)

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 <sup>®</sup> location (for these ZIP Codes <sup>®</sup> , 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

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

**Topographic Feature** This category refers to topographical features that may be used as boundaries or as a reference for an area. The Census TIGER<sup>®</sup> 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	
Nonvisi	ible 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	
<b>F4 4</b>		

- 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

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

- F20 Nonvisible feature for data base topology; major category used when the minor category could not be determined
- F21 Automated feature extension to lengthen existing physical feature

#### Nonvisible Features for Data Base Topology (cont.)

#### CFCC Description

- 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<sup>®</sup> Boundary

CFCC	Description
F50	ZIP Code $^{\ensuremath{\mathbb{R}}}$ boundary, reserved for future use in delineating ZIP Code $^{\ensuremath{\mathbb{R}}}$ Tabulation Areas

#### Map Edge

#### CFCC Description

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

#### Nonvisible Statistical Boundary

- 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 Internal Census Bureau use
- F84 Internal Census Bureau use
- F85 Internal Census Bureau use

# 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**

<b>CFCC</b> H10	<b>Description</b> 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
- H22 Intermittent canal, ditch, or aqueduct

#### Inland Body of Water

- 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

<b>CFCC</b> H50	<b>Description</b> 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
- 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.

- 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<sup>®</sup> data base. Therefore, not all features in a county will appear in the TIGER/Line<sup>®</sup> 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**

Record Type	Field Name	Description
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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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 nontopological 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<sup>®</sup> 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).

Actual	TIGER/Line <sup>®</sup> File			
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<sup>®</sup> 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<sup>®</sup> 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 Type	Field Name	Description
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 Locations for Nodes and Shape Point Coordinates**

# **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<sup>®</sup> files contain identification and geographic codes for each GT-polygon in the Census TIGER<sup>®</sup> data base. These GT-polygons are the smallest areas identified in the TIGER/Line<sup>®</sup> files. Geographic entities and area landmarks have specific identification codes and form more complex polygons. The TIGER/Line<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> data base include new street and boundary complete chains that create new GT-polygons. Thus, each version of the TIGER/Line<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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**

Record Type	Field Name	Description
Р	POLYLONG	Internal point longitude
Р	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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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

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

#### Landmark CFCC Codes

CFCC	Description	Point	Line	Area
D00	Landmark feature, classification unknown, or not elsewhere classified	Р	L	A
D10	Military installation	Р	-	А
D20	Multihousehold and transient quarters	Р	_	А
D21	Apartment building or complex	Р	_	А
D22	Rooming or boarding house	Р	-	_
D23	Trailer court or mobile home park	Р	-	А
D24	Marina	Р	-	А
D25	Crew-of-vessel area		-	А
D26	Housing facility for workers	Р	-	А
D27	Hotel, motel, resort, spa, YMCA, or YWCA	Р	-	А

CFCC	Description	Point	Line	Area
D28	Campground	Р	_	А
D29	Shelter or mission	Р	-	А
D30	Custodial facility	Р	-	А
D31	Hospital	Р	-	А
D32	Halfway house	Р		
D33	Nursing home, retirement home, or home for the aged	Р	_	А
D34	County home or poor farm	Р	-	А
D35	Orphanage	Р	-	А
D36	Jail or detention center	Р	-	А
D37	Federal penitentiary, state prison, or prison farm	Р	-	А
D40	Educational or religious institution	Р	_	А
D41	Sorority or fraternity	Р	-	_
D42	Convent or monastery	Р	-	А
D43	Educational institution	Р	-	А
D44	Religious institution	Р	-	А
D50	Transportation terminal	Р	L	А
D51	Airport or airfield	Р	L	А
D52	Train station	Р	-	А
D53	Bus terminal	Р	-	А
D54	Marine terminal	Р	-	А
D55	Seaplane anchorage	Р	-	А
D60	Employment center	Ρ	_	А
D61	Shopping center or major retail center	Р	-	А
D62	Industrial building or industrial park	Р	-	А
D63	Office building or office park	Р	-	А
D64	Amusement center	Р	-	А
D65	Government center	Р	-	А
D66	Other employment center	Р	-	А
D70	Tower	Р	_	-
D71	Lookout tower	Р	-	-
D80	Open space	Р	-	А
D81	Golf course	P	-	A
D82	Cemetery	P	-	А
D83	National Park Service area	Р	-	А
D84	National forest or other federal land	Р	-	А

CFCC	Description	Point	Line	Area
D85	State or local park or forest	Р	-	А
D90	Special purpose landmark	Р	_	А
D91	Post office box ZIP Code <sup>®</sup>	Р	-	А
D92	Urbanizacion, an identifiable community development in Puerto Rico	Р	-	A
H00	Water feature, classification unknown, or not elsewhere classified	Ρ	L	А
H10	Stream	_	L	А
H11	Perennial stream or river	-	L	А
H12	Intermittent stream, river, or wash	-	L	А
H13	Braided stream or river	-	L	А
H20	Canal, ditch, or aqueduct	-	L	А
H21	Perennial canal, ditch, or aqueduct	-	L	А
H22	Intermittent canal, ditch, or aqueduct	-	L	А
H30	Lake or pond	_	-	А
H31	Perennial lake or pond	-	-	А
H32	Intermittent lake or pond	-	-	А
H40	Reservoir	-	-	А
H41	Perennial reservoir	-	-	А
H42	Intermittent reservoir	-	-	А
H50	Bay, estuary gulf, sound, sea, or ocean	-	-	А
H51	Bay, estuary gulf, or sound	-	-	А
H53	Sea, or ocean	-	-	А
H60	Gravel pit or quarry filled with water	_	-	А
H80	Special water feature	_	_	А
H81	Glacier	-	-	А

## Landmark Feature and KGL Names

The TIGER/Line<sup>®</sup> 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<sup>®</sup> data base in all areas.

The Census Bureau does not guarantee that the landmarks or water areas are consistently identified in the TIGER/Line<sup>®</sup> files. Area landmarks added to the Census TIGER<sup>®</sup> data base in different update actions with the same name and CFCC will produce separate landmark records in the TIGER/Line<sup>®</sup> 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<sup>®</sup> 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 S 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

Record Type	Field Name	Description
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<sup>®</sup> 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

Record Type	Field Name	Description
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<sup>®</sup> 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<sup>®</sup>

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 1997 TIGER/Line<sup>®</sup> 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 only

- 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<sup>®</sup> files identify geographic areas using either the Federal Information Processing Standard (FIPS) codes or Census Bureau-assigned codes. The TIGER/Line<sup>®</sup> 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)

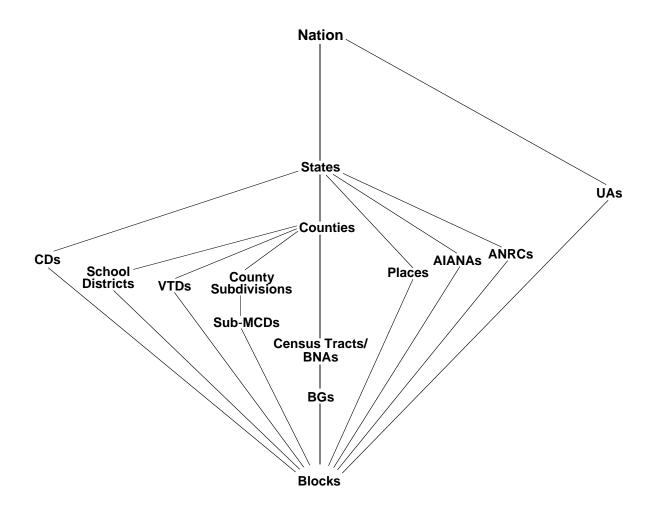
The TIGER/Line<sup>®</sup> files identify some geographic entities in both the complete chain and polygon records for certain boundary vintages. This chapter provides detailed information on the record types and fields for the geographic entities.

# **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 Surveys, or as part of the 1990 Count 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<sup>®</sup> data base. The boundaries of incorporated places have a varied vintage usually based on the 1990 definition of the incorporated place. Below are general guidelines for the effective date of incorporated place boundaries:

- Latest Available Boundaries—Population of 2.500 or greater
- Boundaries as of January 1, 1990—Population of less than 2,500

Figure 4-1 Hierarchical Relationship of Geographic Entities



Some incorporated places have boundaries of a date later than those shown in the list on page 4-2. This occurs because special censuses are conducted, counts are updated based on more current boundary information, or Boundary and Annexation Survey (BAS) information for places is reported later than the deadline. Some boundary dates may be earlier than those shown on page 4-2 because of a nonresponse to the most recent BAS, in which case, the boundaries of the previous BAS are used.

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 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 tab-ulated 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<sup>®</sup> 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 and 1997 TIGER/Line<sup>®</sup> files may differ from earlier TIGER/Line<sup>®</sup> 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<sup>®</sup> files.

The TIGER/Line<sup>®</sup> 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<sup>™</sup> files that the Census Bureau produced as a companion to the 1992 TIGER/Line<sup>®</sup> files. Record Type C also replaces the TIGER Geographic Reference File– Names (GRF-N), 1990.

The documentation and additional information for FIPS codes is available from the National Technical Information Service (NTIS), US Department of Commerce, 5285 Port Royal Road, Springfield, VA 22161. The telephone number is (703) 487-4650. The Internet World Wide Web URL 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, and 1997 versions of the TIGER/Line<sup>®</sup> files do not contain the census codes for places, county subdivisions, and sub-MCDs that were available in earlier versions of the TIGER/Line<sup>®</sup> 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<sup>®</sup>. The TIGER/GICS<sup>®</sup> contains FIPS and Census Bureau codes, names and attributes, and demographic data for the higherlevel geographic entities included in the 1990 census.

## **Entity Type Codes**

Code	Geographic Entity Type
А	Consolidated City
С	County or Equivalent Area
I	American Indian/Alaska Native Area
J	Metropolitan Area
L	Sub-Minor Civil Division
Μ	County Subdivision
Р	Place
S	State or Equivalent Area
U	Urbanized Area
V	Voting District
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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> files did not previously distinguish between AIRs and trust lands because they shared the same code. Beginning with the 1994 TIGER/Line<sup>®</sup> 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**

Record Type	Field Name	Description
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	AIRL	Census American Indian/Alaska Native Area Code, Current Left
3	AIRR	Census American Indian/Alaska Native Area Code, 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	
3	TRUST90R	American Indian Trust Land Flag, 1990 Right
А	FAIR	FIPS 55 Code (American Indian/Alaska Native Area), 1990
С	ENTITY	Entity Type
С	AIR	Census American Indian/Alaska Native Area Code
С	NAME	Name of Geographic Area
S	FAIR	FIPS 55 Code (American Indian/Alaska Native Area), Current

Record Type	Field Name	Description
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<sup>®</sup> 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:

Туре	Census Code Range	Valid FIPS 55 Class
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 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<sup>®</sup> files do not have a separate BG data field. Data users can determine the geographic BG by using the first digit of the 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<sup>®</sup> 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. Blocks never cross county or census tract/BNA boundaries. In rare instances, parts of a block may be discontiguous, but all parts of a 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 Block Numbers Blocks are numbered uniquely within each 1990 state/county/census tract or BNA. A 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 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. Block numbers with suffixes usually represent 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 collection block 101, the portion inside the city may be tabulated in block 101A and the portion outside the city in block 101B. The suffix letters A and B have no correlation to the location of the block portion to which they are assigned. In other words, in the example above, the portion of 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 block can be split.

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

Rather than extending 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 using 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.

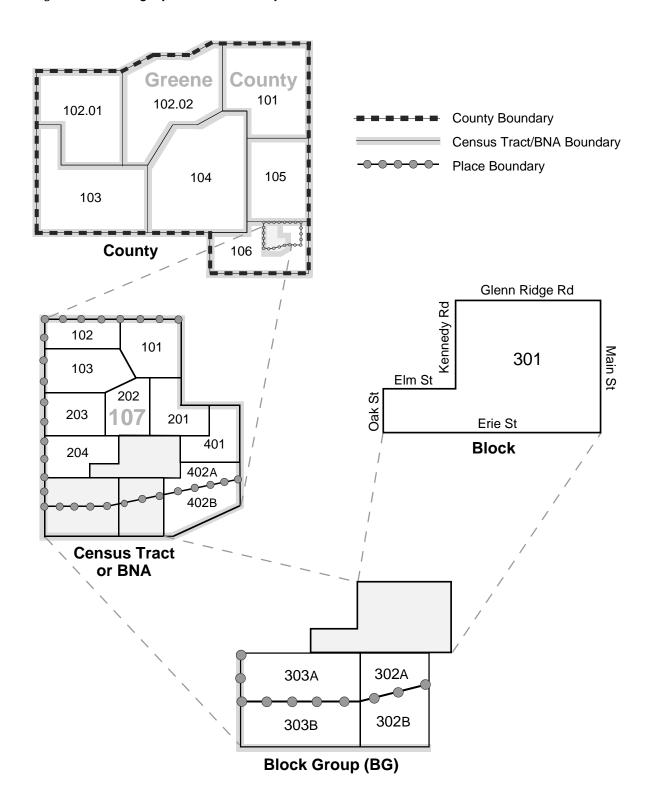


Figure 4-2 Geographic Relationships—Small Area Statistical Entities

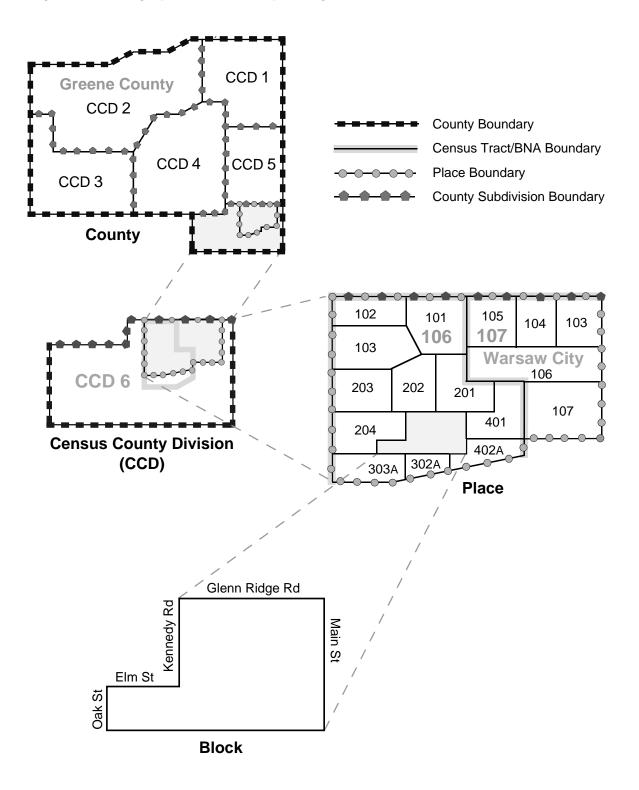


Figure 4-3 Geographic Relationships—Legal and Statistical Entities

Water blocks do not appear in the 1990 census STF files. Census maps and other data files do not display the 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 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<sup>®</sup> files altered or removed block boundary features between parts of some water blocks and changed the block numbers (the BG designator) for those blocks. Because the water blocks had no population or housing, the tabulation of the 1990 census was unaffected. Some water blocks in the 1990 Census TIGER/Line<sup>®</sup> files Supplemental CD-ROM may contain census block suffixes that do not match subsequent TIGER/Line<sup>®</sup> file.

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 prepares for Census 2000.

#### **Census Block Number Record Locations**

Field Name	Description
BLKL	Census Block Number, 1990 Left
BLKR	Census Block Number, 1990 Right
BLK90L	Census Block Number, 1990 Left
BLK90R	Census Block Number, 1990 Right
BLK90	Census Block Number, 1990
BLK00	Block Number, 2000 (currently contains 1990)
	BLKL BLKR BLK90L BLK90R BLK90

## **Census Block Codes**

Land blocks

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

## Water blocks

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

All polygons have a non-blank basic 3-character 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<sup>®</sup> files do not contain geographic codes for the area outside of the county file. The TIGER/Line<sup>®</sup> files identify boundary complete chains by placing a 1 in the single-side segment field in Record Type 1.

## **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 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 by state agencies or the Census Bureau for counties without census tracts. The delineation of BNAs follows 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 The TIGER/Line<sup>®</sup> files store census tract and BNA numbers in 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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 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 census tract or BNA may consist of discontiguous areas. These discontiguous areas may occur where the census tracts are coextensive with all or parts of legal entities that are themselves discontiguous. Census tracts were last defined in preparation for the 1990 census. Census tracts/BNAs must nest within a county. New 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 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<sup>®</sup> 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 census tracts and BNAs represent the same level of geography and share the same field in the TIGER/Line<sup>®</sup> 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

Record Type	Field Name	Description
1	CTBNAL	Census Tract/BNA Code, 1990 Left
1	CTBNAR	Census Tract/BNA Code, 1990Right
3	CTBNA90L	Census Tract/BNA Code, 1990 Left
3	CTBNA90R	Census Tract/BNA Code, 1990 Right
А	CTBNA90	Census Tract/BNA Code, 1990
S	CTBNA00	Census Tract/BNA Code, 2000 (currently contains 1990)

## Census Tract/BNA Codes

0001 to 9499—Basic number range for census tracts 9500 to 9989—Basic number range for BNAs 0000—Default basic number for census tracts/BNAs 01 to 98—Suffix codes for census tracts 85 to 98—Suffix codes for BNAs *blank*—Suffix code for census tracts and BNAs without a suffix 99—Suffix code for crews-of-vessels census tracts/BNAs

All polygons have a non-blank census tract/BNA basic number. The leftand 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<sup>®</sup> files do not contain geographic codes for the area outside of the county file. The TIGER/Line<sup>®</sup> 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 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 shore-line or just offshore, and assigned the default census tract/BNA and special block numbers to the offshore water areas.

## **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<sup>®</sup> 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<sup>®</sup> 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.

### County and County Equivalents Code Record Locations

Record Type	Field Name	Description
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
А	COUNTY	FIPS County Code for file
А	COUN90	FIPS County Code, 1990
С	COUNTY	FIPS County Code,
С	ENTITY	Entity Type
С	NAME	Name of Geographic Area
Н	COUNTY	FIPS County Code for File
I	COUNTY	FIPS County Code for File
Р	COUNTY	FIPS County Code for File
R	COUNTY	FIPS County Code for File
S	COUNTY	FIPS County Code for File
S	COUNTYCU	FIPS County Code, Current

## **County Subdivisions**

The TIGER/Line<sup>®</sup> 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 occur 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<sup>®</sup> 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 (only for current)	North Carolina
lowa	North Dakota
Kansas (only for 1990)	Ohio (only for current)
Louisiana	South Dakota
Maine	

### **County Subdivision Code Record Locations**

Record Type	Field Name	Description
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
А	FMCD	FIPS 55 Code (MCD/CCD), 1990
С	FIPS	FIPS 55 Code,
С	ENTITY	Entity Type
С	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.

# **Congressional Districts**

The 1997 TIGER/Line<sup>®</sup> files contain 2-character numeric code fields for the current (105<sup>th</sup>), the 106<sup>th</sup>, and the 108<sup>th</sup> congressional districts. Congressional districts are numbered uniquely within state. The fields for the 106<sup>th</sup> and 108<sup>th</sup> congressional districts are blank. The current congressional district field always has a value other than blank for all polygons.

## **Congressional District Record Locations**

Record Type	Field Name	Description
А	CD106	Congressional District Number, 106 <sup>th</sup>
А	CD108	Congressional District Number, 108 <sup>th</sup>
S	CDCU	Congressional District Number, Current (105 <sup>th</sup> )

## Congressional District Codes-105th 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<sup>®</sup> 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**

Field Name	Description
FIPS	FIPS 55 Code
ENTITY	Entity Type
NAME	Name of Geographic Area
FCCITY	FIPS 55 Code (Consolidated City), Current
	FIPS ENTITY NAME

## **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 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 crews-of-vessels census tract/ BNA and block as it appears in the TIGER/Line<sup>®</sup> file. See the Census Tracts and Block Numbering Areas and the Census Blocks sections in this chapter for record locations and field names.

Crews-of-vessels census tract/BNA numbers use the same basic 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, census tract 1234.99 is shown as 123499 in the TIGER/Line<sup>®</sup> files and other machine-readable products. Crews-of-vessels block numbers use the same basic block number as the associated land block in that census tract/BNA, plus a block suffix of Z; for example, block 901Z in 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 block 901 creates blocks 901A and 901Z. The Census Bureau does not use the Z census block suffix for any purpose other than the crews-of-vessels.

Either the left or right census tract/BNA and census block identified in Record Type 1 will indicate the location to which the population is assigned. The 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 census block is on the shore inside the land block with the same 3-digit collection block number, not in the water as shown on the census maps. The Census Bureau defines as zero, the area measurement enclosed by the special crews-of-vessels census tract/BNA and block.

## 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<sup>®</sup> 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 CMSAMSA field identifying the CMSA and the value in the PMSA field identifies the PMSA. A blank CMSA field indicates the code in the PMSA

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

Record Type C	Field Name MA	Description FIPS Metropolitan Area Code
С	ENTITY	Entity Type
С	NAME	Name of Geographic Area
S	CMSAMSA	FIPS Consolidated Metropolitan Statistical Area Code, Current
S	PMSA	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<sup>®</sup> 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<sup>®</sup> 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 A, but remains with the 1990 geography contained on Record Type 3. This change occurred in the 1995 TIGER/Line<sup>®</sup> files and will remain in effect until TIGER/Line<sup>®</sup> 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 Type 1.

### 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<sup>®</sup> field. Users of earlier versions of the TIGER/Line<sup>®</sup> files without Record Type C will need to consult the publication GRF-N, FIPS PUB 55-3, or the Census Bureau's TIGER/GICS<sup>®</sup> 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 subdivision; 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<sup>®</sup> 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.

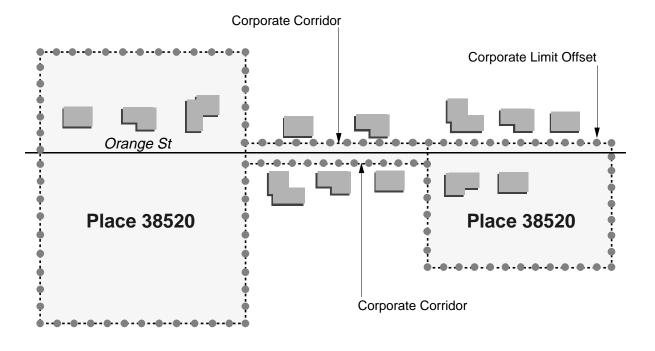
Corporate Corridors and Offset Corporate Boundaries A corporate corridor is a narrow, linear part of an incorporated place (or in a very few instances, another legal entity). The corporate corridor includes the street and/or right-of-way, or a portion of the street and/or right-ofway within the incorporated 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.

In order to reduce the overprinting of symbols on the printed or plotted census maps, a corporate corridor was shown in earlier map versions by only one symbol along its center line rather than by a symbol that followed its outer boundary. Corporate limit offset boundaries use the same map symbology as non-offset boundaries. Figure 4-4 depicts corporate corridors and corporate offset limits.

### 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.





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. 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

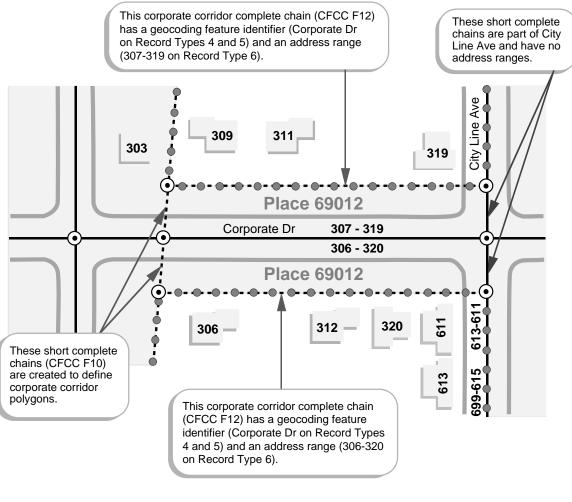
-		
Record Type	Field Name	Description
1	FPLL	FIPS 55 Code (Place), Current Left
1	FPLR	FIPS 55 Code (Place), Current Right
3	FPL90L	FIPS 55 Code (Place/CDP), 1990 Left
3	FPL90R	FIPS 55 Code (Place/CDP), 1990 Right
А	FPL	FIPS 55 Code (Place/CDP), 1990
С	FIPS	FIPS 55 Code,
С	ENTITY	Entity Type
С	NAME	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<sup>®</sup> 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<sup>®</sup> files.

