

OCTOBER 2001

U.S. CENSUS BUREAU
TIGER/Line Census 2000

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All legal boundaries and names are as of January 1, 2000. The boundary information in the TIGER/Line files for both legal and statistical entities are for Census Bureau statistical data collection and tabulation purposes only; their depiction and designation for statistical purposes does not constitute a determination of jurisdictional authority or rights of ownership or entitlement.

WHAT ARE TIGER/LINE FILES

The TIGER/Line files were created from the Census Bureau's TIGER (Topologically Integrated Geographic Encoding and Referencing) data base of selected geographic and cartographic information. TIGER was developed at the Census Bureau to support the mapping and related geographic activities required by the decennial and economic censuses and sample survey programs. TIGER/Line files are made available to the public and are typically used by people to provide the digital map base for their Geographic Information System or mapping software.

This DVD (or CD-ROM) does not contain software to display or generate maps, nor is the data on this DVD (or CD-ROM) in the form of a map image. To create maps with the data on this DVD (or CD-ROM), one would typically use a Geographic Information System package or other mapping software. The Census Bureau cannot provide help in how to use this data with specific software packages. The TIGER/line files are provided in ASCII text format only. Users are responsible for converting or translating the files into a format used by their specific software package.

For information on how to use the TIGER/Line data with a specific software package one should contact the company that produced the software. For information on companies that sell products that use TIGER/Line data or that provide various TIGER/Line-related services refer to the "Vendor's List" on the TIGER Page at the Census Bureau's World Wide Web site described below.

ACCESSING TIGER/LINE FILES

The TIGER/Line files are distributed on DVD (or CD-ROM) and on the Census Bureau's Internet site (www.census.gov). This README.TXT file references both the disc and Internet distribution methods. For those downloading the TIGER/Line files from the Internet, unless otherwise noted, you can find the supplementary files mentioned below through links from the TIGER/Line download page.

WHAT'S NEW - KEY CHANGES

The Census 2000 TIGER/Line files include files for all counties and statistically equivalent entities in the United States as well as files for Puerto Rico and the Island Areas. The Census 2000 TIGER/Line files are released by county or statistically equivalent entity based on the

January 1, 2000 governmental unit boundaries.

The Census 2000 TIGER/Line files contain the ZIP Code Tabulation Areas (ZCTAs) and the address ranges are based upon the addresses in the final Master Address File (MAF) used for tabulating Census 2000. The Census 2000 TIGER/Line files contain all Census 2000 geographic entities except the Census 2000 urban/rural designation and the Census 2000 Public Use Microdata Areas (PUMAs) which have not yet been delineated.

The Census Bureau has corrected some name and attribute information that appeared in the Redistricting Census 2000 TIGER/Line files. For information about these changes refer to the document rdchg2k.txt ("Changes Between the Redistricting Census 2000 TIGER/Line files and the Census 2000 TIGER/Line files") at the TIGER page at the Census Bureau's Internet site (www.census.gov) and on this DVD(CD-ROM).

TIGER/LINE AND ACCOMPANYING FILES

The Census 2000 TIGER/Line files contain digital cartographic data and are accompanied by documentation and related files. These files are distributed on DVD (also known as Digital Versatal Disc or Digital Video Disc) and on the Census Bureau's Internet site (www.census.gov). It may also be distributed as a disc-on-demand CD-ROM product. On the Internet site (select the "TIGER" link from the home page) there are links to the directory/folder for each state where the individual files are stored. Other links lead one to the accompanying files.

On the DVD (or CD-ROM) the TIGER/Line data is stored in the TIGER directory in subdirectories by state. Each state subdirectory is named using the two-digit FIPS code and the Post Office abbreviation for the state (ex. 02_AK for Alaska). Within the state subdirectory each county file has the name TGRssccc.ZIP, where the "ss" is the state FIPS code and "ccc" is the county FIPS code.