## 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<sup>®</sup> 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.



- Actual Street Curb Location
  - Place Boundary

Complete Chain with Start and End Nodes

 $\mathbf{\bullet}$ 

Alabama	North Carolina	Illinois	Tennessee	Montana
California	Oklahoma	Maine	Vermont	New York
Idaho	South Dakota	Missouri	Arkansas	Ohio
Kentucky	Virginia	New Jersey	Georgia	South Carolina
Mississippi	Arizona	North Dakota	Indiana	Texas
Nebraska	Colorado	Oregon	Massachusetts	Washington

# Below is a listing of the states that had school district changes in the 1995 TIGER/Line<sup>®</sup> 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<sup>®</sup> files use separate fields to accommodate for the overlap and may not contain a code for all grade levels.

The TIGER/Line<sup>®</sup> 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 GTpolygons. 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<sup>®</sup> files is a representation of the area, not the actual area.

The TIGER/Line<sup>®</sup> 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 pseudoschool district code of 99998.

#### School District Code Record Locations

Field Name	Description
SDELM	School District Code, Elementary School
SDSEC	School District Code, Secondary School
SDUNI	School District Code, Unified District
ENTITY	Entity Type
SD	School District Code
	SDELM SDSEC SDUNI ENTITY

School District Codes The US Department of Education's Common Core Data File contains the school district names associated with the codes. The TIGER/Line<sup>®</sup> files contain only the codes, not the names of the school districts. The Census Bureau has added a name field to Record Type C so school district names can be included in future versions of the TIGER/Line<sup>®</sup> files. Currently, the name field is blank. For the school district names, contact:

Lee Hoffman Survey and Cooperative Systems Group, Rm. 410 National Center for Education Statistics 555 New Jersey Ave, NW—Washington, DC 20208 Phone: (202) 219-1621

## 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 Territories (American Samoa, Guam, and the Northern Mariana Islands) as the statistical equivalent of a state for the purpose of data presentation. TIGER/Line<sup>®</sup> files were produced for the 50 States, the District of Columbia, the US Virgin Islands, Puerto Rico, and the Pacific Island Territories. See Appendix A for a list of the FIPS state codes.

## State Code Record Locations

Record Type	Field Name	Description
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
А	STATE	FIPS State Code for File
С	STATE	FIPS State Code
С	ENTITY	Entity Type
С	NAME	Name of Geographic Area
Н	STATE	FIPS State Code for File
I	STATE	FIPS State Code for File
Р	STATE	FIPS State Code for File
R	STATE	FIPS State Code for File
S	STATE	FIPS State Code for File
S	STATECU	FIPS State Code, Current
А	STATE90	FIPS State Code, 1990

## 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<sup>®</sup> 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

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

# Traffic Analysis Zone (TAZ)

The Census Bureau collected and tabulated data for approximately 200,000 traffic analysis zones (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<sup>®</sup> extracts. The Census Bureau subsequently inserted the TAZs into the Census TIGER<sup>®</sup> data base and began extracting them starting with the 1994 TIGER/Line<sup>®</sup> 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<sup>®</sup> 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**

Record Type	Field Name	Description
А	CTPP	Census Transportation Planning Package Area Code
А	TAZ	Traffic Analysis Zone Code

# Urbanized Areas (UAs)

A 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 an overall population density of at least 1,000 people per square mile. The TIGER/Line<sup>®</sup> files identify 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**

Record Type	Field Name	Description
А	UA	Census Urbanized Area Code
С	UA	Census Urbanized Area Code,
С	ENTITY	Entity Type
С	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 a flag equal to R; the densely populated blocks will have a flag equal to U.

Incorporated places (based on 1990 census boundaries) with both urbanand 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<sup>®</sup> files include a 1-character U/R flag: R— Rural, not urban U— Urban, in a UA or an urban place

The Census Bureau assigns the U/R flag to tabulation blocks, so all GTpolygons within a block have the same U/R flag. All blocks that have a UA code (other than blank) will have an U/R flag 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 flag equal to U. Rural areas are identified by the R flag and will not have a UA code.

#### **U/R Flag Record Locations**

Record Type	Field Name	Description
A	URBFLAG	Urban Flag

## 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<sup>®</sup> files were supplied by the state governments in response to the requirements of the 1990 Census Redistricting Data Program. The boundaries of the VTDs recorded in the TIGER/Line<sup>®</sup> 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 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<sup>®</sup> 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 discontiguous pieces. Some states did extend VTD coverage into water areas. Blank space indicates that a VTD is not assigned to an area.

## **VTD Code Record Locations**

Record Type	Field Name	Description
3	VTDL	Census Voting District Code, 1990 Left
3	VTDR	Census Voting District Code, 1990 Right
С	VTD	Census Voting District Code,

## Chapter 5: Data Quality

This section provides detailed information on the lineage, positional accuracy, attribute accuracy, logical consistency, and completeness of the TIGER/Line<sup>®</sup> files. Data users can use this information to help evaluate the adequacy and applicability of this geographic file for a particular use. See the Introduction chapter for information specific to the 1997 TIGER/Line<sup>®</sup> files.

### Lineage

#### **Geometric Properties**

Source codes that specify the original digital source of complete chains in the TIGER/Line<sup>®</sup> files are listed in the Sources section of this chapter. These codes cover the source categories in the Census TIGER<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> files, the Census Bureau uses various internal and external procedures to update the Census TIGER<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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

Value	Description
blank	Not Documented Elsewhere
А	Updated 1980 GBF/DIME-File
В	USGS 1:100,000-Scale DLG-3 File
С	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
Н	Census Bureau Update Post-1990 Operations
Ι	Census Address List/TIGER Linkage Operations

### Source Code Record Locations

Record Type	Field Name	Description
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
Н	HIST	History or Last Source Code to Update
Н	SOURCE	Source or First Source Code to Update

### Address Ranges and ZIP Codes®

The TIGER/Line<sup>®</sup> files contain potential address ranges and ZIP Codes<sup>®</sup> 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<sup>®</sup> using an address range creation formula for all counties. The original TIGER<sup>®</sup> 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<sup>®</sup> files contained a mixture of pre-existing TIGER<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> files.

ZIP Codes<sup>®</sup> were originally derived from two sources: those already existing in the Census TIGER<sup>®</sup> data base and those derived from the ACF. Address ranges created from the ACF may have non-city delivery ZIP Codes<sup>®</sup>. 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<sup>®</sup> in the early 1990's by matching the Census TIGER® data base with an updated USPS ZIP+4<sup>®</sup> file (AMS Match) for the 50 states and the District of Columbia. The 5-digit ZIP Code<sup>®</sup> and street name were used as keys to match address ranges from the TIGER<sup>®</sup> data base to corresponding address ranges in the ZIP+4<sup>®</sup> file. Where a match occurred, the ZIP Add-On (Plus 4) code was added to the TIGER<sup>®</sup> address range record. If the TIGER<sup>®</sup> data base address ranges did not align exactly with the ZIP+4<sup>®</sup> address ranges, the TIGER<sup>®</sup> 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<sup>®</sup> file, and the second used data from the July 1994 file. Between the matches, clerical updates improved fivedigit ZIP Code<sup>®</sup> coverage (particularly notable in southern California and central Florida), and eliminated the illegal five-digit ZIP Codes<sup>®</sup> and three-digit ZIP Codes<sup>®</sup>. Many of the ZIP Code<sup>®</sup> changes reflect

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

Additional matching between the ZIP+4<sup>®</sup> file and the Census TIGER<sup>®</sup> data base occurs during the normal course of operations to maintain the address range and five-digit ZIP Codes<sup>®</sup> in Census TIGER<sup>®</sup>. It is not possible to specify the version of the ZIP+4<sup>®</sup> file used for the release of any specific TIGER/Line<sup>®</sup> file. Because of time constraints during the various operations needed to create the 1997 TIGER/Line<sup>®</sup> files, the Census Bureau has not added new ZIP+4<sup>®</sup> information and has removed some existing data. See the Introduction chapter for further details.

### **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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> files is as precise as the source used during the creation or update of the Census TIGER<sup>®</sup> data base. Accuracy statements on the Census TIGER<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> files without making additional edits. For example, State Highway 32 may cross the entire county. The TIGER/Line<sup>®</sup> 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/ßAlaska 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> data base, and staff reviews of computer-performed operations.

### Address Ranges and ZIP Codes®

The conversion from the GBF/DIME-Files to the TIGER<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> files have the benefit of the files going through a TIGER<sup>®</sup>/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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> data base were compared with street names in the ZIP+4<sup>®</sup> (AMS) file from the US Postal Service. Errors in feature directionals or feature types were corrected in the Census TIGER<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> data base.

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

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

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

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<sup>®</sup> 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.

See the Introduction for changes and anomalies related to Record Type 1.

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

### Record Type 2—Complete Chain Shape Coordinates

#### Note:

The TIGER/Line<sup>®</sup> 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.

Field	ΒV	Fmt	Туре	Beg	End	Len	Description
RT	No	L	А	1	1	1	Record Type
VERSION	No	R	Ν	2	5	4	Version Number
TLID	No	R	Ν	6	15	10	TIGER/Line <sup>®</sup> ID, Permanent Record Number
STATE90L	Yes	L	Ν	16	17	2	FIPS State Code, 1990 Left
STATE90R	Yes	L	Ν	18	19	2	FIPS State Code, 1990 Right
COUN90L	Yes	L	Ν	20	22	3	FIPS County Code, 1990 Left
COUN90R	Yes	L	Ν	23	25	3	FIPS County Code, 1990 Right
FMCD90L	Yes	L	Ν	26	30	5	FIPS 55 Code (MCD/CCD), 1990 Left
FMCD90R	Yes	L	Ν	31	35	5	FIPS 55 Code (MCD/CCD), 1990 Right
FPL90L	Yes	L	Ν	36	40	5	FIPS 55 Code (Place/CDP), 1990 Left
FPL90R	Yes	L	Ν	41	45	5	FIPS 55 Code (Place/CDP), 1990 Right
CTBNA90L	Yes	L	Ν	46	51	6	Census Tract/BNA Code, 1990 Left
CTBNA90R	Yes	L	Ν	52	57	6	Census Tract/BNA Code, 1990 Right
AIR90L	Yes	L	Ν	58	61	4	Census American Indian/Alaska Native Area Code 1990, Left
AIR90R	Yes	L	Ν	62	65	4	Census American Indian/Alaska Native Area Code 1990, Right
TRUST90L	Yes	L	Ν	66	66	1	American Indian Trust Land Flag 1990, Left
TRUST90R	Yes	L	Ν	67	67	1	American Indian Trust Land Flag 1990, Right
RS1	Yes	L	А	68	69	2	Reserved Space 1
BLK90L	Yes	L	А	70	73	4	Census Block Number, 1990 Left
BLK90R	Yes	L	А	74	77	4	Census Block Number, 1990 Right
AIRL	Yes	L	Ν	78	81	4	Census American Indian/Alaska Native Area Code, Current Left
AIRR	Yes	L	Ν	82	85	4	Census American Indian/Alaska Native Area Code, Current Right
RS2	Yes	L	А	86	90	5	Reserved Space 2
RS3	Yes	L	А	91	95	5	Reserved Space 3
RS4	Yes	L	А	96	98	3	Reserved Space 4
RS5	Yes	L	А	99	101	3	Reserved Space 5
RS6	Yes	L	А	102	103	2	Reserved Space 6
VTDL	Yes	L	А	104	107	4	Census Voting District Code, 1990 Left
VTDR	Yes	L	А	108	111	4	Census Voting District Code, 1990 Right

## Record Type 3 – Complete Chain Geographic Entity Codes

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

## Record Type 4 – Index to Alternate Feature Identifiers

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

## Record Type 5 – Complete Chain Feature Identifiers

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

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

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

## Record Type 7 – Landmark Features

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

## Record Type 8 – Polygons Linked to Area Landmarks

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

## **Record Type 9 – Key Geographic Location Features**

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

Field	BV	Fmt	Туре	Beg	End	Len	Description
RT	No	L	А	1	1	1	Record Type
VERSION	No	R	Ν	2	5	4	Version Number
STATE	No	L	Ν	6	7	2	FIPS State Code for File
COUNTY	No	L	Ν	8	10	3	FIPS County Code for File
CENID	No	L	А	11	15	5	Census File Identification Code
POLYID	No	R	Ν	16	25	10	Polygon Identification Code
FAIR	Yes	L	Ν	26	30	5	FIPS 55 Code (American Indian/Alaska Native Area),1990
FMCD	Yes	L	Ν	31	35	5	FIPS 55 Code (MCD/CCD),1990
FPL	Yes	L	Ν	36	40	5	FIPS 55 Code (Place/CDP),1990
CTBNA90	Yes	L	Ν	41	46	6	Census Tract/BNA Code, 1990
BLK90	Yes	L	А	47	50	4	Census Block Number, 1990
CD106	Yes	L	Ν	51	52	2	Congressional District Number, 106 <sup>th</sup>
CD108	Yes	L	Ν	53	54	2	Congressional District Number, 108 <sup>th</sup>
SDELM	Yes	L	А	55	59	5	School District Code, Elementary School
RS1	Yes	L	А	60	64	5	Reserved Space 1
SDSEC	Yes	L	А	65	69	5	School District Code, Secondary School
SDUNI	Yes	L	А	70	74	5	School District Code, Unified District
TAZ	Yes	L	А	75	80	6	Traffic Analysis Zone Code
UA	Yes	L	Ν	81	84	4	Census Urbanized Area Code
URBFLAG	Yes	L	А	85	85	1	Urban Flag
СТРР	Yes	L	А	86	89	4	Census Transportation Planning Package Area Code
STATE90	Yes	L	Ν	90	91	2	FIPS State Code, 1990
COUN90	Yes	L	Ν	92	94	3	FIPS County Code, 1990
AIR90	Yes	L	Ν	95	98	4	Census American Indian/Alaska Native Area Code, 1990

## Record Type A – Polygon Geographic Entity Codes

51 51						5	
Field	BV	Fmt	Туре	Beg	End	Len	Description
RT	No	L	А	1	1	1	Record Type
VERSION	No	R	Ν	2	5	4	Version Number
STATE	Yes	L	Ν	6	7	2	FIPS State Code
COUNTY	Yes	L	Ν	8	10	3	FIPS County Code
FIPSYR	Yes	L	А	11	12	2	FIPS Code and Name Relationship Applicable Year
FIPS	Yes	L	Ν	13	17	5	FIPS 55 Code
FIPSCC	Yes	L	А	18	19	2	FIPS 55 Class Code (see Appendix B)
PDC	Yes	L	А	20	20	1	Census Place Description Code
LASAD	Yes	L	Ν	21	22	2	Legal/Administrative/Statistical Area Description Code
ENTITY	No	L	А	23	23	1	Entity Type Code
MA	Yes	L	Ν	24	27	4	Metropolitan Area Code
SD	Yes*	L	Ν	28	32	5	School District Code
AIR	Yes	L	Ν	33	36	4	Census American Indian/Alaska Native Area Code
VTD	Yes	R	А	37	42	6	Census Voting District Code
UA	Yes	L	Ν	43	46	4	Census Urbanized Area Code
NAME	Yes*	L	А	47	112	66	Name of Geographic Area

## Record Type C – Geographic Entity Names

\* School district names are not included in this version of the TIGER/Line $^{\textcircled{R}}$  files.

# Record Type H – TIGER/Line<sup>®</sup> ID History

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

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

### **Record Type I – Link Between Complete Chains and Polygons**

## Record Type P – Polygon Internal Point

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

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

## Record Type R – TIGER/Line<sup>®</sup> ID Record Number Range

Field	BV	Fmt	Туре	Beg	End	Len	Description
RT	No	L	А	1	1	1	Record Type
VERSION	No	R	Ν	2	5	4	Version Number
STATE	No	L	Ν	6	7	2	FIPS State Code for File
COUNTY	No	L	Ν	8	10	3	FIPS County Code for File
CENID	No	L	А	11	15	5	Census File Identification Code
POLYID	No	R	Ν	16	25	10	Polygon Identification Code
WATER	Yes	L	А	26	26	1	Water Flag
CMSAMSA	Yes	L	Ν	27	30	4	FIPS Consolidated Metropolitan Statistical Area Code, Current
PMSA	Yes	L	Ν	31	34	4	FIPS Metropolitan Area Code, Current
FAIR	Yes	L	Ν	35	39	5	FIPS 55 Code (American Indian/Alaska Native Area), Current
AIR	Yes	L	Ν	40	43	4	Census American Indian/Alaska Native Area Code, Current
TRUST	Yes	L	А	44	44	1	American Indian Trust Land Flag
ANRC	Yes	L	Ν	45	46	2	Census Alaska Native Regional Corporation Code, Current
STATECU	Yes	L	Ν	47	48	2	FIPS State Code, Current
COUNTYCU	Yes	L	Ν	49	51	3	FIPS County Code, Current
FCCITY	Yes	L	Ν	52	56	5	FIPS 55 Code (Consolidated City), Current
FMCD	Yes	L	Ν	57	61	5	FIPS 55 Code (MCD/CCD), Current
FSMCD	Yes	L	Ν	62	66	5	FIPS 55 Code (Sub-MCD), Current
FPL	Yes	L	Ν	67	71	5	FIPS 55 Code (Place), Current
CTBNA00	Yes	L	Ν	72	77	6	Census Tract/BNA Code, 2000 (currently contains 1990)
BLK00	Yes	L	А	78	81	4	Block Number, 2000 (currently contains 1990)
RS10	Yes	L	А	82	82	1	Reserved Space 10
CDCU	Yes	R	Ν	83	84	2	Congressional District Code, Current
STSENATE	Yes	L	А	85	90	6	State Senate District Code (not filled)
STHOUSE	Yes	L	А	91	96	6	State House District Code (not filled)
VTD00	Yes	L	А	97	102	6	Census Voting District Code, 2000 (not filled)
RS11	Yes	L	А	103	108	6	Reserved Space 11
RS12	Yes	L	А	109	109	1	Reserved Space 12
RS13	Yes	L	А	110	114	5	Reserved Space 13
RS14	Yes	L	А	115	119	5	Reserved Space 14
FILLER	Yes	L	А	120	120	1	Filler (to make even character count)

## Record Type S – Polygon Additional Geographic Entity Codes

## Record Type Z – ZIP+4<sup>®</sup> Codes

Field	ΒV	Fmt	Туре	Beg	End	Len	Description
RT	No	L	А	1	1	1	Record Type
VERSION	No	R	Ν	2	5	4	Version Number
TLID	No	R	Ν	6	15	10	TIGER/Line <sup>®</sup> ID, Permanent Record Number
rtsq	No	R	Ν	16	18	3	Record Sequence Number
ZIP4L	Yes	L	Ν	19	22	4	+4 Postal Add-On Code, Left
ZIP4R	Yes	L	Ν	23	26	4	+4 Postal Add-On Code, Right

Note:

See the *Introduction* for information specific to the 1997 TIGER/Line<sup>®</sup> files.

## Appendix A—Recode of the Census Identification Code

The CENID field, through the 1994 TIGER/Line<sup>®</sup> files, contained a five-character numeric left-justified value representing the census file identification code. Beginning with the 1995 TIGER/Line<sup>®</sup> files, the CENID field is alphanumeric with a single alphabetic followed by a four-digit numeric. The four-digit numeric is a recode of the state and county code as shown in the table below.

FIP	S	CENID	County	State	FIF	PS -	CENID	County	State
01	001	1002	Autauga	AL	01	059	1060	Franklin	AL
01	003	1004	Baldwin	AL	01	061	1062	Geneva	AL
01	005	1006	Barbour	AL	01	063	1064	Greene	AL
01	007	1008	Bibb	AL	01	065	1066	Hale	AL
01	009	1010	Blount	AL	01	067	1068	Henry	AL
01	011	1012	Bullock	AL	01	069	1070	Houston	AL
01	013	1014	Butler	AL	01	071	1072	Jackson	AL
01	015	1016	Calhoun	AL	01	073	1074	Jefferson	AL
01	017	1018	Chambers	AL	01	075	1076	Lamar	AL
01	019	1020	Cherokee	AL	01	077	1078	Lauderdale	AL
01	021	1022	Chilton	AL	01	079	1080	Lawrence	AL
01	023	1024	Choctaw	AL	01	081	1082	Lee	AL
01	025	1026	Clarke	AL	01	083	1084	Limestone	AL
01	027	1028	Clay	AL	01	085	1086	Lowndes	AL
01	029	1030	Cleburne	AL	01	087	1088	Macon	AL
01	031	1032	Coffee	AL	01	089	1090	Madison	AL
01	033	1034	Colbert	AL	01	091	1092	Marengo	AL
01	035	1036	Conecuh	AL	01	093	1094	Marion	AL
01	037	1038	Coosa	AL	01	095	1096	Marshall	AL
01	039	1040	Covington	AL	01	097	1098	Mobile	AL
01	041	1042	Crenshaw	AL	01	099	1100	Monroe	AL
01	043	1044	Cullman	AL	01	101	1102	Montgomery	AL
01	045	1046	Dale	AL	01	103	1104	Morgan	AL
01	047	1048	Dallas	AL	01	105	1106	Perry	AL
01	049	1050	DeKalb	AL	01	107	1108	Pickens	AL
01	051	1052	Elmore	AL	01	109	1110	Pike	AL
01	053	1054	Escambia	AL	01	111	1112	Randolph	AL
01	055	1056	Etowah	AL	01	113	1114	Russell	AL
01	057	1058	Fayette	AL	01	115	1116	St. Clair	AL

FIF	PS	CENID	County	State	FIPS	S	CENID	County	State
01	117	1118	Shelby	AL	04	001	1190	Apache	AZ
01	119	1120	Sumter	AL	04	003	1192	Cochise	AZ
01	121	1122	Talladega	AL	04	005	1194	Coconino	AZ
01	123	1124	Tallapoosa	AL	04	007	1196	Gila	AZ
01	125	1126	Tuscaloosa	AL	04	009	1198	Graham	AZ
01	127	1128	Walker	AL	04	011	1200	Greenlee	AZ
01	129	1130	Washington	AL	04	012	1202	La Paz	AZ
01	131	1132	Wilcox	AL	04	013	1204	Maricopa	AZ
01	133	1134	Winston	AL	04	015	1206	Mohave	AZ
02	013	1136	Aleutians East	AK	04	017	1208	Navajo	AZ
02	016	1138	Aleutians West	AK	04	019	1210	Pima	AZ
02	020	1140	Anchorage	AK	04	021	1212	Pinal	AZ
02	050	1142	Bethel	AK	04	023	1214	Santa Cruz	AZ
02	060	1144	Bristol Bay	AK	04	025	1216	Yavapai	AZ
02	068	1146	Denali	AK	04	027	1218	Yuma	AZ
02	070	1148	Dillingham	AK	05	001	1220	Arkansas	AR
02	090	1150	Fairbanks North Star	AK	05	003	1222	Ashley	AR
02	100	1152	Haines	AK	05	005	1224	Baxter	AR
02	110	1154	Juneau	AK	05	007	1226	Benton	AR
02	122	1156	Kenai Peninsula	AK	05	009	1228	Boone	AR
02	130	1158	Ketchikan Gateway	AK	05	011	1230	Bradley	AR
02	150	1160	Kodiak Island	AK	05	013	1232	Calhoun	AR
02	164	1162	Lake and Peninsula	AK	05	015	1234	Carroll	AR
02	170	1164	Matanuska-Susitna	AK	05	017	1236	Chicot	AR
02	180	1166	Nome	AK	05	019	1238	Clark	AR
02	185	1168	North Slope	AK	05	021	1240	Clay	AR
02	188	1170	Northwest Arctic	AK	05	023	1242	Cleburne	AR
02	201	1172	Prince of Wales-		05	025	1244	Cleveland	AR
			Outer Ketchikan	AK	05	027	1246	Columbia	AR
	220	1174	Sitka	AK	05	029	1248	Conway	AR
02	232	1176	Skagway-Hoonah- Angoon	AK	05	031	1250	Craighead	AR
02	240	1178	Southeast Fairbanks	AK	05	033	1252	Crawford	AR
	240	1180	Valdez-Cordova	AK	05	035	1254	Crittenden	AR
		1182	Wade Hampton	AK	05	037	1256	Cross	AR
	280	1184	Wrangell-Petersburg		05	039	1258	Dallas	AR
		1186	Yakutat	AK	05	041	1260	Desha	AR
	202	1188	Yukon-Koyukuk	AK	05	043	1262	Drew	AR
UΖ	270	1100			05	045	1264	Faulkner	AR

FIP	S	CENID	County	State	FIP	S	CENID	County	State
05	047	1266	Franklin	AR	05	123	1342	St. Francis	AR
05	049	1268	Fulton	AR	05	125	1344	Saline	AR
05	051	1270	Garland	AR	05	127	1346	Scott	AR
05	053	1272	Grant	AR	05	129	1348	Searcy	AR
05	055	1274	Greene	AR	05	131	1350	Sebastian	AR
05	057	1276	Hempstead	AR	05	133	1352	Sevier	AR
05	059	1278	Hot Spring	AR	05	135	1354	Sharp	AR
05	061	1280	Howard	AR	05	137	1356	Stone	AR
05	063	1282	Independence	AR	05	139	1358	Union	AR
05	065	1284	Izard	AR	05	141	1360	Van Buren	AR
05	067	1286	Jackson	AR	05	143	1362	Washington	AR
05	069	1288	Jefferson	AR	05	145	1364	White	AR
05	071	1290	Johnson	AR	05	147	1366	Woodruff	AR
05	073	1292	Lafayette	AR	05	149	1368	Yell	AR
05	075	1294	Lawrence	AR	06	001	1370	Alameda	CA
05	077	1296	Lee	AR	06	003	1372	Alpine	CA
05	079	1298	Lincoln	AR	06	005	1374	Amador	CA
05	081	1300	Little River	AR	06	007	1376	Butte	CA
05	083	1302	Logan	AR	06	009	1378	Calaveras	CA
05	085	1304	Lonoke	AR	06	011	1380	Colusa	CA
05	087	1306	Madison	AR	06	013	1382	Contra Costa	CA
05	089	1308	Marion	AR	06	015	1384	Del Norte	CA
05	091	1310	Miller	AR	06	017	1386	El Dorado	CA
05	093	1312	Mississippi	AR	06	019	1388	Fresno	CA
05	095	1314	Monroe	AR	06	021	1390	Glenn	CA
05	097	1316	Montgomery	AR	06	023	1392	Humboldt	CA
05	099	1318	Nevada	AR	06	025	1394	Imperial	CA
05	101	1320	Newton	AR	06	027	1396	Inyo	CA
05	103	1322	Ouachita	AR	06	029	1398	Kern	CA
05	105	1324	Perry	AR	06	031	1400	Kings	CA
05	107	1326	Phillips	AR	06	033	1402	Lake	CA
05	109	1328	Pike	AR	06	035	1404	Lassen	CA
05	111	1330	Poinsett	AR	06	037	1406	Los Angeles	CA
05	113	1332	Polk	AR	06	039	1408	Madera	CA
05	115	1334	Pope	AR	06	041	1410	Marin	CA
05	117	1336	Prairie	AR	06	043	1412	Mariposa	CA
05	119	1338	Pulaski	AR	06	045	1414	Mendocino	CA
05	121	1340	Randolph	AR	06	047	1416	Merced	СА

FIP	PS	CENID	County	State	F	IPS	CENID	County	State
06	049	1418	Modoc	СА	0	8 009	9 1494	Baca	CO
06	051	1420	Mono	СА	0	8 011	1496	Bent	CO
06	053	1422	Monterey	СА	0	8 013	8 1498	Boulder	CO
06	055	1424	Napa	CA	0	8 015	5 1500	Chaffee	CO
06	057	1426	Nevada	CA	0	8 017	1502	Cheyenne	CO
06	059	1428	Orange	CA	0	8 019	9 1504	Clear Creek	CO
06	061	1430	Placer	CA	0	8 021	1506	Conejos	CO
06	063	1432	Plumas	CA	0	8 023	8 1508	Costilla	CO
06	065	1434	Riverside	CA	0	8 025	5 1510	Crowley	CO
06	067	1436	Sacramento	CA	0	8 027	1512	Custer	CO
06	069	1438	San Benito	CA	0	8 029	9 1514	Delta	CO
06	071	1440	San Bernardino	CA	0	8 031	1516	Denver	CO
06	073	1442	San Diego	CA	0	8 033	8 1518	Dolores	CO
06	075	1444	San Francisco	CA	0	8 035	5 1520	Douglas	CO
06	077	1446	San Joaquin	CA	0	8 037	1522	Eagle	CO
06	079	1448	San Luis Obispo	CA	0	8 039	9 1524	Elbert	CO
06	081	1450	San Mateo	CA	0	8 041	1526	El Paso	CO
06	083	1452	Santa Barbara	CA	0	8 043	8 1528	Fremont	CO
06	085	1454	Santa Clara	CA	0	8 045	5 1530	Garfield	CO
06	087	1456	Santa Cruz	CA	0	8 047	1532	Gilpin	CO
06	089	1458	Shasta	CA	0	8 049	9 1534	Grand	CO
06	091	1460	Sierra	CA	0	8 051	1536	Gunnison	CO
06	093	1462	Siskiyou	CA	0	8 053	8 1538	Hinsdale	CO
06	095	1464	Solano	CA	0	8 055	5 1540	Huerfano	CO
06	097	1466	Sonoma	CA	0	8 057	1542	Jackson	CO
06	099	1468	Stanislaus	CA	0	8 059	9 1544	Jefferson	CO
06	101	1470	Sutter	CA	0	8 061	1546	Kiowa	CO
06	103	1472	Tehama	CA	0	8 063	3 1548	Kit Carson	CO
06	105	1474	Trinity	CA	0	8 065	5 1550	Lake	CO
06	107	1476	Tulare	CA	0	8 067	1552	La Plata	CO
06	109	1478	Tuolumne	CA	0	8 069	9 1554	Larimer	CO
06	111	1480	Ventura	CA	0	8 071	1556	Las Animas	CO
06	113	1482	Yolo	CA	0	8 073	3 1558	Lincoln	CO
06	115	1484	Yuba	CA	0	8 075	5 1560	Logan	CO
80	001	1486	Adams	CO	0	8 077	1562	Mesa	CO
80	003	1488	Alamosa	CO	0	8 079	9 1564	Mineral	CO
	005	1490	Arapahoe	CO		8 081		Moffat	CO
80	007	1492	Archuleta	CO	0	8 083	8 1568	Montezuma	CO

FIPS		CENID	County S	State	FIPS	CENID	County	State
08	085	1570	Montrose	СО	12 011	1646	Broward	FL
08	087	1572	Morgan	СО	12 013	1648	Calhoun	FL
08	089	1574	Otero	CO	12 015	1650	Charlotte	FL
08	091	1576	Ouray	CO	12 017	1652	Citrus	FL
08	093	1578	Park	CO	12 019	1654	Clay	FL
08	095	1580	Phillips	CO	12 021	1656	Collier	FL
08	097	1582	Pitkin	CO	12 023	1658	Columbia	FL
08	099	1584	Prowers	CO	12 025	1660	Dade	FL
08	101	1586	Pueblo	CO	12 027	1662	DeSoto	FL
08	103	1588	Rio Blanco	CO	12 029	1664	Dixie	FL
08	105	1590	Rio Grande	СО	12 031	1666	Duval	FL
08	107	1592	Routt	CO	12 033	1668	Escambia	FL
08	109	1594	Saguache	CO	12 035	1670	Flagler	FL
08	111	1596	San Juan	CO	12 037	1672	Franklin	FL
08	113	1598	San Miguel	СО	12 039	1674	Gadsden	FL
08	115	1600	Sedgwick	СО	12 041	1676	Gilchrist	FL
08	117	1602	Summit	СО	12 043	1678	Glades	FL
08	119	1604	Teller	CO	12 045	1680	Gulf	FL
08	121	1606	Washington	CO	12 047	1682	Hamilton	FL
08	123	1608	Weld	CO	12 049	1684	Hardee	FL
08	125	1610	Yuma	CO	12 051	1686	Hendry	FL
09	001	1612	Fairfield	CT	12 053	1688	Hernando	FL
09	003	1614	Hartford	CT	12 055	1690	Highlands	FL
09	005	1616	Litchfield	CT	12 057	1692	Hillsborough	FL
09	007	1618	Middlesex	CT	12 059	1694	Holmes	FL
09	009	1620	New Haven	CT	12 061	1696	Indian River	FL
09	011	1622	New London	CT	12 063	1698	Jackson	FL
09	013	1624	Tolland	CT	12 065	1700	Jefferson	FL
09	015	1626	Windham	CT	12 067	1702	Lafayette	FL
10	001	1628	Kent	DE	12 069	1704	Lake	FL
	003	1630	New Castle	DE	12 071	1706	Lee	FL
	005	1632	Sussex	DE	12 073	1708	Leon	FL
11	001	1634	District of Columbia	DC	12 075	1710	Levy	FL
12	001	1636	Alachua	FL	12 077	1712	Liberty	FL
	003	1638	Baker	FL	12 079	1714	Madison	FL
	005	1640	Вау	FL	12 081	1716	Manatee	FL
	007	1642	Bradford	FL	12 083	1718	Marion	FL
12	009	1644	Brevard	FL	12 085	1720	Martin	FL

FIPS	CENID	County	State	FIPS	CENID	County	State
12 087	1722	Monroe	FL	13 029	1798	Bryan	GA
12 089	1724	Nassau	FL	13 031	1800	Bulloch	GA
12 091	1726	Okaloosa	FL	13 033	1802	Burke	GA
12 093	1728	Okeechobee	FL	13 035	1804	Butts	GA
12 095	1730	Orange	FL	13 037	1806	Calhoun	GA
12 097	1732	Osceola	FL	13 039	1808	Camden	GA
12 099	1734	Palm Beach	FL	13 043	1810	Candler	GA
12 101	1736	Pasco	FL	13 045	1812	Carroll	GA
12 103	1738	Pinellas	FL	13 047	1814	Catoosa	GA
12 105	1740	Polk	FL	13 049	1816	Charlton	GA
12 107	1742	Putnam	FL	13 051	1818	Chatham	GA
12 109	1744	St. Johns	FL	13 053	1820	Chattahoochee	GA
12 111	1746	St. Lucie	FL	13 055	1822	Chattooga	GA
12 113	1748	Santa Rosa	FL	13 057	1824	Cherokee	GA
12 115	1750	Sarasota	FL	13 059	1826	Clarke	GA
12 117	1752	Seminole	FL	13 061	1828	Clay	GA
12 119	1754	Sumter	FL	13 063	1830	Clayton	GA
12 121	1756	Suwannee	FL	13 065	1832	Clinch	GA
12 123	1758	Taylor	FL	13 067	1834	Cobb	GA
12 125	1760	Union	FL	13 069	1836	Coffee	GA
12 127	1762	Volusia	FL	13 071	1838	Colquitt	GA
12 129	1764	Wakulla	FL	13 073	1840	Columbia	GA
12 131	1766	Walton	FL	13 075	1842	Cook	GA
12 133	1768	Washington	FL	13 077	1844	Coweta	GA
13 001	1770	Appling	GA	13 079	1846	Crawford	GA
13 003	1772	Atkinson	GA	13 081	1848	Crisp	GA
13 005	1774	Bacon	GA	13 083	1850	Dade	GA
13 007	1776	Baker	GA	13 085	1852	Dawson	GA
13 009	1778	Baldwin	GA	13 087	1854	Decatur	GA
13 011	1780	Banks	GA	13 089	1856	DeKalb	GA
13 013	1782	Barrow	GA	13 091	1858	Dodge	GA
13 015	1784	Bartow	GA	13 093	1860	Dooly	GA
13 017	1786	Ben Hill	GA	13 095	1862	Dougherty	GA
13 019	1788	Berrien	GA	13 097	1864	Douglas	GA
13 021	1790	Bibb	GA	13 099	1866	Early	GA
13 023	1792	Bleckley	GA	13 101	1868	Echols	GA
13 025	1794	Brantley	GA	13 103	1870	Effingham	GA
13 027	1796	Brooks	GA	13 105	1872	Elbert	GA

FIP	S	CENID	County	State	FIPS	CENID	County	State
13	107	1874	Emanuel	GA	13 183	1950	Long	GA
13	109	1876	Evans	GA	13 185	1952	Lowndes	GA
13	111	1878	Fannin	GA	13 187	1954	Lumpkin	GA
13	113	1880	Fayette	GA	13 189	1956	McDuffie	GA
13	115	1882	Floyd	GA	13 191	1958	McIntosh	GA
13	117	1884	Forsyth	GA	13 193	1960	Macon	GA
13	119	1886	Franklin	GA	13 195	1962	Madison	GA
13	121	1888	Fulton	GA	13 197	1964	Marion	GA
13	123	1890	Gilmer	GA	13 199	1966	Meriwether	GA
13	125	1892	Glascock	GA	13 201	1968	Miller	GA
13	127	1894	Glynn	GA	13 205	1970	Mitchell	GA
13	129	1896	Gordon	GA	13 207	1972	Monroe	GA
13	131	1898	Grady	GA	13 209	1974	Montgomery	GA
13	133	1900	Greene	GA	13 211	1976	Morgan	GA
13	135	1902	Gwinnett	GA	13 213	1978	Murray	GA
13	137	1904	Habersham	GA	13 215	1980	Muscogee	GA
13	139	1906	Hall	GA	13 217	1982	Newton	GA
13	141	1908	Hancock	GA	13 219	1984	Oconee	GA
13	143	1910	Haralson	GA	13 221	1986	Oglethorpe	GA
13	145	1912	Harris	GA	13 223	1988	Paulding	GA
13	147	1914	Hart	GA	13 225	1990	Peach	GA
13	149	1916	Heard	GA	13 227	1992	Pickens	GA
13	151	1918	Henry	GA	13 229	1994	Pierce	GA
13	153	1920	Houston	GA	13 231	1996	Pike	GA
13	155	1922	Irwin	GA	13 233	1998	Polk	GA
13	157	1924	Jackson	GA	13 235	2000	Pulaski	GA
13	159	1926	Jasper	GA	13 237	2002	Putnam	GA
13	161	1928	Jeff Davis	GA	13 239	2004	Quitman	GA
13	163	1930	Jefferson	GA	13 241	2006	Rabun	GA
13	165	1932	Jenkins	GA	13 243	2008	Randolph	GA
13	167	1934	Johnson	GA	13 245	2010	Richmond	GA
13	169	1936	Jones	GA	13 247	2012	Rockdale	GA
13	171	1938	Lamar	GA	13 249	2014	Schley	GA
13	173	1940	Lanier	GA	13 251	2016	Screven	GA
13	175	1942	Laurens	GA	13 253	2018	Seminole	GA
13	177	1944	Lee	GA	13 255	2020	Spalding	GA
	179	1946	Liberty	GA	13 257	2022	Stephens	GA
13	181	1948	Lincoln	GA	13 259	2024	Stewart	GA

FIP	S	CENID	County	State	FIPS	CENID	County	State
13	261	2026	Sumter	GA	16 005	2102	Bannock	ID
13	263	2028	Talbot	GA	16 007	2104	Bear Lake	ID
13	265	2030	Taliaferro	GA	16 009	2106	Benewah	ID
13	267	2032	Tattnall	GA	16 011	2108	Bingham	ID
13	269	2034	Taylor	GA	16 013	2110	Blaine	ID
13	271	2036	Telfair	GA	16 015	2112	Boise	ID
13	273	2038	Terrell	GA	16 017	2114	Bonner	ID
13	275	2040	Thomas	GA	16 019	2116	Bonneville	ID
13	277	2042	Tift	GA	16 021	2118	Boundary	ID
13	279	2044	Toombs	GA	16 023	2120	Butte	ID
13	281	2046	Towns	GA	16 025	2122	Camas	ID
13	283	2048	Treutlen	GA	16 027	2124	Canyon	ID
13	285	2050	Troup	GA	16 029	2126	Caribou	ID
13	287	2052	Turner	GA	16 031	2128	Cassia	ID
13	289	2054	Twiggs	GA	16 033	2130	Clark	ID
13	291	2056	Union	GA	16 035	2132	Clearwater	ID
13	293	2058	Upson	GA	16 037	2134	Custer	ID
13	295	2060	Walker	GA	16 039	2136	Elmore	ID
13	297	2062	Walton	GA	16 041	2138	Franklin	ID
13	299	2064	Ware	GA	16 043	2140	Fremont	ID
13	301	2066	Warren	GA	16 045	2142	Gem	ID
13	303	2068	Washington	GA	16 047	2144	Gooding	ID
13	305	2070	Wayne	GA	16 049	2146	Idaho	ID
13	307	2072	Webster	GA	16 051	2148	Jefferson	ID
13	309	2074	Wheeler	GA	16 053	2150	Jerome	ID
13	311	2076	White	GA	16 055	2152	Kootenai	ID
13	313	2078	Whitfield	GA	16 057	2154	Latah	ID
13	315	2080	Wilcox	GA	16 059	2156	Lemhi	ID
13	317	2082	Wilkes	GA	16 061	2158	Lewis	ID
13	319	2084	Wilkinson	GA	16 063	2160	Lincoln	ID
13	321	2086	Worth	GA	16 065	2162	Madison	ID
15	001	2088	Hawaii	HI	16 067	2164	Minidoka	ID
15	003	2090	Honolulu	HI	16 069	2166	Nez Perce	ID
15	005	2092	Kalawao	HI	16 071	2168	Oneida	ID
15	007	2094	Kauai	HI	16 073	2170	Owyhee	ID
15	009	2096	Maui	HI	16 075	2172	Payette	ID
16	001	2098	Ada	ID	16 077	2174	Power	ID
16	003	2100	Adams	ID	16 079	2176	Shoshone	ID

FIPS	CENID	County	State	FIPS	CENID	County	State
16 081	2178	Teton	ID	17 069	2254	Hardin	IL
16 083	2180	Twin Falls	ID	17 071	2256	Henderson	IL
16 085	2182	Valley	ID	17 073	2258	Henry	IL
16 087	2184	Washington	ID	17 075	2260	Iroquois	IL
17 001	2186	Adams	IL	17 077	2262	Jackson	IL
17 003	2188	Alexander	IL	17 079	2264	Jasper	IL
17 005	2190	Bond	IL	17 081	2266	Jefferson	IL
17 007	2192	Boone	IL	17 083	2268	Jersey	IL
17 009	2194	Brown	IL	17 085	2270	Jo Daviess	IL
17 011	2196	Bureau	IL	17 087	2272	Johnson	IL
17 013	2198	Calhoun	IL	17 089	2274	Kane	IL
17 015	2200	Carroll	IL	17 091	2276	Kankakee	IL
17 017	2202	Cass	IL	17 093	2278	Kendall	IL
17 019	2204	Champaign	IL	17 095	2280	Knox	IL
17 021	2206	Christian	IL	17 097	2282	Lake	IL
17 023	2208	Clark	IL	17 099	2284	La Salle	IL
17 025	2210	Clay	IL	17 101	2286	Lawrence	IL
17 027	2212	Clinton	IL	17 103	2288	Lee	IL
17 029	2214	Coles	IL	17 105	2290	Livingston	IL
17 031	2216	Cook	IL	17 107	2292	Logan	IL
17 033	2218	Crawford	IL	17 109	2294	McDonough	IL
17 035	2220	Cumberland	IL	17 111	2296	McHenry	IL
17 037	2222	DeKalb	IL	17 113	2298	McLean	IL
17 039	2224	De Witt	IL	17 115	2300	Macon	IL
17 041	2226	Douglas	IL	17 117	2302	Macoupin	IL
17 043	2228	DuPage	IL	17 119	2304	Madison	IL
17 045	2230	Edgar	IL	17 121	2306	Marion	IL
17 047	2232	Edwards	IL	17 123	2308	Marshall	IL
17 049	2234	Effingham	IL	17 125	2310	Mason	IL
17 051	2236	Fayette	IL	17 127	2312	Massac	IL
17 053	2238	Ford	IL	17 129	2314	Menard	IL
17 055	2240	Franklin	IL	17 131	2316	Mercer	IL
17 057	2242	Fulton	IL	17 133	2318	Monroe	IL
17 059	2244	Gallatin	IL	17 135	2320	Montgomery	IL
17 061	2246	Greene	IL	17 137	2322	Morgan	IL
17 063	2248	Grundy	IL	17 139	2324	Moultrie	IL
17 065	2250	Hamilton	IL	17 141	2326	Ogle	IL
17 067	2252	Hancock	IL	17 143	2328	Peoria	IL

FIP	S	CENID	County	State	FIPS	CENID	County	State
17	145	2330	Perry	IL	18 017	2406	Cass	IN
17	147	2332	Piatt	IL	18 019	2408	Clark	IN
17	149	2334	Pike	IL	18 021	2410	Clay	IN
17	151	2336	Роре	IL	18 023	2412	Clinton	IN
17	153	2338	Pulaski	IL	18 025	2414	Crawford	IN
17	155	2340	Putnam	IL	18 027	2416	Daviess	IN
17	157	2342	Randolph	IL	18 029	2418	Dearborn	IN
17	159	2344	Richland	IL	18 031	2420	Decatur	IN
17	161	2346	Rock Island	IL	18 033	2422	De Kalb	IN
17	163	2348	St. Clair	IL	18 035	2424	Delaware	IN
17	165	2350	Saline	IL	18 037	2426	Dubois	IN
17	167	2352	Sangamon	IL	18 039	2428	Elkhart	IN
17	169	2354	Schuyler	IL	18 041	2430	Fayette	IN
17	171	2356	Scott	IL	18 043	2432	Floyd	IN
17	173	2358	Shelby	IL	18 045	2434	Fountain	IN
17	175	2360	Stark	IL	18 047	2436	Franklin	IN
17	177	2362	Stephenson	IL	18 049	2438	Fulton	IN
17	179	2364	Tazewell	IL	18 051	2440	Gibson	IN
17	181	2366	Union	IL	18 053	2442	Grant	IN
17	183	2368	Vermilion	IL	18 055	2444	Greene	IN
17	185	2370	Wabash	IL	18 057	2446	Hamilton	IN
17	187	2372	Warren	IL	18 059	2448	Hancock	IN
17	189	2374	Washington	IL	18 061	2450	Harrison	IN
17	191	2376	Wayne	IL	18 063	2452	Hendricks	IN
17	193	2378	White	IL	18 065	2454	Henry	IN
17	195	2380	Whiteside	IL	18 067	2456	Howard	IN
17	197	2382	Will	IL	18 069	2458	Huntington	IN
17	199	2384	Williamson	IL	18 071	2460	Jackson	IN
17	201	2386	Winnebago	IL	18 073	2462	Jasper	IN
17	203	2388	Woodford	IL	18 075	2464	Jay	IN
18	001	2390	Adams	IN	18 077	2466	Jefferson	IN
18	003	2392	Allen	IN	18 079	2468	Jennings	IN
18	005	2394	Bartholomew	IN	18 081	2470	Johnson	IN
18	007	2396	Benton	IN	18 083	2472	Knox	IN
18	009	2398	Blackford	IN	18 085	2474	Kosciusko	IN
18	011	2400	Boone	IN	18 087	2476	Lagrange	IN
18	013	2402	Brown	IN	18 089	2478	Lake	IN
18	015	2404	Carroll	IN	18 091	2480	La Porte	IN

FIPS	CENID	County	State	FIPS	CENID	County	State
18 093	2482	Lawrence	IN	18 169	2558	Wabash	IN
18 095	2484	Madison	IN	18 171	2560	Warren	IN
18 097	2486	Marion	IN	18 173	2562	Warrick	IN
18 099	2488	Marshall	IN	18 175	2564	Washington	IN
18 101	2490	Martin	IN	18 177	2566	Wayne	IN
18 103	2492	Miami	IN	18 179	2568	Wells	IN
18 105	2494	Monroe	IN	18 181	2570	White	IN
18 107	2496	Montgomery	IN	18 183	2572	Whitley	IN
18 109	2498	Morgan	IN	19 001	2574	Adair	IA
18 111	2500	Newton	IN	19 003	2576	Adams	IA
18 113	2502	Noble	IN	19 005	2578	Allamakee	IA
18 115	2504	Ohio	IN	19 007	2580	Appanoose	IA
18 117	2506	Orange	IN	19 009	2582	Audubon	IA
18 119	2508	Owen	IN	19 011	2584	Benton	IA
18 121	2510	Parke	IN	19 013	2586	Black Hawk	IA
18 123	2512	Perry	IN	19 015	2588	Boone	IA
18 125	2514	Pike	IN	19 017	2590	Bremer	IA
18 127	2516	Porter	IN	19 019	2592	Buchanan	IA
18 129	2518	Posey	IN	19 021	2594	Buena Vista	IA
18 131	2520	Pulaski	IN	19 023	2596	Butler	IA
18 133	2522	Putnam	IN	19 025	2598	Calhoun	IA
18 135	2524	Randolph	IN	19 027	2600	Carroll	IA
18 137	2526	Ripley	IN	19 029	2602	Cass	IA
18 139	2528	Rush	IN	19 031	2604	Cedar	IA
18 141	2530	St. Joseph	IN	19 033	2606	Cerro Gordo	IA
18 143	2532	Scott	IN	19 035	2608	Cherokee	IA
18 145	2534	Shelby	IN	19 037	2610	Chickasaw	IA
18 147	2536	Spencer	IN	19 039	2612	Clarke	IA
18 149	2538	Starke	IN	19 041	2614	Clay	IA
18 151	2540	Steuben	IN	19 043	2616	Clayton	IA
18 153	2542	Sullivan	IN	19 045	2618	Clinton	IA
18 155	2544	Switzerland	IN	19 047	2620	Crawford	IA
18 157	2546	Tippecanoe	IN	19 049	2622	Dallas	IA
18 159	2548	Tipton	IN	19 051	2624	Davis	IA
18 161	2550	Union	IN	19 053	2626	Decatur	IA
18 163	2552	Vanderburgh	IN	19 055	2628	Delaware	IA
18 165	2554	Vermillion	IN	19 057	2630	Des Moines	IA
18 167	2556	Vigo	IN	19 059	2632	Dickinson	IA

FIPS	CENID	County	State	FIPS	CENID	County	State
19 06	1 2634	Dubuque	IA	19 137	2710	Montgomery	IA
19 06	3 2636	Emmet	IA	19 139	2712	Muscatine	IA
19 06	5 2638	Fayette	IA	19 141	2714	O'Brien	IA
19 06	7 2640	Floyd	IA	19 143	2716	Osceola	IA
19 06	9 2642	Franklin	IA	19 145	2718	Page	IA
19 07	1 2644	Fremont	IA	19 147	2720	Palo Alto	IA
19 07	3 2646	Greene	IA	19 149	2722	Plymouth	IA
19 07	5 2648	Grundy	IA	19 151	2724	Pocahontas	IA
19 07	7 2650	Guthrie	IA	19 153	2726	Polk	IA
19 07	9 2652	Hamilton	IA	19 155	2728	Pottawattamie	IA
19 08	1 2654	Hancock	IA	19 157	2730	Poweshiek	IA
19 08	3 2656	Hardin	IA	19 159	2732	Ringgold	IA
19 08	5 2658	Harrison	IA	19 161	2734	Sac	IA
19 08	7 2660	Henry	IA	19 163	2736	Scott	IA
19 08	9 2662	Howard	IA	19 165	2738	Shelby	IA
19 09	1 2664	Humboldt	IA	19 167	2740	Sioux	IA
19 09	3 2666	Ida	IA	19 169	2742	Story	IA
19 09	5 2668	Iowa	IA	19 171	2744	Tama	IA
19 09	7 2670	Jackson	IA	19 173	2746	Taylor	IA
19 09	9 2672	Jasper	IA	19 175	2748	Union	IA
19 10	1 2674	Jefferson	IA	19 177	2750	Van Buren	IA
19 10	3 2676	Johnson	IA	19 179	2752	Wapello	IA
19 10	5 2678	Jones	IA	19 181	2754	Warren	IA
19 10	7 2680	Keokuk	IA	19 183	2756	Washington	IA
19 10	9 2682	Kossuth	IA	19 185	2758	Wayne	IA
19 11	1 2684	Lee	IA	19 187	2760	Webster	IA
19 11	3 2686	Linn	IA	19 189	2762	Winnebago	IA
19 11	5 2688	Louisa	IA	19 191	2764	Winneshiek	IA
19 11	7 2690	Lucas	IA	19 193	2766	Woodbury	IA
19 11	9 2692	Lyon	IA	19 195	2768	Worth	IA
19 12	1 2694	Madison	IA	19 197	2770	Wright	IA
19 12	3 2696	Mahaska	IA	20 001	2772	Allen	KS
19 12	5 2698	Marion	IA	20 003	2774	Anderson	KS
19 12	7 2700	Marshall	IA	20 005	2776	Atchison	KS
19 12	9 2702	Mills	IA	20 007	2778	Barber	KS
19 13	1 2704	Mitchell	IA	20 009	2780	Barton	KS
19 13		Monona	IA	20 011	2782	Bourbon	KS
19 13	5 2708	Monroe	IA	20 013	2784	Brown	KS

FIPS	CENID	County	State	FIPS	CENID	County	State
20 015	2786	Butler	KS	20 091	2862	Johnson	KS
20 017	2788	Chase	KS	20 093	2864	Kearny	KS
20 019	2790	Chautauqua	KS	20 095	2866	Kingman	KS
20 021	2792	Cherokee	KS	20 097	2868	Kiowa	KS
20 023	2794	Cheyenne	KS	20 099	2870	Labette	KS
20 025	2796	Clark	KS	20 101	2872	Lane	KS
20 027	2798	Clay	KS	20 103	2874	Leavenworth	KS
20 029	2800	Cloud	KS	20 105	2876	Lincoln	KS
20 031	2802	Coffey	KS	20 107	2878	Linn	KS
20 033	2804	Comanche	KS	20 109	2880	Logan	KS
20 035	2806	Cowley	KS	20 111	2882	Lyon	KS
20 037	2808	Crawford	KS	20 113	2884	McPherson	KS
20 039	2810	Decatur	KS	20 115	2886	Marion	KS
20 041	2812	Dickinson	KS	20 117	2888	Marshall	KS
20 043	2814	Doniphan	KS	20 119	2890	Meade	KS
20 045	2816	Douglas	KS	20 121	2892	Miami	KS
20 047	2818	Edwards	KS	20 123	2894	Mitchell	KS
20 049	2820	Elk	KS	20 125	2896	Montgomery	KS
20 051	2822	Ellis	KS	20 127	2898	Morris	KS
20 053	2824	Ellsworth	KS	20 129	2900	Morton	KS
20 055	2826	Finney	KS	20 131	2902	Nemaha	KS
20 057	2828	Ford	KS	20 133	2904	Neosho	KS
20 059	2830	Franklin	KS	20 135	2906	Ness	KS
20 061	2832	Geary	KS	20 137	2908	Norton	KS
20 063	2834	Gove	KS	20 139	2910	Osage	KS
20 065	2836	Graham	KS	20 141	2912	Osborne	KS
20 067	2838	Grant	KS	20 143	2914	Ottawa	KS
20 069	2840	Gray	KS	20 145	2916	Pawnee	KS
20 071	2842	Greeley	KS	20 147	2918	Phillips	KS
20 073	2844	Greenwood	KS	20 149	2920	Pottawatomie	KS
20 075	2846	Hamilton	KS	20 151	2922	Pratt	KS
20 077	2848	Harper	KS	20 153	2924	Rawlins	KS
20 079	2850	Harvey	KS	20 155	2926	Reno	KS
20 081	2852	Haskell	KS	20 157	2928	Republic	KS
20 083	2854	Hodgeman	KS	20 159	2930	Rice	KS
20 085	2856	Jackson	KS	20 161	2932	Riley	KS
20 087	2858	Jefferson	KS	20 163	2934	Rooks	KS
20 089	2860	Jewell	KS	20 165	2936	Rush	KS

FIF	PS	CENID	County	State	FIPS	5	CENID	County	State
20	167	2938	Russell	KS	21 (	033	3014	Caldwell	KY
20	169	2940	Saline	KS	21 (	035	3016	Calloway	KY
20	171	2942	Scott	KS	21 (	037	3018	Campbell	KY
20	173	2944	Sedgwick	KS	21 (	039	3020	Carlisle	KY
20	175	2946	Seward	KS	21 (	041	3022	Carroll	KY
20	177	2948	Shawnee	KS	21 (	043	3024	Carter	KY
20	179	2950	Sheridan	KS	21 (	045	3026	Casey	KY
20	181	2952	Sherman	KS	21 (	047	3028	Christian	KY
20	183	2954	Smith	KS	21 (	049	3030	Clark	KY
20	185	2956	Stafford	KS	21 (	051	3032	Clay	KY
20	187	2958	Stanton	KS	21 (	053	3034	Clinton	KY
20	189	2960	Stevens	KS	21 (	055	3036	Crittenden	KY
20	191	2962	Sumner	KS	21 (	057	3038	Cumberland	KY
20	193	2964	Thomas	KS	21 (	059	3040	Daviess	KY
20	195	2966	Trego	KS	21 (	061	3042	Edmonson	KY
20	197	2968	Wabaunsee	KS	21 (	063	3044	Elliott	KY
20	199	2970	Wallace	KS	21 (	065	3046	Estill	KY
20	201	2972	Washington	KS	21 (	067	3048	Fayette	KY
20	203	2974	Wichita	KS	21 (	069	3050	Fleming	KY
20	205	2976	Wilson	KS	21 (	071	3052	Floyd	KY
20	207	2978	Woodson	KS	21 (	073	3054	Franklin	KY
20	209	2980	Wyandotte	KS	21 (	075	3056	Fulton	KY
21	001	2982	Adair	KY	21 (	077	3058	Gallatin	KY
21	003	2984	Allen	KY	21 (	079	3060	Garrard	KY
21	005	2986	Anderson	KY	21 (	081	3062	Grant	KY
21	007	2988	Ballard	KY	21 (	083	3064	Graves	KY
21	009	2990	Barren	KY	21 (	085	3066	Grayson	KY
21	011	2992	Bath	KY	21 (	087	3068	Green	KY
21	013	2994	Bell	KY	21 (	089	3070	Greenup	KY
21	015	2996	Boone	KY	21 (	091	3072	Hancock	KY
21	017	2998	Bourbon	KY	21 (	093	3074	Hardin	KY
21	019	3000	Boyd	KY	21 (	095	3076	Harlan	KY
21	021	3002	Boyle	KY	21 (	097	3078	Harrison	KY
21	023	3004	Bracken	KY	21 (	099	3080	Hart	KY
21	025	3006	Breathitt	KY	21 2	101	3082	Henderson	KY
21	027	3008	Breckinridge	KY		103	3084	Henry	KY
21	029	3010	Bullitt	KY		105	3086	Hickman	KY
21	031	3012	Butler	KY	21 1	107	3088	Hopkins	KY

FIF	PS	CENID	County	State	FIPS	CENID	County	State
21	109	3090	Jackson	KY	21 185	3166	Oldham	KY
21	111	3092	Jefferson	KY	21 187	3168	Owen	KY
21	113	3094	Jessamine	KY	21 189	3170	Owsley	KY
21	115	3096	Johnson	KY	21 191	3172	Pendleton	KY
21	117	3098	Kenton	KY	21 193	3174	Perry	KY
21	119	3100	Knott	KY	21 195	3176	Pike	KY
21	121	3102	Knox	KY	21 197	3178	Powell	KY
21	123	3104	Larue	KY	21 199	3180	Pulaski	KY
21	125	3106	Laurel	KY	21 201	3182	Robertson	KY
21	127	3108	Lawrence	KY	21 203	3184	Rockcastle	KY
21	129	3110	Lee	KY	21 205	3186	Rowan	KY
21	131	3112	Leslie	KY	21 207	3188	Russell	KY
21	133	3114	Letcher	KY	21 209	3190	Scott	KY
21	135	3116	Lewis	KY	21 211	3192	Shelby	KY
21	137	3118	Lincoln	KY	21 213	3194	Simpson	KY
21	139	3120	Livingston	KY	21 215	3196	Spencer	KY
21	141	3122	Logan	KY	21 217	3198	Taylor	KY
21	143	3124	Lyon	KY	21 219	3200	Todd	KY
21	145	3126	McCracken	KY	21 221	3202	Trigg	KY
21	147	3128	McCreary	KY	21 223	3204	Trimble	KY
21	149	3130	McLean	KY	21 225	3206	Union	KY
21	151	3132	Madison	KY	21 227	3208	Warren	KY
21	153	3134	Magoffin	KY	21 229	3210	Washington	KY
21	155	3136	Marion	KY	21 231	3212	Wayne	KY
21	157	3138	Marshall	KY	21 233	3214	Webster	KY
21	159	3140	Martin	KY	21 235	3216	Whitley	KY
21	161	3142	Mason	KY	21 237	3218	Wolfe	KY
21	163	3144	Meade	KY	21 239	3220	Woodford	KY
21	165	3146	Menifee	KY	22 001	3222	Acadia	LA
21	167	3148	Mercer	KY	22 003	3224	Allen	LA
21	169	3150	Metcalfe	KY	22 005	3226	Ascension	LA
21	171	3152	Monroe	KY	22 007	3228	Assumption	LA
21	173	3154	Montgomery	KY	22 009	3230	Avoyelles	LA
21	175	3156	Morgan	KY	22 011	3232	Beauregard	LA
21	177	3158	Muhlenberg	KY	22 013	3234	Bienville	LA
21	179	3160	Nelson	KY	22 015	3236	Bossier	LA
21	181	3162	Nicholas	KY	22 017	3238	Caddo	LA
21	183	3164	Ohio	KY	22 019	3240	Calcasieu	LA

FIPS	CENID	County	State	FIP	S	CENID	County	State
22 02	1 3242	Caldwell	LA	22	097	3318	St. Landry	LA
22 023	3 3244	Cameron	LA	22	099	3320	St. Martin	LA
22 02	5 3246	Catahoula	LA	22	101	3322	St. Mary	LA
22 02	7 3248	Claiborne	LA	22	103	3324	St. Tammany	LA
22 02	9 3250	Concordia	LA	22	105	3326	Tangipahoa	LA
22 03	1 3252	De Soto	LA	22	107	3328	Tensas	LA
22 03	3 3254	East Baton Rouge	LA	22	109	3330	Terrebonne	LA
22 03	5 3256	East Carroll	LA	22	111	3332	Union	LA
22 03	7 3258	East Feliciana	LA	22	113	3334	Vermilion	LA
22 03	9 3260	Evangeline	LA	22	115	3336	Vernon	LA
22 04	1 3262	Franklin	LA	22	117	3338	Washington	LA
22 043	3 3264	Grant	LA	22	119	3340	Webster	LA
22 04	5 3266	Iberia	LA	22	121	3342	West Baton Rouge	LA
22 04	7 3268	Iberville	LA	22	123	3344	West Carroll	LA
22 04	9 3270	Jackson	LA	22	125	3346	West Feliciana	LA
22 05	1 3272	Jefferson	LA	22	127	3348	Winn	LA
22 05	3 3274	Jefferson Davis	LA	23	001	3350	Androscoggin	ME
22 05	5 3276	Lafayette	LA	23	003	3352	Aroostook	ME
22 05	7 3278	Lafourche	LA	23	005	3354	Cumberland	ME
22 05	9 3280	La Salle	LA	23	007	3356	Franklin	ME
22 06	1 3282	Lincoln	LA	23	009	3358	Hancock	ME
22 06	3 3284	Livingston	LA	23	011	3360	Kennebec	ME
22 06	5 3286	Madison	LA	23	013	3362	Knox	ME
22 06	7 3288	Morehouse	LA	23	015	3364	Lincoln	ME
22 06	9 3290	Natchitoches	LA	23	017	3366	Oxford	ME
22 07	1 3292	Orleans	LA	23	019	3368	Penobscot	ME
22 07	3 3294	Ouachita	LA	23	021	3370	Piscataquis	ME
22 07	5 3296	Plaquemines	LA	23	023	3372	Sagadahoc	ME
22 07	7 3298	Pointe Coupee	LA	23	025	3374	Somerset	ME
22 07	9 3300	Rapides	LA	23	027	3376	Waldo	ME
22 08	1 3302	Red River	LA	23	029	3378	Washington	ME
22 08	3 3304	Richland	LA	23	031	3380	York	ME
22 08	5 3306	Sabine	LA	24	001	3382	Allegany	MD
22 08	7 3308	St. Bernard	LA	24	003	3384	Anne Arundel	MD
22 08	9 3310	St. Charles	LA	24	005	3386	Baltimore	MD
22 09		St. Helena	LA		009	3388	Calvert	MD
22 093		St. James	LA		011	3390	Caroline	MD
22 09	5 3316	St. John the Baptist	LA	24	013	3392	Carroll	MD

FIF	PS	CENID	County	State	FIP	S	CENID	County	State
24	015	3394	Cecil	MD	26	013	3470	Baraga	MI
24	017	3396	Charles	MD	26	015	3472	Barry	MI
24	019	3398	Dorchester	MD	26	017	3474	Вау	MI
24	021	3400	Frederick	MD	26	019	3476	Benzie	MI
24	023	3402	Garrett	MD	26	021	3478	Berrien	MI
24	025	3404	Harford	MD	26	023	3480	Branch	MI
24	027	3406	Howard	MD	26	025	3482	Calhoun	MI
24	029	3408	Kent	MD	26	027	3484	Cass	MI
24	031	3410	Montgomery	MD	26	029	3486	Charlevoix	MI
24	033	3412	Prince George's	MD	26	031	3488	Cheboygan	MI
24	035	3414	Queen Anne's	MD	26	033	3490	Chippewa	MI
24	037	3416	St. Mary's	MD	26	035	3492	Clare	MI
24	039	3418	Somerset	MD	26	037	3494	Clinton	MI
24	041	3420	Talbot	MD	26	039	3496	Crawford	MI
24	043	3422	Washington	MD	26	041	3498	Delta	MI
24	045	3424	Wicomico	MD	26	043	3500	Dickinson	MI
24	047	3426	Worcester	MD	26	045	3502	Eaton	MI
24	510	3428	Baltimore	MD	26	047	3504	Emmet	MI
25	001	3430	Barnstable	MA	26	049	3506	Genesee	MI
25	003	3432	Berkshire	MA	26	051	3508	Gladwin	MI
25	005	3434	Bristol	MA	26	053	3510	Gogebic	MI
25	007	3436	Dukes	MA	26	055	3512	Grand Traverse	MI
25	009	3438	Essex	MA	26	057	3514	Gratiot	MI
25	011	3440	Franklin	MA	26	059	3516	Hillsdale	MI
25	013	3442	Hampden	MA	26	061	3518	Houghton	MI
25	015	3444	Hampshire	MA	26	063	3520	Huron	MI
25	017	3446	Middlesex	MA	26	065	3522	Ingham	MI
25	019	3448	Nantucket	MA	26	067	3524	Ionia	MI
25	021	3450	Norfolk	MA	26	069	3526	losco	MI
25	023	3452	Plymouth	MA	26	071	3528	Iron	MI
25	025	3454	Suffolk	MA	26	073	3530	Isabella	MI
25	027	3456	Worcester	MA	26	075	3532	Jackson	MI
26	001	3458	Alcona	MI	26	077	3534	Kalamazoo	MI
26	003	3460	Alger	MI	26	079	3536	Kalkaska	MI
26	005	3462	Allegan	MI	26	081	3538	Kent	MI
26	007	3464	Alpena	MI	26	083	3540	Keweenaw	MI
26	009	3466	Antrim	MI	26	085	3542	Lake	MI
26	011	3468	Arenac	MI	26	087	3544	Lapeer	MI

FIPS	CENID	County	State	FIPS	CENID	County	State
26 089	3546	Leelanau	MI	26 165	3622	Wexford	MI
26 091	3548	Lenawee	MI	27 001	3624	Aitkin	MN
26 093	3550	Livingston	MI	27 003	3626	Anoka	MN
26 095	3552	Luce	MI	27 005	3628	Becker	MN
26 097	3554	Mackinac	MI	27 007	3630	Beltrami	MN
26 099	3556	Macomb	MI	27 009	3632	Benton	MN
26 101	3558	Manistee	MI	27 011	3634	Big Stone	MN
26 103	3560	Marquette	MI	27 013	3636	Blue Earth	MN
26 105	3562	Mason	MI	27 015	3638	Brown	MN
26 107	3564	Mecosta	MI	27 017	3640	Carlton	MN
26 109	3566	Menominee	MI	27 019	3642	Carver	MN
26 111	3568	Midland	MI	27 021	3644	Cass	MN
26 113	3570	Missaukee	MI	27 023	3646	Chippewa	MN
26 115	3572	Monroe	MI	27 025	3648	Chisago	MN
26 117	3574	Montcalm	MI	27 027	3650	Clay	MN
26 119	3576	Montmorency	MI	27 029	3652	Clearwater	MN
26 121	3578	Muskegon	MI	27 031	3654	Cook	MN
26 123	3580	Newaygo	MI	27 033	3656	Cottonwood	MN
26 125	3582	Oakland	MI	27 035	3658	Crow Wing	MN
26 127	3584	Oceana	MI	27 037	3660	Dakota	MN
26 129	3586	Ogemaw	MI	27 039	3662	Dodge	MN
26 131	3588	Ontonagon	MI	27 041	3664	Douglas	MN
26 133	3590	Osceola	MI	27 043	3666	Faribault	MN
26 135	3592	Oscoda	MI	27 045	3668	Fillmore	MN
26 137	3594	Otsego	MI	27 047	3670	Freeborn	MN
26 139	3596	Ottawa	MI	27 049	3672	Goodhue	MN
26 141	3598	Presque Isle	MI	27 051	3674	Grant	MN
26 143	3600	Roscommon	MI	27 053	3676	Hennepin	MN
26 145	3602	Saginaw	MI	27 055	3678	Houston	MN
26 147	3604	St. Clair	MI	27 057	3680	Hubbard	MN
26 149	3606	St. Joseph	MI	27 059	3682	Isanti	MN
26 151	3608	Sanilac	MI	27 061	3684	Itasca	MN
26 153	3610	Schoolcraft	MI	27 063	3686	Jackson	MN
26 155	3612	Shiawassee	MI	27 065	3688	Kanabec	MN
26 157	3614	Tuscola	MI	27 067	3690	Kandiyohi	MN
26 159	3616	Van Buren	MI	27 069	3692	Kittson	MN
26 161	3618	Washtenaw	MI	27 071	3694	Koochiching	MN
26 163	3620	Wayne	MI	27 073	3696	Lac qui Parle	MN

FIPS	CENID	County	State	FIPS	CENID	County	State
27 075	3698	Lake	MN	27 151	3774	Swift	MN
27 077	3700	Lake of the Woods	MN	27 153	3776	Todd	MN
27 079	3702	Le Sueur	MN	27 155	3778	Traverse	MN
27 081	3704	Lincoln	MN	27 157	3780	Wabasha	MN
27 083	3706	Lyon	MN	27 159	3782	Wadena	MN
27 085	3708	McLeod	MN	27 161	3784	Waseca	MN
27 087	3710	Mahnomen	MN	27 163	3786	Washington	MN
27 089	3712	Marshall	MN	27 165	3788	Watonwan	MN
27 091	3714	Martin	MN	27 167	3790	Wilkin	MN
27 093	3716	Meeker	MN	27 169	3792	Winona	MN
27 095	3718	Mille Lacs	MN	27 171	3794	Wright	MN
27 097	3720	Morrison	MN	27 173	3796	Yellow Medicine	MN
27 099	3722	Mower	MN	28 001	3798	Adams	MS
27 101	3724	Murray	MN	28 003	3800	Alcorn	MS
27 103	3726	Nicollet	MN	28 005	3802	Amite	MS
27 105	3728	Nobles	MN	28 007	3804	Attala	MS
27 107	3730	Norman	MN	28 009	3806	Benton	MS
27 109	3732	Olmsted	MN	28 011	3808	Bolivar	MS
27 111	3734	Otter Tail	MN	28 013	3810	Calhoun	MS
27 113	3736	Pennington	MN	28 015	3812	Carroll	MS
27 115	3738	Pine	MN	28 017	3814	Chickasaw	MS
27 117	3740	Pipestone	MN	28 019	3816	Choctaw	MS
27 119	3742	Polk	MN	28 021	3818	Claiborne	MS
27 121	3744	Роре	MN	28 023	3820	Clarke	MS
27 123	3746	Ramsey	MN	28 025	3822	Clay	MS
27 125	3748	Red Lake	MN	28 027	3824	Coahoma	MS
27 127	3750	Redwood	MN	28 029	3826	Copiah	MS
27 129	3752	Renville	MN	28 031	3828	Covington	MS
27 131	3754	Rice	MN	28 033	3830	DeSoto	MS
27 133	3756	Rock	MN	28 035	3832	Forrest	MS
27 135	3758	Roseau	MN	28 037	3834	Franklin	MS
27 137	3760	St. Louis	MN	28 039	3836	George	MS
27 139	3762	Scott	MN	28 041	3838	Greene	MS
27 141	3764	Sherburne	MN	28 043	3840	Grenada	MS
27 143	3766	Sibley	MN	28 045	3842	Hancock	MS
27 145	3768	Stearns	MN	28 047	3844	Harrison	MS
27 147	3770	Steele	MN	28 049	3846	Hinds	MS
27 149	3772	Stevens	MN	28 051	3848	Holmes	MS

FIPS	5	CENID	County	State	FIF	S	CENID	County	State
28 (	053	3850	Humphreys	MS	28	129	3926	Smith	MS
28 (	055	3852	Issaquena	MS	28	131	3928	Stone	MS
28 (	057	3854	Itawamba	MS	28	133	3930	Sunflower	MS
28 (	059	3856	Jackson	MS	28	135	3932	Tallahatchie	MS
28 (	061	3858	Jasper	MS	28	137	3934	Tate	MS
28 (	063	3860	Jefferson	MS	28	139	3936	Tippah	MS
28 (	065	3862	Jefferson Davis	MS	28	141	3938	Tishomingo	MS
28 (	067	3864	Jones	MS	28	143	3940	Tunica	MS
28 (	069	3866	Kemper	MS	28	145	3942	Union	MS
28 (	071	3868	Lafayette	MS	28	147	3944	Walthall	MS
28 (	073	3870	Lamar	MS	28	149	3946	Warren	MS
28 (	075	3872	Lauderdale	MS	28	151	3948	Washington	MS
28 (	077	3874	Lawrence	MS	28	153	3950	Wayne	MS
28 (	079	3876	Leake	MS	28	155	3952	Webster	MS
28 (	081	3878	Lee	MS	28	157	3954	Wilkinson	MS
28 (	083	3880	Leflore	MS	28	159	3956	Winston	MS
28 (	085	3882	Lincoln	MS	28	161	3958	Yalobusha	MS
28 (	087	3884	Lowndes	MS	28	163	3960	Yazoo	MS
28 (	089	3886	Madison	MS	29	001	3962	Adair	MO
28 (	091	3888	Marion	MS	29	003	3964	Andrew	MO
28 (	093	3890	Marshall	MS	29	005	3966	Atchison	MO
28 (	095	3892	Monroe	MS	29	007	3968	Audrain	MO
28 (	097	3894	Montgomery	MS	29	009	3970	Barry	MO
28 (	099	3896	Neshoba	MS	29	011	3972	Barton	MO
28 1	101	3898	Newton	MS	29	013	3974	Bates	MO
28 1	103	3900	Noxubee	MS	29	015	3976	Benton	MO
28 1	105	3902	Oktibbeha	MS	29	017	3978	Bollinger	MO
28 1	107	3904	Panola	MS	29	019	3980	Boone	MO
28 1	109	3906	Pearl River	MS	29	021	3982	Buchanan	MO
28 1	111	3908	Perry	MS	29	023	3984	Butler	MO
28 1	113	3910	Pike	MS	29	025	3986	Caldwell	MO
28 1	115	3912	Pontotoc	MS	29	027	3988	Callaway	MO
28 1	117	3914	Prentiss	MS	29	029	3990	Camden	MO
28 1	119	3916	Quitman	MS	29	031	3992	Cape Girardeau	MO
28 1	121	3918	Rankin	MS	29	033	3994	Carroll	MO
28 2	123	3920	Scott	MS	29	035	3996	Carter	MO
28 1	125	3922	Sharkey	MS	29	037	3998	Cass	MO
28 1	127	3924	Simpson	MS	29	039	4000	Cedar	MO

FIPS	5	CENID	County	State	FIPS	CENID	County	State
29 C	041	4002	Chariton	MO	29 117	4078	Livingston	MO
29 C	043	4004	Christian	MO	29 119	4080	McDonald	MO
29 C	045	4006	Clark	MO	29 121	4082	Macon	MO
29 C	047	4008	Clay	MO	29 123	4084	Madison	MO
29 C	049	4010	Clinton	MO	29 125	4086	Maries	MO
29 0	051	4012	Cole	MO	29 127	4088	Marion	MO
29 C	053	4014	Cooper	MO	29 129	4090	Mercer	MO
29 0	055	4016	Crawford	MO	29 131	4092	Miller	MO
29 0	057	4018	Dade	MO	29 133	4094	Mississippi	MO
29 C	059	4020	Dallas	MO	29 135	4096	Moniteau	MO
29 C	061	4022	Daviess	MO	29 137	4098	Monroe	MO
29 C	063	4024	DeKalb	MO	29 139	4100	Montgomery	MO
29 C	065	4026	Dent	MO	29 141	4102	Morgan	MO
29 C	067	4028	Douglas	MO	29 143	4104	New Madrid	MO
29 0	069	4030	Dunklin	MO	29 145	4106	Newton	MO
29 C	071	4032	Franklin	MO	29 147	4108	Nodaway	MO
29 C	073	4034	Gasconade	MO	29 149	4110	Oregon	MO
29 C	075	4036	Gentry	MO	29 151	4112	Osage	MO
29 C	770	4038	Greene	MO	29 153	4114	Ozark	MO
29 C	079	4040	Grundy	MO	29 155	4116	Pemiscot	MO
29 0	081	4042	Harrison	MO	29 157	4118	Perry	MO
29 C	083	4044	Henry	MO	29 159	4120	Pettis	MO
29 C	085	4046	Hickory	MO	29 161	4122	Phelps	MO
29 C	087	4048	Holt	MO	29 163	4124	Pike	MO
29 C	089	4050	Howard	MO	29 165	4126	Platte	MO
29 C	091	4052	Howell	MO	29 167	4128	Polk	MO
29 C	093	4054	Iron	MO	29 169	4130	Pulaski	MO
29 C	095	4056	Jackson	MO	29 171	4132	Putnam	MO
29 C	097	4058	Jasper	MO	29 173	4134	Ralls	MO
29 C	)99	4060	Jefferson	MO	29 175	4136	Randolph	MO
29 1	101	4062	Johnson	MO	29 177	4138	Ray	MO
29 1	103	4064	Knox	MO	29 179	4140	Reynolds	MO
29 1	105	4066	Laclede	MO	29 181	4142	Ripley	MO
29 1	107	4068	Lafayette	MO	29 183	4144	St. Charles	MO
29 1	109	4070	Lawrence	MO	29 185	4146	St. Clair	MO
29 1	111	4072	Lewis	MO	29 186	4148	Ste. Genevieve	MO
29 1	113	4074	Lincoln	MO	29 187	4150	St. Francois	MO
29 1	115	4076	Linn	MO	29 189	4152	St. Louis	MO

FIPS	CENID	County	State	FIPS	CENID	County	State
29 195	4154	Saline	MO	30 039	4230	Granite	MT
29 197	4156	Schuyler	MO	30 041	4232	Hill	MT
29 199	4158	Scotland	MO	30 043	4234	Jefferson	MT
29 201	4160	Scott	MO	30 045	4236	Judith Basin	MT
29 203	4162	Shannon	MO	30 047	4238	Lake	MT
29 205	4164	Shelby	MO	30 049	4240	Lewis and Clark	MT
29 207	4166	Stoddard	MO	30 051	4242	Liberty	MT
29 209	4168	Stone	MO	30 053	4244	Lincoln	MT
29 211	4170	Sullivan	MO	30 055	4246	McCone	MT
29 213	4172	Taney	MO	30 057	4248	Madison	MT
29 215	4174	Texas	MO	30 059	4250	Meagher	MT
29 217	4176	Vernon	MO	30 061	4252	Mineral	MT
29 219	4178	Warren	MO	30 063	4254	Missoula	MT
29 221	4180	Washington	MO	30 065	4256	Musselshell	MT
29 223	4182	Wayne	MO	30 067	4258	Park	MT
29 225	4184	Webster	MO	30 069	4260	Petroleum	MT
29 227	4186	Worth	MO	30 071	4262	Phillips	MT
29 229	4188	Wright	MO	30 073	4264	Pondera	MT
29 510	4190	St. Louis	MO	30 075	4266	Powder River	MT
30 001	4192	Beaverhead	MT	30 077	4268	Powell	MT
30 003	4194	Big Horn	MT	30 079	4270	Prairie	MT
30 005	4196	Blaine	MT	30 081	4272	Ravalli	MT
30 007	4198	Broadwater	MT	30 083	4274	Richland	MT
30 009	4200	Carbon	MT	30 085	4276	Roosevelt	MT
30 011	4202	Carter	MT	30 087	4278	Rosebud	MT
30 013	4204	Cascade	MT	30 089	4280	Sanders	MT
30 015	4206	Chouteau	MT	30 091	4282	Sheridan	MT
30 017	4208	Custer	MT	30 093	4284	Silver Bow	MT
30 019	4210	Daniels	MT	30 095	4286	Stillwater	MT
30 021	4212	Dawson	MT	30 097	4288	Sweet Grass	MT
30 023	4214	Deer Lodge	MT	30 099	4290	Teton	MT
30 025	4216	Fallon	MT	30 101	4292	Toole	MT
30 027	4218	Fergus	MT	30 103	4294	Treasure	MT
30 029	4220	Flathead	MT	30 105	4296	Valley	MT
30 031	4222	Gallatin	MT	30 107	4298	Wheatland	MT
30 033	4224	Garfield	MT	30 109	4300	Wibaux	MT
30 035	4226	Glacier	MT	30 111	4302	Yellowstone	MT
30 037	4228	Golden Valley	MT				

FIF	PS	CENID	County	State	FIPS	CENID	County	State
30	113	4304	Yellowstone	MT	31 073	4378	Gosper	NE
			National Park		31 075	4380	Grant	NE
31	001	4306	Adams	NE	31 077	4382	Greeley	NE
31	003	4308	Antelope	NE	31 079	4384	Hall	NE
31	005	4310	Arthur	NE	31 081	4386	Hamilton	NE
31	007	4312	Banner	NE	31 083	4388	Harlan	NE
31	009	4314	Blaine	NE	31 085	4390	Hayes	NE
31	011	4316	Boone	NE	31 087	4392	Hitchcock	NE
31	013	4318	Box Butte	NE	31 089	4394	Holt	NE
31	015	4320	Boyd	NE	31 091	4396	Hooker	NE
31	017	4322	Brown	NE	31 093	4398	Howard	NE
31	019	4324	Buffalo	NE	31 095	4400	Jefferson	NE
31	021	4326	Burt	NE	31 097	4402	Johnson	NE
31	023	4328	Butler	NE	31 099	4404	Kearney	NE
31	025	4330	Cass	NE	31 101	4406	Keith	NE
31	027	4332	Cedar	NE	31 103	4408	Keya Paha	NE
31	029	4334	Chase	NE	31 105	4410	Kimball	NE
31	031	4336	Cherry	NE	31 107	4412	Knox	NE
31	033	4338	Cheyenne	NE	31 109	4414	Lancaster	NE
31	035	4340	Clay	NE	31 111	4416	Lincoln	NE
31	037	4342	Colfax	NE	31 113	4418	Logan	NE
31	039	4344	Cuming	NE	31 115	4420	Loup	NE
31	041	4346	Custer	NE	31 117	4422	McPherson	NE
31	043	4348	Dakota	NE	31 119	4424	Madison	NE
31	045	4350	Dawes	NE	31 121	4426	Merrick	NE
31	047	4352	Dawson	NE	31 123	4428	Morrill	NE
31	049	4354	Deuel	NE	31 125	4430	Nance	NE
31	051	4356	Dixon	NE	31 127	4432	Nemaha	NE
31	053	4358	Dodge	NE	31 129	4434	Nuckolls	NE
31	055	4360	Douglas	NE	31 131	4436	Otoe	NE
31	057	4362	Dundy	NE	31 133	4438	Pawnee	NE
31	059	4364	Fillmore	NE	31 135	4440	Perkins	NE
31	061	4366	Franklin	NE	31 137	4442	Phelps	NE
31	063	4368	Frontier	NE	31 139	4444	Pierce	NE
31	065	4370	Furnas	NE	31 141	4446	Platte	NE
31	067	4372	Gage	NE	31 143	4448	Polk	NE
31	069	4374	Garden	NE	31 145	4450	Red Willow	NE
31	071	4376	Garfield	NE	31 147	4452	Richardson	NE

FIF	PS	CENID	County	State	FIPS	CENID	County	State
31	149	4454	Rock	NE	33 005	4530	Cheshire	NH
31	151	4456	Saline	NE	33 007	4532	Coos	NH
31	153	4458	Sarpy	NE	33 009	4534	Grafton	NH
31	155	4460	Saunders	NE	33 011	4536	Hillsborough	NH
31	157	4462	Scotts Bluff	NE	33 013	4538	Merrimack	NH
31	159	4464	Seward	NE	33 015	4540	Rockingham	NH
31	161	4466	Sheridan	NE	33 017	4542	Strafford	NH
31	163	4468	Sherman	NE	33 019	4544	Sullivan	NH
31	165	4470	Sioux	NE	34 001	4546	Atlantic	NJ
31	167	4472	Stanton	NE	34 003	4548	Bergen	NJ
31	169	4474	Thayer	NE	34 005	4550	Burlington	NJ
31	171	4476	Thomas	NE	34 007	4552	Camden	NJ
31	173	4478	Thurston	NE	34 009	4554	Cape May	NJ
31	175	4480	Valley	NE	34 011	4556	Cumberland	NJ
31	177	4482	Washington	NE	34 013	4558	Essex	NJ
31	179	4484	Wayne	NE	34 015	4560	Gloucester	NJ
31	181	4486	Webster	NE	34 017	4562	Hudson	NJ
31	183	4488	Wheeler	NE	34 019	4564	Hunterdon	NJ
31	185	4490	York	NE	34 021	4566	Mercer	NJ
32	001	4492	Churchill	NV	34 023	4568	Middlesex	NJ
32	003	4494	Clark	NV	34 025	4570	Monmouth	NJ
32	005	4496	Douglas	NV	34 027	4572	Morris	NJ
32	007	4498	Elko	NV	34 029	4574	Ocean	NJ
32	009	4500	Esmeralda	NV	34 031	4576	Passaic	NJ
32	011	4502	Eureka	NV	34 033	4578	Salem	NJ
32	013	4504	Humboldt	NV	34 035	4580	Somerset	NJ
32	015	4506	Lander	NV	34 037	4582	Sussex	NJ
32	017	4508	Lincoln	NV	34 039	4584	Union	NJ
32	019	4510	Lyon	NV	34 041	4586	Warren	NJ
32	021	4512	Mineral	NV	35 001	4588	Bernalillo	NM
32	023	4514	Nye	NV	35 003	4590	Catron	NM
32	027	4516	Pershing	NV	35 005	4592	Chaves	NM
32	029	4518	Storey	NV	35 006	4594	Cibola	NM
32	031	4520	Washoe	NV	35 007	4596	Colfax	NM
32	033	4522	White Pine	NV	35 009	4598	Curry	NM
32	510	4524	Carson City	NV	35 011	4600	DeBaca	NM
33	001	4526	Belknap	NH	35 013	4602	Dona Ana	NM
33	003	4528	Carroll	NH	35 015	4604	Eddy	NM

FIF	PS -	CENID	County	State	FIPS	CENID	County	State
35	017	4606	Grant	NM	36 029	4682	Erie	NY
35	019	4608	Guadalupe	NM	36 031	4684	Essex	NY
35	021	4610	Harding	NM	36 033	4686	Franklin	NY
35	023	4612	Hidalgo	NM	36 035	4688	Fulton	NY
35	025	4614	Lea	NM	36 037	4690	Genesee	NY
35	027	4616	Lincoln	NM	36 039	4692	Greene	NY
35	028	4618	Los Alamos	NM	36 041	4694	Hamilton	NY
35	029	4620	Luna	NM	36 043	4696	Herkimer	NY
35	031	4622	McKinley	NM	36 045	4698	Jefferson	NY
35	033	4624	Mora	NM	36 047	4700	Kings	NY
35	035	4626	Otero	NM	36 049	4702	Lewis	NY
35	037	4628	Quay	NM	36 051	4704	Livingston	NY
35	039	4630	Rio Arriba	NM	36 053	4706	Madison	NY
35	041	4632	Roosevelt	NM	36 055	4708	Monroe	NY
35	043	4634	Sandoval	NM	36 057	4710	Montgomery	NY
35	045	4636	San Juan	NM	36 059	4712	Nassau	NY
35	047	4638	San Miguel	NM	36 061	4714	New York	NY
35	049	4640	Santa Fe	NM	36 063	4716	Niagara	NY
35	051	4642	Sierra	NM	36 065	4718	Oneida	NY
35	053	4644	Socorro	NM	36 067	4720	Onondaga	NY
35	055	4646	Taos	NM	36 069	4722	Ontario	NY
35	057	4648	Torrance	NM	36 071	4724	Orange	NY
35	059	4650	Union	NM	36 073	4726	Orleans	NY
35	061	4652	Valencia	NM	36 075	4728	Oswego	NY
36	001	4654	Albany	NY	36 077	4730	Otsego	NY
36	003	4656	Allegany	NY	36 079	4732	Putnam	NY
36	005	4658	Bronx	NY	36 081	4734	Queens	NY
36	007	4660	Broome	NY	36 083	4736	Rensselaer	NY
36	009	4662	Cattaraugus	NY	36 085	4738	Richmond	NY
36	011	4664	Cayuga	NY	36 087	4740	Rockland	NY
36	013	4666	Chautauqua	NY	36 089	4742	St. Lawrence	NY
36	015	4668	Chemung	NY	36 091	4744	Saratoga	NY
36	017	4670	Chenango	NY	36 093	4746	Schenectady	NY
36	019	4672	Clinton	NY	36 095	4748	Schoharie	NY
36	021	4674	Columbia	NY	36 097	4750	Schuyler	NY
36	023	4676	Cortland	NY	36 099	4752	Seneca	NY
36	025	4678	Delaware	NY	36 101	4754	Steuben	NY
36	027	4680	Dutchess	NY	36 103	4756	Suffolk	NY

FIF	PS	CENID	County	State	FIPS	CENID	County	State
36	105	4758	Sullivan	NY	37 057	4834	Davidson	NC
36	107	4760	Tioga	NY	37 059	4836	Davie	NC
36	109	4762	Tompkins	NY	37 061	4838	Duplin	NC
36	111	4764	Ulster	NY	37 063	4840	Durham	NC
36	113	4766	Warren	NY	37 065	4842	Edgecombe	NC
36	115	4768	Washington	NY	37 067	4844	Forsyth	NC
36	117	4770	Wayne	NY	37 069	4846	Franklin	NC
36	119	4772	Westchester	NY	37 071	4848	Gaston	NC
36	121	4774	Wyoming	NY	37 073	4850	Gates	NC
36	123	4776	Yates	NY	37 075	4852	Graham	NC
37	001	4778	Alamance	NC	37 077	4854	Granville	NC
37	003	4780	Alexander	NC	37 079	4856	Greene	NC
37	005	4782	Alleghany	NC	37 081	4858	Guilford	NC
37	007	4784	Anson	NC	37 083	4860	Halifax	NC
37	009	4786	Ashe	NC	37 085	4862	Harnett	NC
37	011	4788	Avery	NC	37 087	4864	Haywood	NC
37	013	4790	Beaufort	NC	37 089	4866	Henderson	NC
37	015	4792	Bertie	NC	37 091	4868	Hertford	NC
37	017	4794	Bladen	NC	37 093	4870	Hoke	NC
37	019	4796	Brunswick	NC	37 095	4872	Hyde	NC
37	021	4798	Buncombe	NC	37 097	4874	Iredell	NC
37	023	4800	Burke	NC	37 099	4876	Jackson	NC
37	025	4802	Cabarrus	NC	37 101	4878	Johnston	NC
37	027	4804	Caldwell	NC	37 103	4880	Jones	NC
37	029	4806	Camden	NC	37 105	4882	Lee	NC
37	031	4808	Carteret	NC	37 107	4884	Lenoir	NC
37	033	4810	Caswell	NC	37 109	4886	Lincoln	NC
37	035	4812	Catawba	NC	37 111	4888	McDowell	NC
37	037	4814	Chatham	NC	37 113	4890	Macon	NC
37	039	4816	Cherokee	NC	37 115	4892	Madison	NC
37	041	4818	Chowan	NC	37 117	4894	Martin	NC
37	043	4820	Clay	NC	37 119	4896	Mecklenburg	NC
37	045	4822	Cleveland	NC	37 121	4898	Mitchell	NC
37	047	4824	Columbus	NC	37 123	4900	Montgomery	NC
37	049	4826	Craven	NC	37 125	4902	Moore	NC
37	051	4828	Cumberland	NC	37 127	4904	Nash	NC
37	053	4830	Currituck	NC	37 129	4906	New Hanover	NC
37	055	4832	Dare	NC	37 131	4908	Northampton	NC

FIP	PS	CENID	County	State	FIPS	CENID	County	State
37	133	4910	Onslow	NC	38 009	4986	Bottineau	ND
37	135	4912	Orange	NC	38 011	4988	Bowman	ND
37	137	4914	Pamlico	NC	38 013	4990	Burke	ND
37	139	4916	Pasquotank	NC	38 015	4992	Burleigh	ND
37	141	4918	Pender	NC	38 017	4994	Cass	ND
37	143	4920	Perquimans	NC	38 019	4996	Cavalier	ND
37	145	4922	Person	NC	38 021	4998	Dickey	ND
37	147	4924	Pitt	NC	38 023	5000	Divide	ND
37	149	4926	Polk	NC	38 025	5002	Dunn	ND
37	151	4928	Randolph	NC	38 027	5004	Eddy	ND
37	153	4930	Richmond	NC	38 029	5006	Emmons	ND
37	155	4932	Robeson	NC	38 031	5008	Foster	ND
37	157	4934	Rockingham	NC	38 033	5010	Golden Valley	ND
37	159	4936	Rowan	NC	38 035	5012	Grand Forks	ND
37	161	4938	Rutherford	NC	38 037	5014	Grant	ND
37	163	4940	Sampson	NC	38 039	5016	Griggs	ND
37	165	4942	Scotland	NC	38 041	5018	Hettinger	ND
37	167	4944	Stanly	NC	38 043	5020	Kidder	ND
37	169	4946	Stokes	NC	38 045	5022	LaMoure	ND
37	171	4948	Surry	NC	38 047	5024	Logan	ND
37	173	4950	Swain	NC	38 049	5026	McHenry	ND
37	175	4952	Transylvania	NC	38 051	5028	McIntosh	ND
37	177	4954	Tyrrell	NC	38 053	5030	McKenzie	ND
37	179	4956	Union	NC	38 055	5032	McLean	ND
37	181	4958	Vance	NC	38 057	5034	Mercer	ND
37	183	4960	Wake	NC	38 059	5036	Morton	ND
37	185	4962	Warren	NC	38 061	5038	Mountrail	ND
37	187	4964	Washington	NC	38 063	5040	Nelson	ND
37	189	4966	Watauga	NC	38 065	5042	Oliver	ND
37	191	4968	Wayne	NC	38 067	5044	Pembina	ND
37	193	4970	Wilkes	NC	38 069	5046	Pierce	ND
37	195	4972	Wilson	NC	38 071	5048	Ramsey	ND
37	197	4974	Yadkin	NC	38 073	5050	Ransom	ND
37	199	4976	Yancey	NC	38 075	5052	Renville	ND
38	001	4978	Adams	ND	38 077	5054	Richland	ND
38	003	4980	Barnes	ND	38 079	5056	Rolette	ND
38	005	4982	Benson	ND	38 081	5058	Sargent	ND
38	007	4984	Billings	ND	38 083	5060	Sheridan	ND

FIP	PS	CENID	County	State	FIPS	CENID	County	State
38	085	5062	Sioux	ND	39 055	5138	Geauga	ОН
38	087	5064	Slope	ND	39 057	5140	Greene	OH
38	089	5066	Stark	ND	39 059	5142	Guernsey	OH
38	091	5068	Steele	ND	39 061	5144	Hamilton	OH
38	093	5070	Stutsman	ND	39 063	5146	Hancock	OH
38	095	5072	Towner	ND	39 065	5148	Hardin	OH
38	097	5074	Traill	ND	39 067	5150	Harrison	OH
38	099	5076	Walsh	ND	39 069	5152	Henry	OH
38	101	5078	Ward	ND	39 071	5154	Highland	OH
38	103	5080	Wells	ND	39 073	5156	Hocking	OH
38	105	5082	Williams	ND	39 075	5158	Holmes	OH
39	001	5084	Adams	OH	39 077	5160	Huron	OH
39	003	5086	Allen	OH	39 079	5162	Jackson	OH
39	005	5088	Ashland	OH	39 081	5164	Jefferson	OH
39	007	5090	Ashtabula	OH	39 083	5166	Knox	OH
39	009	5092	Athens	OH	39 085	5168	Lake	OH
39	011	5094	Auglaize	OH	39 087	5170	Lawrence	OH
39	013	5096	Belmont	OH	39 089	5172	Licking	OH
39	015	5098	Brown	OH	39 091	5174	Logan	OH
39	017	5100	Butler	OH	39 093	5176	Lorain	OH
39	019	5102	Carroll	OH	39 095	5178	Lucas	OH
39	021	5104	Champaign	OH	39 097	5180	Madison	OH
39	023	5106	Clark	OH	39 099	5182	Mahoning	OH
39	025	5108	Clermont	OH	39 101	5184	Marion	OH
39	027	5110	Clinton	OH	39 103	5186	Medina	OH
39	029	5112	Columbiana	OH	39 105	5188	Meigs	OH
39	031	5114	Coshocton	OH	39 107	5190	Mercer	OH
39	033	5116	Crawford	OH	39 109	5192	Miami	OH
39	035	5118	Cuyahoga	OH	39 111	5194	Monroe	OH
39	037	5120	Darke	OH	39 113	5196	Montgomery	OH
39	039	5122	Defiance	OH	39 115	5198	Morgan	OH
39	041	5124	Delaware	OH	39 117	5200	Morrow	OH
39	043	5126	Erie	OH	39 119	5202	Muskingum	OH
39	045	5128	Fairfield	OH	39 121	5204	Noble	OH
39	047	5130	Fayette	OH	39 123	5206	Ottawa	OH
39	049	5132	Franklin	OH	39 125	5208	Paulding	OH
39	051	5134	Fulton	OH	39 127	5210	Perry	OH
39	053	5136	Gallia	OH	39 129	5212	Pickaway	OH

FIP	PS	CENID	County	State	FIPS	CENID	County	State
39	131	5214	Pike	ОН	40 031	5290	Comanche	ОК
39	133	5216	Portage	ОН	40 033	5292	Cotton	OK
39	135	5218	Preble	ОН	40 035	5294	Craig	OK
39	137	5220	Putnam	ОН	40 037	5296	Creek	OK
39	139	5222	Richland	ОН	40 039	5298	Custer	OK
39	141	5224	Ross	ОН	40 041	5300	Delaware	OK
39	143	5226	Sandusky	ОН	40 043	5302	Dewey	OK
39	145	5228	Scioto	OH	40 045	5304	Ellis	OK
39	147	5230	Seneca	OH	40 047	5306	Garfield	OK
39	149	5232	Shelby	OH	40 049	5308	Garvin	OK
39	151	5234	Stark	OH	40 051	5310	Grady	OK
39	153	5236	Summit	OH	40 053	5312	Grant	OK
39	155	5238	Trumbull	OH	40 055	5314	Greer	OK
39	157	5240	Tuscarawas	OH	40 057	5316	Harmon	OK
39	159	5242	Union	OH	40 059	5318	Harper	OK
39	161	5244	Van Wert	OH	40 061	5320	Haskell	OK
39	163	5246	Vinton	OH	40 063	5322	Hughes	OK
39	165	5248	Warren	OH	40 065	5324	Jackson	OK
39	167	5250	Washington	OH	40 067	5326	Jefferson	OK
39	169	5252	Wayne	OH	40 069	5328	Johnston	OK
39	171	5254	Williams	OH	40 071	5330	Кау	OK
39	173	5256	Wood	OH	40 073	5332	Kingfisher	OK
39	175	5258	Wyandot	OH	40 075	5334	Kiowa	OK
40	001	5260	Adair	OK	40 077	5336	Latimer	OK
40	003	5262	Alfalfa	OK	40 079	5338	Le Flore	OK
40	005	5264	Atoka	OK	40 081	5340	Lincoln	OK
40	007	5266	Beaver	OK	40 083	5342	Logan	OK
40	009	5268	Beckham	OK	40 085	5344	Love	OK
40	011	5270	Blaine	OK	40 087	5346	McClain	OK
40	013	5272	Bryan	OK	40 089	5348	McCurtain	OK
40	015	5274	Caddo	OK	40 091	5350	McIntosh	OK
40	017	5276	Canadian	OK	40 093	5352	Major	OK
40	019	5278	Carter	OK	40 095	5354	Marshall	OK
40	021	5280	Cherokee	OK	40 097	5356	Mayes	OK
40	023	5282	Choctaw	OK	40 099	5358	Murray	OK
	025	5284	Cimarron	OK	40 101	5360	Muskogee	OK
	027	5286	Cleveland	OK	40 103	5362	Noble	OK
40	029	5288	Coal	OK	40 105	5364	Nowata	OK

FIP	S	CENID	County	State	FIPS	CENID	County	State
40	107	5366	Okfuskee	OK	41 029	5442	Jackson	OR
40	109	5368	Oklahoma	OK	41 031	5444	Jefferson	OR
40	111	5370	Okmulgee	OK	41 033	5446	Josephine	OR
40	113	5372	Osage	ОК	41 035	5448	Klamath	OR
40	115	5374	Ottawa	ОК	41 037	5450	Lake	OR
40	117	5376	Pawnee	ОК	41 039	5452	Lane	OR
40	119	5378	Payne	OK	41 041	5454	Lincoln	OR
40	121	5380	Pittsburg	OK	41 043	5456	Linn	OR
40	123	5382	Pontotoc	OK	41 045	5458	Malheur	OR
40	125	5384	Pottawatomie	OK	41 047	5460	Marion	OR
40	127	5386	Pushmataha	OK	41 049	5462	Morrow	OR
40	129	5388	Roger Mills	OK	41 051	5464	Multnomah	OR
40	131	5390	Rogers	OK	41 053	5466	Polk	OR
40	133	5392	Seminole	OK	41 055	5468	Sherman	OR
40	135	5394	Sequoyah	OK	41 057	5470	Tillamook	OR
40	137	5396	Stephens	OK	41 059	5472	Umatilla	OR
40	139	5398	Texas	OK	41 061	5474	Union	OR
40	141	5400	Tillman	OK	41 063	5476	Wallowa	OR
40	143	5402	Tulsa	OK	41 065	5478	Wasco	OR
40	145	5404	Wagoner	OK	41 067	5480	Washington	OR
40	147	5406	Washington	OK	41 069	5482	Wheeler	OR
40	149	5408	Washita	OK	41 071	5484	Yamhill	OR
40	151	5410	Woods	OK	42 001	5486	Adams	PA
40	153	5412	Woodward	OK	42 003	5488	Allegheny	PA
41	001	5414	Baker	OR	42 005	5490	Armstrong	PA
41	003	5416	Benton	OR	42 007	5492	Beaver	PA
41	005	5418	Clackamas	OR	42 009	5494	Bedford	PA
41	007	5420	Clatsop	OR	42 011	5496	Berks	PA
41	009	5422	Columbia	OR	42 013	5498	Blair	PA
41	011	5424	Coos	OR	42 015	5500	Bradford	PA
41	013	5426	Crook	OR	42 017	5502	Bucks	PA
41	015	5428	Curry	OR	42 019	5504	Butler	PA
41	017	5430	Deschutes	OR	42 021	5506	Cambria	PA
41	019	5432	Douglas	OR	42 023	5508	Cameron	PA
41	021	5434	Gilliam	OR	42 025	5510	Carbon	PA
41	023	5436	Grant	OR	42 027	5512	Centre	PA
41	025	5438	Harney	OR	42 029	5514	Chester	PA
41	027	5440	Hood River	OR	42 031	5516	Clarion	PA

FIF	PS	CENID	County	State	FIP	S	CENID	County	State
42	033	5518	Clearfield	PA	42	109	5594	Snyder	PA
42	035	5520	Clinton	PA	42	111	5596	Somerset	PA
42	037	5522	Columbia	PA	42	113	5598	Sullivan	PA
42	039	5524	Crawford	PA	42	115	5600	Susquehanna	PA
42	041	5526	Cumberland	PA	42	117	5602	Tioga	PA
42	043	5528	Dauphin	PA	42	119	5604	Union	PA
42	045	5530	Delaware	PA	42	121	5606	Venango	PA
42	047	5532	Elk	PA	42	123	5608	Warren	PA
42	049	5534	Erie	PA	42	125	5610	Washington	PA
42	051	5536	Fayette	PA	42	127	5612	Wayne	PA
42	053	5538	Forest	PA	42	129	5614	Westmoreland	PA
42	055	5540	Franklin	PA	42	131	5616	Wyoming	PA
42	057	5542	Fulton	PA	42	133	5618	York	PA
42	059	5544	Greene	PA	44	001	5620	Bristol	RI
42	061	5546	Huntingdon	PA	44	003	5622	Kent	RI
42	063	5548	Indiana	PA	44	005	5624	Newport	RI
42	065	5550	Jefferson	PA	44	007	5626	Providence	RI
42	067	5552	Juniata	PA	44	009	5628	Washington	RI
42	069	5554	Lackawanna	PA	45	001	5630	Abbeville	SC
42	071	5556	Lancaster	PA	45	003	5632	Aiken	SC
42	073	5558	Lawrence	PA	45	005	5634	Allendale	SC
42	075	5560	Lebanon	PA	45	007	5636	Anderson	SC
42	077	5562	Lehigh	PA	45	009	5638	Bamberg	SC
42	079	5564	Luzerne	PA	45	011	5640	Barnwell	SC
42	081	5566	Lycoming	PA	45	013	5642	Beaufort	SC
42	083	5568	McKean	PA	45	015	5644	Berkeley	SC
42	085	5570	Mercer	PA	45	017	5646	Calhoun	SC
42	087	5572	Mifflin	PA	45	019	5648	Charleston	SC
42	089	5574	Monroe	PA	45	021	5650	Cherokee	SC
42	091	5576	Montgomery	PA	45	023	5652	Chester	SC
42	093	5578	Montour	PA	45	025	5654	Chesterfield	SC
42	095	5580	Northampton	PA	45	027	5656	Clarendon	SC
42	097	5582	Northumberland	PA	45	029	5658	Colleton	SC
42	099	5584	Perry	PA	45	031	5660	Darlington	SC
42	101	5586	Philadelphia	PA		033	5662	Dillon	SC
42	103	5588	Pike	PA	45	035	5664	Dorchester	SC
42	105	5590	Potter	PA		037	5666	Edgefield	SC
42	107	5592	Schuylkill	PA	45	039	5668	Fairfield	SC

FIF	PS	CENID	County	State	FIPS	CENID	County	State
45	041	5670	Florence	SC	46 027	5746	Clay	SD
45	043	5672	Georgetown	SC	46 029	5748	Codington	SD
45	045	5674	Greenville	SC	46 031	5750	Corson	SD
45	047	5676	Greenwood	SC	46 033	5752	Custer	SD
45	049	5678	Hampton	SC	46 035	5754	Davison	SD
45	051	5680	Horry	SC	46 037	5756	Day	SD
45	053	5682	Jasper	SC	46 039	5758	Deuel	SD
45	055	5684	Kershaw	SC	46 041	5760	Dewey	SD
45	057	5686	Lancaster	SC	46 043	5762	Douglas	SD
45	059	5688	Laurens	SC	46 045	5764	Edmunds	SD
45	061	5690	Lee	SC	46 047	5766	Fall River	SD
45	063	5692	Lexington	SC	46 049	5768	Faulk	SD
45	065	5694	McCormick	SC	46 051	5770	Grant	SD
45	067	5696	Marion	SC	46 053	5772	Gregory	SD
45	069	5698	Marlboro	SC	46 055	5774	Haakon	SD
45	071	5700	Newberry	SC	46 057	5776	Hamlin	SD
45	073	5702	Oconee	SC	46 059	5778	Hand	SD
45	075	5704	Orangeburg	SC	46 061	5780	Hanson	SD
45	077	5706	Pickens	SC	46 063	5782	Harding	SD
45	079	5708	Richland	SC	46 065	5784	Hughes	SD
45	081	5710	Saluda	SC	46 067	5786	Hutchinson	SD
45	083	5712	Spartanburg	SC	46 069	5788	Hyde	SD
45	085	5714	Sumter	SC	46 071	5790	Jackson	SD
45	087	5716	Union	SC	46 073	5792	Jerauld	SD
45	089	5718	Williamsburg	SC	46 075	5794	Jones	SD
45	091	5720	York	SC	46 077	5796	Kingsbury	SD
46	003	5722	Aurora	SD	46 079	5798	Lake	SD
46	005	5724	Beadle	SD	46 081	5800	Lawrence	SD
46	007	5726	Bennett	SD	46 083	5802	Lincoln	SD
46	009	5728	Bon Homme	SD	46 085	5804	Lyman	SD
46	011	5730	Brookings	SD	46 087	5806	McCook	SD
46	013	5732	Brown	SD	46 089	5808	McPherson	SD
46	015	5734	Brule	SD	46 091	5810	Marshall	SD
46	017	5736	Buffalo	SD	46 093	5812	Meade	SD
46	019	5738	Butte	SD	46 095	5814	Mellette	SD
46	021	5740	Campbell	SD	46 097	5816	Miner	SD
46	023	5742	Charles Mix	SD	46 099	5818	Minnehaha	SD
46	025	5744	Clark	SD	46 101	5820	Moody	SD

FIF	PS	CENID	County	State	FIPS	CENID	County	State
46	103	5822	Pennington	SD	47 0	)45 5898	Dyer	TN
46	105	5824	Perkins	SD	47 0	047 5900	Fayette	TN
46	107	5826	Potter	SD	47 0	949 5902	Fentress	TN
46	109	5828	Roberts	SD	47 0	51 5904	Franklin	TN
46	111	5830	Sanborn	SD	47 0	53 5906	Gibson	TN
46	113	5832	Shannon	SD	47 0	55 5908	Giles	TN
46	115	5834	Spink	SD	47 0	57 5910	Grainger	TN
46	117	5836	Stanley	SD	47 0	)59 5912	Greene	TN
46	119	5838	Sully	SD	47 0	)61 5914	Grundy	TN
46	121	5840	Todd	SD	47 0	63 5916	Hamblen	TN
46	123	5842	Tripp	SD	47 0	65 5918	Hamilton	TN
46	125	5844	Turner	SD	47 0	67 5920	Hancock	TN
46	127	5846	Union	SD	47 0	69 5922	Hardeman	TN
46	129	5848	Walworth	SD	47 0	)71 5924	Hardin	TN
46	135	5850	Yankton	SD	47 0	)73 5926	Hawkins	TN
46	137	5852	Ziebach	SD	47 0	)75 5928	Haywood	TN
47	001	5854	Anderson	ΤN	47 0	077 5930	Henderson	TN
47	003	5856	Bedford	ΤN	47 0	)79 5932	Henry	TN
47	005	5858	Benton	ΤN	47 0	)81 5934	Hickman	TN
47	007	5860	Bledsoe	TN	47 0	)83 5936	Houston	TN
47	009	5862	Blount	TN	47 0	)85 5938	Humphreys	TN
47	011	5864	Bradley	ΤN	47 0	87 5940	Jackson	TN
47	013	5866	Campbell	ΤN	47 0	89 5942	Jefferson	TN
47	015	5868	Cannon	ΤN	47 0	91 5944	Johnson	TN
47	017	5870	Carroll	ΤN	47 0	93 5946	Knox	TN
47	019	5872	Carter	ΤN	47 0	95 5948	Lake	TN
47	021	5874	Cheatham	ΤN	47 0	97 5950	Lauderdale	TN
47	023	5876	Chester	ΤN	47 0	99 5952	Lawrence	TN
47	025	5878	Claiborne	ΤN	47 1	01 5954	Lewis	TN
47	027	5880	Clay	ΤN	47 1	03 5956	Lincoln	TN
47	029	5882	Cocke	ΤN	47 1	05 5958	Loudon	TN
47	031	5884	Coffee	ΤN	47 1	07 5960	McMinn	TN
47	033	5886	Crockett	ΤN	47 1	09 5962	McNairy	TN
47	035	5888	Cumberland	ΤN	47 1	11 5964	Macon	TN
47	037	5890	Davidson	ΤN	47 1	13 5966	Madison	TN
47	039	5892	Decatur	ΤN	47 1	15 5968	Marion	TN
47	041	5894	DeKalb	ΤN	47 1	17 5970	Marshall	TN
47	043	5896	Dickson	ΤN	47 1	19 5972	Maury	TN

FIPS	CENID	County	State	FIPS	CENID	County	State
47 12	1 5974	Meigs	TN	48 007	6050	Aransas	ТХ
47 12	3 5976	Monroe	TN	48 009	6052	Archer	ТХ
47 12	5 5978	Montgomery	TN	48 011	6054	Armstrong	ТХ
47 12	7 5980	Moore	TN	48 013	6056	Atascosa	ТХ
47 12	9 5982	Morgan	TN	48 015	6058	Austin	ТХ
47 13	1 5984	Obion	TN	48 017	6060	Bailey	ТХ
47 13	3 5986	Overton	TN	48 019	6062	Bandera	ТХ
47 13	5 5988	Perry	TN	48 021	6064	Bastrop	ТХ
47 13	7 5990	Pickett	TN	48 023	6066	Baylor	ТХ
47 13	9 5992	Polk	TN	48 025	6068	Bee	ТХ
47 14	1 5994	Putnam	TN	48 027	6070	Bell	ТХ
47 14	3 5996	Rhea	TN	48 029	6072	Bexar	ТХ
47 14	5 5998	Roane	TN	48 031	6074	Blanco	ТХ
47 14	7 6000	Robertson	TN	48 033	6076	Borden	ТХ
47 14	9 6002	Rutherford	TN	48 035	6078	Bosque	ΤX
47 15	1 6004	Scott	TN	48 037	6080	Bowie	ТХ
47 15	3 6006	Sequatchie	TN	48 039	6082	Brazoria	ТХ
47 15	5 6008	Sevier	TN	48 041	6084	Brazos	ТХ
47 15	7 6010	Shelby	TN	48 043	6086	Brewster	ТХ
47 15	9 6012	Smith	TN	48 045	6088	Briscoe	ТХ
47 16	1 6014	Stewart	TN	48 047	6090	Brooks	ТХ
47 16	3 6016	Sullivan	TN	48 049	6092	Brown	ТХ
47 16	5 6018	Sumner	TN	48 051	6094	Burleson	ТХ
47 16	7 6020	Tipton	TN	48 053	6096	Burnet	ТХ
47 16	9 6022	Trousdale	TN	48 055	6098	Caldwell	ТХ
47 17	1 6024	Unicoi	TN	48 057	6100	Calhoun	ТХ
47 17	3 6026	Union	TN	48 059	6102	Callahan	ТХ
47 17	5 6028	Van Buren	TN	48 061	6104	Cameron	TX
47 17	7 6030	Warren	TN	48 063	6106	Camp	ТХ
47 17	9 6032	Washington	TN	48 065	6108	Carson	ТХ
47 18	1 6034	Wayne	TN	48 067	6110	Cass	TX
47 18	3 6036	Weakley	TN	48 069	6112	Castro	TX
47 18	5 6038	White	TN	48 071	6114	Chambers	TX
47 18	7 6040	Williamson	TN	48 073	6116	Cherokee	ТХ
47 18	9 6042	Wilson	TN	48 075	6118	Childress	ТХ
48 00	1 6044	Anderson	ТХ	48 077	6120	Clay	ТХ
48 00	3 6046	Andrews	ТХ	48 079	6122	Cochran	TX
48 00	5 6048	Angelina	ТХ	48 081	6124	Coke	ТХ

FIP	S	CENID	County	State	FIPS	CENID	County	State
48	083	6126	Coleman	ТХ	48 159	6202	Franklin	ТХ
48	085	6128	Collin	ТХ	48 161	6204	Freestone	ТХ
48	087	6130	Collingsworth	ТХ	48 163	6206	Frio	ТХ
48	089	6132	Colorado	ТХ	48 165	6208	Gaines	ТХ
48	091	6134	Comal	ТХ	48 167	6210	Galveston	ТХ
48	093	6136	Comanche	ТХ	48 169	6212	Garza	ТХ
48	095	6138	Concho	ТХ	48 171	6214	Gillespie	ТХ
48	097	6140	Cooke	ТХ	48 173	6216	Glasscock	ТХ
48	099	6142	Coryell	ТХ	48 175	6218	Goliad	ТХ
48	101	6144	Cottle	ТХ	48 177	6220	Gonzales	ТХ
48	103	6146	Crane	ТХ	48 179	6222	Gray	ТХ
48	105	6148	Crockett	ТХ	48 181	6224	Grayson	ТХ
48	107	6150	Crosby	ТХ	48 183	6226	Gregg	ТХ
48	109	6152	Culberson	ТХ	48 185	6228	Grimes	ТХ
48	111	6154	Dallam	ТХ	48 187	6230	Guadalupe	ТХ
48	113	6156	Dallas	ТХ	48 189	6232	Hale	ТХ
48	115	6158	Dawson	ТХ	48 191	6234	Hall	ТХ
48	117	6160	Deaf Smith	ТХ	48 193	6236	Hamilton	ТХ
48	119	6162	Delta	ТХ	48 195	6238	Hansford	ТХ
48	121	6164	Denton	ТХ	48 197	6240	Hardeman	ТХ
48	123	6166	DeWitt	ТХ	48 199	6242	Hardin	ТХ
48	125	6168	Dickens	ТХ	48 201	6244	Harris	ТХ
48	127	6170	Dimmit	ТХ	48 203	6246	Harrison	ТХ
48	129	6172	Donley	ТХ	48 205	6248	Hartley	ТХ
48	131	6174	Duval	ТХ	48 207	6250	Haskell	ТХ
48	133	6176	Eastland	ТХ	48 209	6252	Hays	ТХ
48	135	6178	Ector	ТХ	48 211	6254	Hemphill	ТХ
48	137	6180	Edwards	ТХ	48 213	6256	Henderson	ТХ
48	139	6182	Ellis	ТХ	48 215	6258	Hidalgo	ТХ
48	141	6184	El Paso	ТХ	48 217	6260	Hill	ТХ
48	143	6186	Erath	ТХ	48 219	6262	Hockley	ТХ
48	145	6188	Falls	ТХ	48 221	6264	Hood	ТХ
48	147	6190	Fannin	ТХ	48 223	6266	Hopkins	ТХ
48	149	6192	Fayette	ТХ	48 225	6268	Houston	ТХ
48	151	6194	Fisher	ТХ	48 227	6270	Howard	ТХ
48	153	6196	Floyd	ТХ	48 229	6272	Hudspeth	ТХ
48	155	6198	Foard	ТХ	48 231	6274	Hunt	ТХ
48	157	6200	Fort Bend	ТХ	48 233	6276	Hutchinson	ТХ

FIF	PS	CENID	County	State	FIPS	CENID	County	State
48	235	6278	Irion	ТХ	48 311	6354	McMullen	ТХ
48	237	6280	Jack	ТХ	48 313	6356	Madison	ТХ
48	239	6282	Jackson	ТХ	48 315	6358	Marion	ТХ
48	241	6284	Jasper	ТХ	48 317	6360	Martin	ТХ
48	243	6286	Jeff Davis	ТХ	48 319	6362	Mason	ТХ
48	245	6288	Jefferson	ТХ	48 321	6364	Matagorda	ТХ
48	247	6290	Jim Hogg	ТХ	48 323	6366	Maverick	ТХ
48	249	6292	Jim Wells	ТХ	48 325	6368	Medina	ТХ
48	251	6294	Johnson	ТХ	48 327	6370	Menard	ТХ
48	253	6296	Jones	ТХ	48 329	6372	Midland	ТХ
48	255	6298	Karnes	ТХ	48 331	6374	Milam	ТХ
48	257	6300	Kaufman	ТХ	48 333	6376	Mills	ТХ
48	259	6302	Kendall	ТХ	48 335	6378	Mitchell	ТХ
48	261	6304	Kenedy	ТХ	48 337	6380	Montague	ТХ
48	263	6306	Kent	ТХ	48 339	6382	Montgomery	ТХ
48	265	6308	Kerr	ТХ	48 341	6384	Moore	ТХ
48	267	6310	Kimble	ТХ	48 343	6386	Morris	ТХ
48	269	6312	King	ТХ	48 345	6388	Motley	ТХ
48	271	6314	Kinney	ТХ	48 347	6390	Nacogdoches	ТХ
48	273	6316	Kleberg	ТХ	48 349	6392	Navarro	ТХ
48	275	6318	Knox	ТХ	48 351	6394	Newton	ТХ
48	277	6320	Lamar	ТХ	48 353	6396	Nolan	ТХ
48	279	6322	Lamb	ТХ	48 355	6398	Nueces	ТХ
48	281	6324	Lampasas	ТХ	48 357	6400	Ochiltree	ТХ
48	283	6326	La Salle	ТХ	48 359	6402	Oldham	ТХ
48	285	6328	Lavaca	ТХ	48 361	6404	Orange	ТХ
48	287	6330	Lee	ТХ	48 363	6406	Palo Pinto	ТХ
48	289	6332	Leon	ТХ	48 365	6408	Panola	ТХ
48	291	6334	Liberty	ТХ	48 367	6410	Parker	ТХ
48	293	6336	Limestone	ТХ	48 369	6412	Parmer	ТХ
48	295	6338	Lipscomb	ТХ	48 371	6414	Pecos	ТХ
48	297	6340	Live Oak	ТХ	48 373	6416	Polk	ТХ
48	299	6342	Llano	ТХ	48 375	6418	Potter	ТХ
48	301	6344	Loving	ТХ	48 377	6420	Presidio	ТХ
48	303	6346	Lubbock	ТХ	48 379	6422	Rains	ТХ
48	305	6348	Lynn	ТХ	48 381	6424	Randall	ТХ
48	307	6350	McCulloch	ТХ	48 383	6426	Reagan	ТХ
48	309	6352	McLennan	ТХ	48 385	6428	Real	ТХ

FIP	S	CENID	County	State	FIPS	CENID	County	State
48	387	6430	Red River	ТХ	48 463	6506	Uvalde	ТΧ
48	389	6432	Reeves	ТΧ	48 465	6508	Val Verde	ТΧ
48	391	6434	Refugio	ТΧ	48 467	6510	Van Zandt	ТΧ
48	393	6436	Roberts	ТΧ	48 469	6512	Victoria	ТΧ
48	395	6438	Robertson	ТΧ	48 471	6514	Walker	ТХ
48	397	6440	Rockwall	ТΧ	48 473	6516	Waller	ТΧ
48	399	6442	Runnels	ТΧ	48 475	6518	Ward	ТΧ
48	401	6444	Rusk	ТΧ	48 477	6520	Washington	ТΧ
48	403	6446	Sabine	ТΧ	48 479	6522	Webb	ТΧ
48	405	6448	San Augustine	ТХ	48 481	6524	Wharton	ТΧ
48	407	6450	San Jacinto	ТΧ	48 483	6526	Wheeler	ТΧ
48	409	6452	San Patricio	ТΧ	48 485	6528	Wichita	ТΧ
48	411	6454	San Saba	ТΧ	48 487	6530	Wilbarger	ТΧ
48	413	6456	Schleicher	ТХ	48 489	6532	Willacy	ТΧ
48	415	6458	Scurry	ТΧ	48 491	6534	Williamson	ТΧ
48	417	6460	Shackelford	ТХ	48 493	6536	Wilson	ТΧ
48	419	6462	Shelby	ТΧ	48 495	6538	Winkler	ТΧ
48	421	6464	Sherman	ТΧ	48 497	6540	Wise	ТΧ
48	423	6466	Smith	ТΧ	48 499	6542	Wood	ТΧ
48	425	6468	Somervell	ТΧ	48 501	6544	Yoakum	ТΧ
48	427	6470	Starr	ТΧ	48 503	6546	Young	ТΧ
48	429	6472	Stephens	ТΧ	48 505	6548	Zapata	ТΧ
48	431	6474	Sterling	ТΧ	48 507	6550	Zavala	ТΧ
48	433	6476	Stonewall	ТΧ	49 001	6552	Beaver	UT
48	435	6478	Sutton	ТΧ	49 003	6554	Box Elder	UT
48	437	6480	Swisher	ТΧ	49 005	6556	Cache	UT
48	439	6482	Tarrant	ТΧ	49 007	6558	Carbon	UT
48	441	6484	Taylor	ТΧ	49 009	6560	Daggett	UT
48	443	6486	Terrell	ТΧ	49 011	6562	Davis	UT
48	445	6488	Terry	ТΧ	49 013	6564	Duchesne	UT
48	447	6490	Throckmorton	ТΧ	49 015	6566	Emery	UT
48	449	6492	Titus	ТΧ	49 017	6568	Garfield	UT
48	451	6494	Tom Green	ТΧ	49 019	6570	Grand	UT
48	453	6496	Travis	ТΧ	49 021	6572	Iron	UT
48	455	6498	Trinity	ТΧ	49 023	6574	Juab	UT
48	457	6500	Tyler	ТΧ	49 025	6576	Kane	UT
48	459	6502	Upshur	ТΧ	49 027	6578	Millard	UT
48	461	6504	Upton	ТХ	49 029	6580	Morgan	UT

FIF	PS -	CENID	County	State	FIPS	CENID	County	State
49	031	6582	Piute	UT	51 021	6658	Bland	VA
49	033	6584	Rich	UT	51 023	6660	Botetourt	VA
49	035	6586	Salt Lake	UT	51 025	6662	Brunswick	VA
49	037	6588	San Juan	UT	51 027	6664	Buchanan	VA
49	039	6590	Sanpete	UT	51 029	6666	Buckingham	VA
49	041	6592	Sevier	UT	51 031	6668	Campbell	VA
49	043	6594	Summit	UT	51 033	6670	Caroline	VA
49	045	6596	Tooele	UT	51 035	6672	Carroll	VA
49	047	6598	Uintah	UT	51 036	6674	Charles City	VA
49	049	6600	Utah	UT	51 037	6676	Charlotte	VA
49	051	6602	Wasatch	UT	51 041	6678	Chesterfield	VA
49	053	6604	Washington	UT	51 043	6680	Clarke	VA
49	055	6606	Wayne	UT	51 045	6682	Craig	VA
49	057	6608	Weber	UT	51 047	6684	Culpeper	VA
50	001	6610	Addison	VT	51 049	6686	Cumberland	VA
50	003	6612	Bennington	VT	51 051	6688	Dickenson	VA
50	005	6614	Caledonia	VT	51 053	6690	Dinwiddie	VA
50	007	6616	Chittenden	VT	51 057	6692	Essex	VA
50	009	6618	Essex	VT	51 059	6694	Fairfax	VA
50	011	6620	Franklin	VT	51 061	6696	Fauquier	VA
50	013	6622	Grand Isle	VT	51 063	6698	Floyd	VA
50	015	6624	Lamoille	VT	51 065	6700	Fluvanna	VA
50	017	6626	Orange	VT	51 067	6702	Franklin	VA
50	019	6628	Orleans	VT	51 069	6704	Frederick	VA
50	021	6630	Rutland	VT	51 071	6706	Giles	VA
50	023	6632	Washington	VT	51 073	6708	Gloucester	VA
50	025	6634	Windham	VT	51 075	6710	Goochland	VA
50	027	6636	Windsor	VT	51 077	6712	Grayson	VA
51	001	6638	Accomack	VA	51 079	6714	Greene	VA
51	003	6640	Albemarle	VA	51 081	6716	Greensville	VA
51	005	6642	Alleghany	VA	51 083	6718	Halifax	VA
51	007	6644	Amelia	VA	51 085	6720	Hanover	VA
51	009	6646	Amherst	VA	51 087	6722	Henrico	VA
51	011	6648	Appomattox	VA	51 089	6724	Henry	VA
51	013	6650	Arlington	VA	51 091	6726	Highland	VA
51	015	6652	Augusta	VA	51 093	6728	Isle of Wight	VA
51	017	6654	Bath	VA	51 095	6730	James City	VA
51	019	6656	Bedford	VA	51 097	6732	King and Queen	VA

FIF	PS	CENID	County	State	FIF	PS	CENID	County	State
51	099	6734	King George	VA	51	181	6810	Surry	VA
51	101	6736	King William	VA	51	183	6812	Sussex	VA
51	103	6738	Lancaster	VA	51	185	6814	Tazewell	VA
51	105	6740	Lee	VA	51	187	6816	Warren	VA
51	107	6742	Loudoun	VA	51	191	6818	Washington	VA
51	109	6744	Louisa	VA	51	193	6820	Westmoreland	VA
51	111	6746	Lunenburg	VA	51	195	6822	Wise	VA
51	113	6748	Madison	VA	51	197	6824	Wythe	VA
51	115	6750	Mathews	VA	51	199	6826	York	VA
51	117	6752	Mecklenburg	VA	51	510	6828	Alexandria	VA
51	119	6754	Middlesex	VA	51	515	6830	Bedford	VA
51	121	6756	Montgomery	VA	51	520	6832	Bristol	VA
51	125	6758	Nelson	VA	51	530	6834	Buena Vista	VA
51	127	6760	New Kent	VA	51	540	6836	Charlottesville	VA
51	131	6762	Northampton	VA	51	550	6838	Chesapeake	VA
51	133	6764	Northumberland	VA	51	560	6840	Clifton Forge	VA
51	135	6766	Nottoway	VA	51	570	6842	Colonial Heights	VA
51	137	6768	Orange	VA	51	580	6844	Covington	VA
51	139	6770	Page	VA	51	590	6846	Danville	VA
51	141	6772	Patrick	VA	51	595	6848	Emporia	VA
51	143	6774	Pittsylvania	VA	51	600	6850	Fairfax	VA
51	145	6776	Powhatan	VA	51	610	6852	Falls Church	VA
51	147	6778	Prince Edward	VA	51	620	6854	Franklin	VA
51	149	6780	Prince George	VA	51	630	6856	Fredericksburg	VA
51	153	6782	Prince William	VA	51	640	6858	Galax	VA
51	155	6784	Pulaski	VA	51	650	6860	Hampton	VA
51	157	6786	Rappahannock	VA	51	660	6862	Harrisonburg	VA
51	159	6788	Richmond	VA	51	670	6864	Hopewell	VA
51	161	6790	Roanoke	VA	51	678	6866	Lexington	VA
51	163	6792	Rockbridge	VA	51	680	6868	Lynchburg	VA
51	165	6794	Rockingham	VA	51	683	6870	Manassas	VA
51	167	6796	Russell	VA	51	685	6872	Manassas Park	VA
51	169	6798	Scott	VA	51	690	6874	Martinsville	VA
51	171	6800	Shenandoah	VA	51	700	6876	Newport News	VA
51	173	6802	Smyth	VA	51	710	6878	Norfolk	VA
51	175	6804	Southampton	VA	51	720	6880	Norton	VA
51	177	6806	Spotsylvania	VA	51	730	6882	Petersburg	VA
51	179	6808	Stafford	VA	51	735	6884	Poquoson	VA

FIF	PS	CENID	County	State	FIPS	CENID	County	State
51	740	6886	Portsmouth	VA	53 055	6962	San Juan	WA
51	750	6888	Radford	VA	53 057	6964	Skagit	WA
51	760	6890	Richmond	VA	53 059	6966	Skamania	WA
51	770	6892	Roanoke	VA	53 061	6968	Snohomish	WA
51	775	6894	Salem	VA	53 063	6970	Spokane	WA
51	790	6896	Staunton	VA	53 065	6972	Stevens	WA
51	800	6898	Suffolk	VA	53 067	6974	Thurston	WA
51	810	6900	Virginia Beach	VA	53 069	6976	Wahkiakum	WA
51	820	6902	Waynesboro	VA	53 071	6978	Walla Walla	WA
51	830	6904	Williamsburg	VA	53 073	6980	Whatcom	WA
51	840	6906	Winchester	VA	53 075	6982	Whitman	WA
53	001	6908	Adams	WA	53 077	6984	Yakima	WA
53	003	6910	Asotin	WA	54 001	6986	Barbour	WV
53	005	6912	Benton	WA	54 003	6988	Berkeley	WV
53	007	6914	Chelan	WA	54 005	6990	Boone	WV
53	009	6916	Clallam	WA	54 007	6992	Braxton	WV
53	011	6918	Clark	WA	54 009	6994	Brooke	WV
53	013	6920	Columbia	WA	54 011	6996	Cabell	WV
53	015	6922	Cowlitz	WA	54 013	6998	Calhoun	WV
53	017	6924	Douglas	WA	54 015	7000	Clay	WV
53	019	6926	Ferry	WA	54 017	7002	Doddridge	WV
53	021	6928	Franklin	WA	54 019	7004	Fayette	WV
53	023	6930	Garfield	WA	54 021	7006	Gilmer	WV
53	025	6932	Grant	WA	54 023	7008	Grant	WV
53	027	6934	Grays Harbor	WA	54 025	7010	Greenbrier	WV
53	029	6936	Island	WA	54 027	7012	Hampshire	WV
53	031	6938	Jefferson	WA	54 029	7014	Hancock	WV
53	033	6940	King	WA	54 031	7016	Hardy	WV
53	035	6942	Kitsap	WA	54 033	7018	Harrison	WV
53	037	6944	Kittitas	WA	54 035	7020	Jackson	WV
53	039	6946	Klickitat	WA	54 037	7022	Jefferson	WV
53	041	6948	Lewis	WA	54 039	7024	Kanawha	WV
53	043	6950	Lincoln	WA	54 041	7026	Lewis	WV
53	045	6952	Mason	WA	54 043	7028	Lincoln	WV
53	047	6954	Okanogan	WA	54 045	7030	Logan	WV
53	049	6956	Pacific	WA	54 047	7032	McDowell	WV
53	051	6958	Pend Oreille	WA	54 049	7034	Marion	WV
53	053	6960	Pierce	WA	54 051	7036	Marshall	WV

FIPS	CENI	D County	State	FIPS	CENID	County	State
54 C	053 7038	Mason	WV	55 019	7114	Clark	WI
54 C	055 7040	Mercer	WV	55 021	7116	Columbia	WI
54 C	057 7042	Mineral	WV	55 023	7118	Crawford	WI
54 C	059 7044	Mingo	WV	55 025	7120	Dane	WI
54 C	061 7046	Monongalia	WV	55 027	7122	Dodge	WI
54 C	063 7048	Monroe	WV	55 029	7124	Door	WI
54 C	065 7050	Morgan	WV	55 031	7126	Douglas	WI
54 C	067 7052	Nicholas	WV	55 033	7128	Dunn	WI
54 C	069 7054	Ohio	WV	55 035	7130	Eau Claire	WI
54 C	071 7056	Pendleton	WV	55 037	7132	Florence	WI
54 C	073 7058	Pleasants	WV	55 039	7134	Fond du Lac	WI
54 C	075 7060	Pocahontas	WV	55 041	7136	Forest	WI
54 C	077 7062	Preston	WV	55 043	7138	Grant	WI
54 C	079 7064	Putnam	WV	55 045	7140	Green	WI
54 C	081 7066	Raleigh	WV	55 047	7142	Green Lake	WI
54 C	083 7068	Randolph	WV	55 049	7144	lowa	WI
54 C	085 7070	Ritchie	WV	55 051	7146	Iron	WI
54 C	087 7072	Roane	WV	55 053	7148	Jackson	WI
54 C	089 7074	Summers	WV	55 055	7150	Jefferson	WI
54 C	091 7076	Taylor	WV	55 057	7152	Juneau	WI
54 C	)93 7078	Tucker	WV	55 059	7154	Kenosha	WI
54 C	)95 7080	Tyler	WV	55 061	7156	Kewaunee	WI
54 C	097 7082	Upshur	WV	55 063	7158	La Crosse	WI
54 C	099 7084	Wayne	WV	55 065	7160	Lafayette	WI
54 1	101 7086	Webster	WV	55 067	7162	Langlade	WI
54 1	103 7088	Wetzel	WV	55 069	7164	Lincoln	WI
54 1	105 7090	Wirt	WV	55 071	7166	Manitowoc	WI
54 1	107 7092	Wood	WV	55 073	7168	Marathon	WI
54 1	109 7094	Wyoming	WV	55 075	7170	Marinette	WI
55 C	001 7096	Adams	WI	55 077	7172	Marquette	WI
55 C	003 7098	Ashland	WI	55 078	7174	Menominee	WI
55 C	005 7100	Barron	WI	55 079	7176	Milwaukee	WI
55 C	007 7102	Bayfield	WI	55 081	7178	Monroe	WI
55 C		Brown	WI	55 083	7180	Oconto	WI
	011 7106	Buffalo	WI	55 085	7182	Oneida	WI
55 C	013 7108	Burnett	WI	55 087	7184	Outagamie	WI
55 C			WI	55 089	7186	Ozaukee	WI
55 C	017 7112	Chippewa	WI	55 091	7188	Pepin	WI

FIPS	5	CENID	County	State	FIPS	CENID	County	State
55 (	093	7190	Pierce	WI	56 027	7266	Niobrara	WY
55 C	095	7192	Polk	WI	56 029	7268	Park	WY
55 (	097	7194	Portage	WI	56 031	7270	Platte	WY
55 (	099	7196	Price	WI	56 033	7272	Sheridan	WY
55 1	101	7198	Racine	WI	56 035	7274	Sublette	WY
55 1	103	7200	Richland	WI	56 037	7276	Sweetwater	WY
55 1	105	7202	Rock	WI	56 039	7278	Teton	WY
55 1	107	7204	Rusk	WI	56 041	7280	Uinta	WY
55 1	109	7206	St. Croix	WI	56 043	7282	Washakie	WY
55 1	111	7208	Sauk	WI	56 045	7284	Weston	WY
55 1	113	7210	Sawyer	WI	60 010	7286	Eastern	AS
55 1	115	7212	Shawano	WI	60 020	7288	Manu'a	AS
55 1	117	7214	Sheboygan	WI	60 030	7290	Rose Island	AS
55 1	119	7216	Taylor	WI	60 040	7292	Swains Island	AS
55 1	121	7218	Trempealeau	WI	60 050	7294	Western	AS
55 1	123	7220	Vernon	WI	66 010	7296	Guam	GU
55 1	125	7222	Vilas	WI	69 085	7298	Northern Islands	MP
55 1	127	7224	Walworth	WI	69 100	7300	Rota	MP
55 1	129	7226	Washburn	WI	69 110	7302	Saipan	MP
55 1	131	7228	Washington	WI	69 120	7304	Tinian	MP
55 1	133	7230	Waukesha	WI	72 001	7306	Adjuntas	PR
55 1	135	7232	Waupaca	WI	72 003	7308	Aguada	PR
55 1	137	7234	Waushara	WI	72 005	7310	Aguadilla	PR
55 1	139	7236	Winnebago	WI	72 007	7312	Aguas Buenas	PR
55 1	141	7238	Wood	WI	72 009	7314	Aibonito	PR
56 0	001	7240	Albany	WY	72 011	7316	Añasco	PR
56 0	203	7242	Big Horn	WY	72 013	7318	Arecibo	PR
56 (	005	7244	Campbell	WY	72 015	7320	Arroyo	PR
56 0	007	7246	Carbon	WY	72 017	7322	Barceloneta	PR
56 0	009	7248	Converse	WY	72 019	7324	Barranquitas	PR
56 (	D11	7250	Crook	WY	72 021	7326	Bayamón	PR
56 (	013	7252	Fremont	WY	72 023	7328	Cabo Rojo	PR
56 (	015	7254	Goshen	WY	72 025	7330	Caguas	PR
56 (	017	7256	Hot Springs	WY	72 027	7332	Camuy	PR
56 (	019	7258	Johnson	WY	72 029	7334	Canóvanas	PR
56 (	021	7260	Laramie	WY	72 031	7336	Carolina	PR
56 (	023	7262	Lincoln	WY	72 033	7338	Cataño	PR
56 (	025	7264	Natrona	WY	72 035	7340	Cayey	PR

FIPS	CENID	County	State	FIPS	CENID	County	State
72 037	7342	Ceiba	PR	72 111	7418	Peñuelas	PR
72 039	7344	Ciales	PR	72 113	7420	Ponce	PR
72 041	7346	Cidra	PR	72 115	7422	Quebradillas	PR
72 043	7348	Coamo	PR	72 117	7424	Rincón	PR
72 045	7350	Comerío	PR	72 119	7426	Río Grande	PR
72 047	7352	Corozal	PR	72 121	7428	Sabana Grande	PR
72 049	7354	Culebra	PR	72 123	7430	Salinas	PR
72 051	7356	Dorado	PR	72 125	7432	San Germán	PR
72 053	7358	Fajardo	PR	72 127	7434	San Juan	PR
72 054	7360	Florida	PR	72 129	7436	San Lorenzo	PR
72 055	7362	Guánica	PR	72 131	7438	San Sebastián	PR
72 057	7364	Guayama	PR	72 133	7440	Santa Isabel	PR
72 059	7366	Guayanilla	PR	72 135	7442	Toa Alta	PR
72 061	7368	Guaynabo	PR	72 137	7444	Toa Baja	PR
72 063	7370	Gurabo	PR	72 139	7446	Trujillo Alto	PR
72 065	7372	Hatillo	PR	72 141	7448	Utuado	PR
72 067	7374	Hormigueros	PR	72 143	7450	Vega Alta	PR
72 069	7376	Humacao	PR	72 145	7452	Vega Baja	PR
72 071	7378	Isabela	PR	72 147	7454	Vieques	PR
72 073	7380	Jayuya	PR	72 149	7456	Villalba	PR
72 075	7382	Juana Díaz	PR	72 151	7458	Yabucoa	PR
72 077	7384	Juncos	PR	72 153	7460	Yauco	PR
72 079	7386	Lajas	PR	74 300	7462	Midway Islands	UM
72 081	7388	Lares	PR	78 010	7464	St. Croix	VI
72 083	7390	Las Marías	PR	78 020	7466	St. John	VI
72 085	7392	Las Piedras	PR	78 030	7468	St. Thomas	VI
72 087	7394	Loíza	PR				
72 089	7396	Luquillo	PR				
72 091	7398	Manatí	PR				
72 093	7400	Maricao	PR				
72 095	7402	Maunabo	PR				
72 097	7404	Mayagüez	PR				
72 099	7406	Moca	PR				
72 101	7408	Morovis	PR				
72 103	7410	Naguabo	PR				
72 105	7412	Naranjito	PR				
72 107	7414	Orocovis	PR				
72 109	7416	Patillas	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 lowa 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 offreservation 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<sup>®</sup> files contain some field name changes from the 1992 and 1990 Census TIGER/Line<sup>®</sup> 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	STATE90L
	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 RS	CD103 RS	CD108 CTPP, STATE90, COUN90, and RS9 <i>(see note below)</i>
Record Type I	RTPOINT	RTLINK	RTLINK
51	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<sup>®</sup> 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	A	Translation		
	Standard	Short	USPS	
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	AI	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	В	_	Вау
Bank	Bank	Bnk	_	_
Basin	Basin	Basn	_	_
Вау	Bay	В	_	_
Вауои	Bayou	Byu	BYU	_
BIA Highway	BIA Hwy	BIAHy	-	
BIA Road	BIA Rd	BIARd	_	_
BIA Route	BIA Rte	BIARt	_	_
Bluff	Bluff	Blf	BLF	_
Boulevard	Blvd	_	BLD	_
Boundary	Bdy	_	-	_
Branch	Branch	Br	BR	_

Feature Type	Abbreviations			Translation
	Standard	Short	USPS	
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	Вур	BYP	_
Calle	Calle	С	CLL	Street
Calleja	Calleja	Сја	-	Lane
Callejon	Callej	Cjon	-	Narrow street
Camino	Camino	Cam	CAM	Road
Camp	Camp	-	СР	-
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	СС	-	_
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	СТ	-
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
	Standard	Short	USPS	
Escarpment	Escarp	Escrp	_	_
Escuela	Escul	Esc	-	School
Estuary	Est	_	-	-
Expreso	Ехро	Ехр	-	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	FRTrI	-	-
Floodway	Floodway	Fldwy	-	-
Flowage	Flowage	Flow	-	_
Flume	Flume	Flm	-	_
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
	Standard	Short	USPS	
Grade	Grade	Grd	_	_
Gravel Pit	Gr Pit	GrPt	-	_
Gravero	Grav	_	-	Gravel pit
Gulch	Gulch	GI	-	_
Gulf	Gulf	Glf	-	-
Gully	Gully	-	-	_
Harbor	Harbor	Hbr	HBR	_
High School	ΗS	HS	-	_
Highway	Hwy	_	HWY	-
Hill	Hill	_	HL	-
Hollow	Hollow	HIIw	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	IndI Ctr	IndC	-	-
Industrial Park	Indl Park	IPrk	-	-
Inlet	Inlet	InIt	INLT	-
Inn	Inn	-	-	-
Institute	Inst	_	-	-
Institution	Instn	_	-	-
Interstate Highway	-	-	-	-
Isla	Isla	ls	-	Island
Island	Island	ls	IS	-
Islands	Islands	ls	ISS	_
Jail	Jail	JI	-	_
Jeep Trail	Jeep Trl	4WD	-	_
Kansas State Highway	KS StHwy	KStHy	-	_
Kill	Kill	_	_	-
Lago	Lago	Lag	-	Lake
Lagoon	Lagoon	Lag	-	-

Feature Type	Abbi	reviations		Translation
	Standard	Short	USPS	
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	MI	MALL	_
Mar	Mar	Mr	-	Sea
Marginal	Marg	_	-	Service road
Marina	Marina	Mrna	-	-
Marsh	Marsh	Mrsh	-	-
Medical Building	Med Bldg	MdBlg	-	-
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	Abb	Abbreviations		
	Standard	Short	USPS	
National Grassland	Nat GrssInd	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 WId 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	0	_	-
Oceano	Oceano	0	-	Oce
Office Building	Ofc Bldg	OfBlg	-	-
Office Center	Ofc Ctr	OfCtr	-	-
Office Park	Ofc Park	OfPrk	-	-
Orphanage	Orph	-	-	-
Outlet	Outlet	OutIt	-	-
Overpass	Ovps	-	-	-
Parish Road	Par Rd	ParRd	_	-

Feature Type	AI	obreviations		Translation
	Standard	Short	USPS	
Park	Park	-	PARK	_
Parkway	Pkwy	_	РКҮ	_
Parque	Parque	Prqe	-	Park
Pasaje	Pasaje	Pas	-	Passage
Paseo	Paseo	Pso	_	Drive
Paso	Paso	-	PSO	Strait
Pass	Pass	Ps	PASS	-
Passage	Psge	Pas	_	-
Path	Path	_	PATH	-
Peak	Peak	Pek	_	-
Pike	Pike	Pke	PIKE	-
Pipeline	Pipe	_	_	-
Pista	Pista	Psta	_	Track
Place	Place	PI	PL	-
Plaza	Plaza	Plz	PLZ	_
Point	Point	Pt	РТ	_
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
	Standard	Short	USPS	
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	
	Standard	Short	USPS	
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	TrIPk	_	_
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	WIkwy	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	WIdR	-	_
Wild and Scenic River	W&S Rvr	W&SR	-	-

Feature Type	Abbreviations			Translation
	Standard	Short	USPS	
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 <sup>1</sup> of an MSA/PMSA/CMSA, but not a central place of a UA
2	Incorporated place/consolidated city that is a central place <sup>2</sup> of a UA, but not a central city of an MSA/PMSA/CMSA
3	Incorporated place/consolidated city that is a central city <sup>3</sup> 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/or a central place of a UA
5	Incorporated place/consolidated city that is a central city <sup>1</sup> 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
6	Incorporated place/consolidated city that is a central city <sup>3</sup> of an MSA/PMSA/CMSA and 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 <sup>1</sup> of an MSA/PMSA/CMSA, but not a central place of a UA
8	Minor civil division that is a central place <sup>2</sup> 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 <sup>3</sup> of a MSA/PMSA/CMSA and a central place of a UA (no entities had this code in 1990)
0	Minor civil division that is not a central city of a MSA/PMSA/CMSA and/or a central place of a UA (no entities had this code in 1990)
А	Census designated place (CDP) that is the central place <sup>3</sup> of a UA, but not a central city of an MSA/PMSA/CMSA
В	CDP that is the central city <sup>3</sup> of an MSA/PMSA/CMSA but not a central place of a UA <i>(no entities had this code in 1990)</i>
С	CDP that is the central city <sup>3</sup> of an MSA/PMSA/CMSA and a central place of a UA (no entities had this code in 1990)

#### 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 *(applies only to Agana, Guam)*
- **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 (*no entities had this code in 1990*)
- 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.

- 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.

<sup>&</sup>lt;sup>1</sup> Places recognized as the central cities of metropolitan statistical areas include:

• 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.

<sup>2</sup> 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 nonmilitary census designated place.
- <sup>3</sup> Must meet the criteria for both metropolitan area central cities and urbanized area central places.

# Appendix F—Number of Geographic Entities

	1990	1997
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 entities <sup>1</sup>	57	57
States	50	50
District of Columbia	1	1
Outlying Areas <sup>1</sup>	6	6
Counties, parishes, boroughs, municipios, and equivalent entities <sup>1</sup>	3,248	3,234
County Subdivisions and Places	49,902	49,961
Minor Civil Divisions (MCDs) <sup>1</sup>	30,386	30,367
Sub-MCDs <sup>1</sup>	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 <sup>5</sup>	15,274	Not Available
Traffic Analysis Zones (TAZs) <sup>5</sup>	143,537	Not Available
ZIP Codes <sup>2</sup>	29,469	28,759

	1990	1997
Statistical Entities		
Urbanized Areas (UAs)	405	406
American Indian and Alaska Native Areas		
Tribal Jurisdiction Statistical Areas (TJSAs)	17	17
Tribal designated Statistical Areas (TDSAs)	19	19
Alaska Native Village Statistical Areas (ANVSAs)	217	217
County Subdivisions <sup>1</sup>	5,903	5,909
Census County Divisions (CCDs)	5,581	5,581
Unorganized Territories (UTs)	282	286
Other Statistical Entities	40	42
Census Designated Places (CDPs) <sup>3</sup>	4,423	4,330
Census Tracts and Block Numbering Areas <sup>4</sup>	62,276	Not Available
Census Tracts	50,690	Not Available
Block Numbering Areas (BNAs) <sup>1</sup>	11,586	Not Available
Block Groups (BGs) <sup>1</sup>	229,192	Not Available
Blocks <sup>1</sup>	7,017,427	Not Available

<sup>1</sup> 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 1997 totals.

<sup>2</sup> The number of 1990 ZIP Codes<sup>®</sup> was based on a commercial block to ZIP Code<sup>®</sup> equivalency file and included only those residential ZIP Codes<sup>®</sup> for which the Census Bureau tabulated data, not the total number of ZIP Codes<sup>®</sup> used by the US Postal Service for mail delivery. The 1995 number represents those ZIP Codes<sup>®</sup> currently in the TIGER data base.

<sup>3</sup> The decreased number of CDPs in 1997 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 1995 totals.

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

<sup>5</sup> 1997 counts are not available for these entities.

# Appendix G–1990 Urbanized Area Codes and Names

Code	Urbanized Area Name
0040	Abilene, TX
0080	Akron, OH
0120	Albany, GA
0160	Albany–Schenectady–Troy, NY
0200	Albuquerque, NM
0220	Alexandria, LA
0240	Allentown–Bethlehem–Easton, PA–NJ
0275	Alton, IL
0280	Altoona, PA
0320	Amarillo, TX
0380	Anchorage, AK
0400	Anderson, IN
0405	Anderson, SC
0435	Annapolis, MD
0440	Ann Arbor, MI
0450	Anniston, AL
0457	Antioch–Pittsburg, CA
0459	Appleton–Neenah, WI
0480	Asheville, NC
0500	Athens, GA
0520	Atlanta, GA
0560	Atlantic City, NJ
0580	Auburn–Opelika, AL
0600	Augusta, GA–SC
0619	Aurora, IL
0640	Austin, TX
0680	Bakersfield, CA
0720	Baltimore, MD
0730	Bangor, ME
0760	Baton Rouge, LA
0780	Battle Creek, MI
0800	Bay City, MI
0839	Beaumont, TX
0860	Bellingham, WA
0865	Beloit, WI-IL
0870	Benton Harbor, MI
0880	Billings, MT
0920	Biloxi–Gulfport, MS
0960	Binghamton, NY
1000	Birmingham, AL

Cada	
Code	Urbanized Area Name
1010	Bismarck, ND
1020	Bloomington, IN
1040	Bloomington–Normal, IL
1080	Boise City, ID
1120	Boston, MA
1125	Boulder, CO
1150	Bremerton, WA
1160	Bridgeport–Milford, CT
1170	Bristol, CT
1180	Bristol, TN–Bristol, VA
1200	Brockton, MA
1239	Brownsville, TX
1250	Brunswick, GA
1260	Bryan–College Station, TX
1282	Buffalo–Niagara Falls, NY
1300	Burlington, NC
1305	Burlington, VT
1320	Canton, OH
1350	Casper, WY
1360	Cedar Rapids, IA
1400	Champaign–Urbana, IL
1440	Charleston, SC
1480	Charleston, WV
1510	Charlotte, NC
1540	Charlottesville, VA
1560	Chattanooga, TN–GA
1580	Cheyenne, WY
1601	Chicago, IL–Northwestern Indiana
1620	Chico, CA
1640	Cincinnati, OH–KY
1659	Clarksville, TN–KY
1680	Cleveland, OH
1720	Colorado Springs, CO
1740	Columbia, MO
1760	Columbia, SC
1800	Columbus, GA–AL
1840	Columbus, OH
1880	Corpus Christi, TX
1897	Crystal Lake, IL
1900	Cumberland, MD–WV

Code	Urbanized Area Name
1922	Dallas–Fort Worth, TX
1930	Danbury, CT–NY
1950	Danville, VA
1960	Davenport-Rock Island-Moline, IA-IL
1979	Davis, CA
2000	Dayton, OH
2020	Daytona Beach, FL
2030	Decatur, AL
2040	Decatur, IL
2071	Deltona, FL
2075	Denton, TX
2080	Denver, CO
2120	Des Moines, IA
2160	Detroit, MI
2180	Dothan, AL
2190	Dover, DE
2200	Dubuque, IA-IL
2240	Duluth, MN–WI
2280	Durham, NC
2290	Eau Claire, WI
2297	Elgin, IL
2300	Elkhart–Goshen, IN
2310	Elmira, NY
2320	El Paso, TX–NM
2360	Erie, PA
2400	Eugene–Springfield, OR
2440	Evansville, IN–KY
2467	Fairfield, CA
2480	Fall River, MA–RI
2520	Fargo–Moorhead, ND–MN
2560	Fayetteville, NC
2580	Fayetteville-Springdale, AR
2600	Fitchburg–Leominster, MA
2620	Flagstaff, AZ*
2640	Flint, MI
2650	Florence, AL
2655	Florence, SC
2669	Fort Collins, CO
2680	Fort Lauderdale–Hollywood– Pompano Beach, FL

Code	Urbanized Area Name
2700	Fort Myers–Cape Coral, FL
2710	Fort Pierce, FL
2720	Fort Smith, AR–OK
2750	Fort Walton Beach, FL
2760	Fort Wayne, IN
2820	Frederick, MD
2825	Fredericksburg, VA
2840	Fresno, CA
2880	Gadsden, AL
2900	Gainesville, FL
2919	Galveston, TX
2970	Gastonia, NC
2975	Glens Falls, NY
2980	Goldsboro, NC
2985	Grand Forks, ND–MN
2995	Grand Junction, CO
3000	Grand Rapids, MI
3040	Great Falls, MT
3060	Greeley, CO
3080	Green Bay, WI
3115	Greensboro, NC
3150	Greenville, NC
3155	Greenville, SC
3180	Hagerstown, MD–PA–WV
3199	Hamilton, OH
3235	Harlingen, TX
3239	Harrisburg, PA
3280	Hartford–Middletown, CT
3285	Hattiesburg, MS
3288	Hemet–San Jacinto, CA
3289	Hesperia-Apple Valley-Victorville, CA
3290	Hickory, NC
3300	High Point, NC
3317	Holland, MI
3320	Honolulu, HI
3350	Houma, LA
3360	Houston, TX
3400	Huntington–Ashland, WV–KY–OH
3440	Huntsville, AL

\*Flagstaff, AZ became an urbanized area in 1996

Code	Urbanized Area Name
3455	Hyannis, MA
3460	Idaho Falls, ID
3480	Indianapolis, IN
3487	Indio–Coachella,CA
3500	Iowa City, IA
3510	Ithaca, NY
3520	Jackson, MIY
3560	Jackson, MS
3580	Jackson, TN
3600	Jacksonville, FL
3605	Jacksonville, NC
3619	Janesville, WI
3659	Johnson City, TN
3680	Johnstown, PA
3690	Joliet, IL
3710	Joplin, MO
3717	Kailua, HI
3720	Kalamazoo, MI
3740	Kankakee, IL
3750	Kannapolis, NC
3760	Kansas City, MO–KS
3800	Kenosha, WI
3809	Killeen, TX
3815	Kingsport, TN–VA
3833	Kissimmee, FL
3840	Knoxville, TN
3850	Kokomo, IN
3870	La Crosse, WI–MN
3880	Lafayette, LA
3920	Lafayette-West Lafayette, IN
3960	Lake Charles, LA
3979	Lakeland, FL
4000	Lancaster, PA
4010	Lancaster–Palmdale, CA
4040	Lansing–East Lansing, MI
4080	Laredo, TX
4100	Las Cruces, NM
4120	Las Vegas, NV
4150	Lawrence, KS
4160	Lawrence–Haverhill, MA–NH
4200	Lawton, OK
4240	Lewiston–Auburn, ME

Code	Urbanized Area Name
4246	Lewisville, TX
4280	Lexington-Fayette, KY
4320	Lima, OH
4360	Lincoln, NE
4400	Little Rock-North Little Rock, AR
4403	Lodi, CA
4405	Logan, UT
4407	Lompoc, CA
4411	Longmont, CO
4413	Longview, TX
4415	Longview, WA–OR
4440	Lorain–Elyria, OH
4480	Los Angeles, CA
4520	Louisville, KY–IN
4560	Lowell, MA–NH
4600	Lubbock, TX
4640	Lynchburg, VA
4660	McAllen-Edinburg-Mission, TX
4679	Macon, GA
4720	Madison, WI
4760	Manchester, NH
4800	Mansfield, OH
4890	Medford, OR
4899	Melbourne–Palm Bay, FL
4920	Memphis, TN-AR-MS
4940	Merced, CA
5000	Miami–Hialeah, FL
5025	Middletown, OH
5040	Midland, TX
5080	Milwaukee, WI
5120	Minneapolis-St. Paul, MN
5140	Missoula, MT
5160	Mobile, AL
5170	Modesto, CA
5187	Monessen, PA
5200	Monroe, LA
5240	Montgomery, AL
5280	Muncie, IN
5320	Muskegon, MI
5330	Myrtle Beach, SC
5343	Napa, CA
5345	Naples, FL

Code	Urbanized Area Name
5350	Nashua, NH
5360	Nashville, TN
5395	Newark, OH
5400	New Bedford, MA
5440	New Britain, CT
5465	Newburgh, NY
5480	New Haven–Meriden, CT
5520	New London–Norwich, CT
5560	New Orleans, LA
5570	Newport, RI
5601	New York, NY–Northeastern NJ
5720	Norfolk–Virginia Beach–Newport News, VA
5760	Norwalk, CT
5790	Ocala, FL
5800	Odessa, TX
5840	Ogden, UT
5880	Oklahoma City, OK
5910	Olympia, WA
5920	Omaha, NE–IA
5960	Orlando, FL
5973	Oshkosh, WI
5990	Owensboro, KY
6000	Oxnard–Ventura, CA
6012	Palm Springs, CA
6015	Panama City, FL
6020	Parkersburg, WV–OH
6025	Pascagoula, MS
6080	Pensacola, FL
6120	Peoria, IL
6140	Petersburg, VA
6160	Philadelphia, PA–NJ
6200	Phoenix, AZ
6240	Pine Bluff, AR
6282	Pittsburgh, PA
6320	Pittsfield, MA
6340	Pocatello, ID
6377	Port Arthur, TX
6390	Port Huron, MI
6400	Portland, ME
6442	Portland–Vancouver, OR–WA
6450	Portsmouth–Dover–Rochester, NH–ME

Code	Urbanized Area Name		
6454	Pottstown, PA		
6460	Poughkeepsie, NY		
6480	Providence–Pawtucket, RI–MA		
6520	Provo–Orem, UT		
6560	Pueblo, CO		
6580	Punta Gorda, FL		
6600	Racine, WI		
6639	Raleigh, NC		
6660	Rapid City, SD		
6680	Reading, PA		
6690	Redding, CA		
6720	Reno, NV		
6740	Richland–Kennewick–Pasco, WA		
6759	Richmond, VA		
6780	Riverside–San Bernardino, CA		
6800	Roanoke, VA		
6820	Rochester, MN		
6840	Rochester, NY		
6880	Rockford, IL		
6885	Rock Hill, SC		
6895	Rocky Mount, NC		
6900	Rome, GA		
6911	Round Lake Beach–McHenry, IL–WI		
6920	Sacramento, CA		
6959	Saginaw, MI		
6980	St. Cloud, MN		
7000	St. Joseph, MO–KS		
7040	St. Louis, MO–IL		
7080	Salem, OR		
7119	Salinas, CA		
7159	Salt Lake City, UT		
7200	San Angelo, TX		
7240	San Antonio, TX		
7320	San Diego, CA		
7360	San Francisco–Oakland, CA		
7400	San Jose, CA		
7460	San Luis Obispo, CA		
7479	Santa Barbara, CA		
7485	Santa Cruz, CA		
7490	Santa Fe, NM		
7497	Santa Maria, CA		
7500	Santa Rosa, CA		

Code	Urbanized Area Name
7511	Sarasota–Bradenton, FL
7520	Savannah, GA
7560	Scranton–Wilkes-Barre, PA
7572	Seaside–Monterey, CA
7600	Seattle, WA
7610	Sharon, PA–OH
7620	Sheboygan, WI
7640	Sherman–Denison, TX
7680	Shreveport, LA
7702	Simi Valley, CA
7720	Sioux City, IA-NE-SD
7760	Sioux Falls, SD
7767	Slidell, LA
7800	South Bend-Mishawaka, IN-MI
7820	Spartanburg, SC
7840	Spokane, WA
7880	Springfield, IL
7920	Springfield, MO
7960	Springfield, OH
8000	Springfield, MA-CT
8020	Spring Hill, FL
8040	Stamford, CT–NY
8050	State College, PA
8080	Steubenville–Weirton, OH–WV–PA
8120	Stockton, CA
8130	Stuart, FL
8140	Sumter, SC
8160	Syracuse, NY
8200	Tacoma, WA
8240	Tallahassee, FL
8280	Tampa–St Petersburg–Clearwater, FL
8300	Taunton, MA
8312	Temple, TX
8320	Terre Haute, IN
8360	Texarkana, TX–Texarkana, AR
8382	Texas City, TX
8395	Titusville, FL
8400	Toledo, OH–MI
8440	Topeka, KS
8480	Trenton, NJ–PA
8520	Tucson, AZ
8560	Tulsa, OK

Code	Urbanized Area Name
8600	Tuscaloosa, AL
8640	Tyler, TX
8680	Utica-Rome, NY
8694	Vacaville, CA
8740	Vero Beach, FL
8750	Victoria, TX
8760	Vineland-Millville, NJ
8779	Visalia, CA
8800	Waco, TX
8835	Warner Robins, GA
8840	Washington, DC–MD–VA
8880	Waterbury, CT
8920	Waterloo-Cedar Falls, IA
8929	Watsonville, CA
8940	Wausau, WI
8960	West Palm Beach–Boca Raton– Delray Beach, FL
9000	Wheeling, WV–OH
9040	Wichita, KS
9080	Wichita Falls, TX
9140	Williamsport, PA
9160	Wilmington, DE–NJ–MD–PA
9200	Wilmington, NC
9220	Winston-Salem, NC
9227	Winter Haven, FL
9240	Worcester, MA-CT
9260	Yakima, WA
9280	York, PA
9320	Youngstown–Warren, OH
9340	Yuba City, CA
9360	Yuma, AZ–CA
	Puerto Rico
0060	Aguadilla, PR
0470	Arecibo, PR
1310	Caguas, PR
1355	Cayey, PR
3380	Humacao, PR
4840	Mayaguez, PR
6360	Ponce, PR
7440	San Juan, PR
8730	Vega Baja-Manati, PR

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, Guam, and Yellowstone National Park–Montana)
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

# Appendix H—Legal/Administrative/Statistical Area Codes

Legal/Administrative/Statistical Area Codes H-1

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 magis- terial, or municipal, or road)	district	MCD in Virginia, West Virginia, Guam, and the Northern Mariana Islands
28	District (assessment, election, magisterial, super- visor'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 Metro- politan 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)
92	Area	_	American Indian Subreservation Area
93	Chapter	chapter	American Indian Subreservation Area
94	Community	community	American Indian Subreservation Area
95	District	district	American Indian Subreservation Area
96	District	—	American Indian Subreservation Area
97	Segment	segment	American Indian Subreservation Area
98	Tract	tract	American Indian Subreservation Area

## 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<sup>®</sup>, 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 are identified for the Census Bureau 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 identifies and provides maps of these areas for use by the Census Bureau.

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.

2 - 1997 TIGER/Line<sup>®</sup> Files

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 twoletter alphabetic suffix for the 1990 census, that identifies a specific census block on census maps and Summary Tape Files (STFs). Block numbers are not repeated within a census tract or BNA.

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 in counties or statistically equivalent entities in which census tracts have not been established. A BNA is equivalent to a census tract in the Census Bureau's 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. 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. 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<sup>®</sup> 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 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.

**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<sup>®</sup> 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<sup>®</sup> 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, Geographic Reference File.

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 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 twodigit FIPS codes. NIST also has made available an alternative set of fourdigit 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 three-digit numeric code assigned by the Census Bureau to identify each MCD within a county (the Census Bureau assigns the codes based on the alphabetical sequence of the MCD names); also, 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 four-digit code assigned by the Census Bureau to identify each incorporated or census designated place within a state (the Census Bureau assigns the codes based on the alphabetic sequence of the place names). Also, the 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 94<sup>th</sup> 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 twodigit 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.

**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<sup>®</sup> Topologically Integrated Geographic Encoding and Referencing

TJSA See Tribal Jurisdiction Statistical Area.

TLID TIGER/Line<sup>®</sup> 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. TJSAs 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.

ZIP (Zone Improvement Plan) Code A five-, seven-, nine-, or elevendigit 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.