The data for each county (or statistically equivalent entity) is stored in a single compressed file that, when decompressed, results in up to 17 separate files representing each of the TIGER/Line record types that exist for that county. Some counties did not require all of the 17 record types and therefore will have less than 17 files. If the types of data contained in record types 4, 6, 7, 8, 9 and Z are not appropriate for a given county then the files for those record types will NOT be included. The name of each of these files uses a modification of the above convention (TGRssccc.RTx) where "x" is the Record Type. Appendix A of the TIGER/line documentation provides a list of counties and their FIPS codes by state. The data in these files is in a standard ASCII format. The Census bureau does NOT release the TIGER/Line data in vendor-specific GIS/mapping software formats.

Information on the content of each record type can be found in Chapter 6 of the TIGER/Line documentation. Information on decompressing the data files is found below under the heading "DATA COMPRESSION".

The files use the TIGER/Line record formats as described in the accompanying documentation. When decompressed they are fixed length ASCII with record separators (carriage return, line feed).

ADDITIONAL FILES:

COUNTSss.TXT

Each DVD (or CD-ROM) contains COUNTSss.TXT files in the subdirectory for each state under the TIGER directory of the disc. If you are downloading from the Census Internet site they can be found in the appropriate state folder. The file name will have the appropriate state FIPS code in place of "ss" in the file name. The COUNTSss.TXT files show the counts for the number of records for each record type by county for all states that are included on the DVD (or CD-ROM). Note that all counties are listed for a given state. The layout of COUNTSss.TXT is as follows:

FIPS state code	16:17
FIPS county code	20:22
Creation date	25:30
Record type	33:33
Record Count	36:43

An important aspect of the COUNTSss.TXT file is the "Creation Date" information for these files. This date is the date the TIGER/Line file was created from a benchmark of the TIGER data base. The process of creating TIGER/Line files involves extracting the appropriate data from various internal data sets to create what we term a TIGER/Line benchmark. Essentially this benchmark is a snapshot in time of our TIGER data bases which are constantly being updated. From this benchmark we create the TIGER/Line files for use in our operations. Depending on the nature of the operation for which the files are being created, this process can proceed over several months as the sets of files for individual states are created. The VERSION CODE field in TIGER/Line identifies the benchmark used and one can determine the vintage of the file from the information in this field (see page 2-1 of the TIGER/Line documentation). However, occasionally errors are found in the benchmark or in the software that produces the TIGER/Line files. Corrections are made to the benchmark file and then a new TIGER/Line is created from the benchmark. In these situations the VERSION CODE for the original and corrected files would be the same but the "Creation Date" information in the COUNTSss.TXT file would reflect the different vintages.

README.TXT

The document that you are presently reading.

DOCUMENTATION

The documentation for the TIGER/Line files is contained in the TECHDOC subdirectory of the DVD (or CD-ROM). The file name is TIGER2K.PDF and is provided in the PDF format which requires the ADOBE(R) Acrobat(R) Reader(R) (version 3.0 or higher). We are including the installation software for the ar500enu.exe version (5.00) of the reader in the TECHDOC/ACROREAD DVD (or CD-ROM) directory. If you have a version of Acrobat Reader more current than version 5.00, do not install the version of Acrobat Reader contained on the Census 2000 TIGER/Line DVD (or CD-ROM).

Included here are ADOBE's instructions for the installation of the Reader software: "Copy this software to the hard drive of your computer and run it. It will install the version 5.00 of the ADOBE Reader software on your computer. If there is a failure at any point during the installation of Acrobat Reader, the installer performs a complete uninstall. For this reason, it is important not to close the installer application by clicking its close box in the upper right corner of the background window after clicking the "Thank You" dialog box that appears at the end of the installation. If you wait for a second or two, the installer will automatically close the background

windows after the installation is complete."

When the installation is complete you can view the TIGER/Line documentation by running the ADOBE Reader and selecting the TIGER2K.PDF file from the "Open" menu. To get the ADOBE Reader for other computer platforms visit the ADOBE Web site for the proper software (<http://www.adobe.com>).

METADATA

Federal Geographic Data Committee (FGDC) compliant metadata is included on the DVD/CD-ROM in the TIGER subdirectory. It is also available from the Census Internet download site.

RDCHG2K.TXT

This document provides a detailed explanation of the content changes between the Redistricting Census 2000 TIGER/Line files and the Census 2000 TIGER/Line version.

ERROR2K.TXT

This file documents the geographic errors in the Census 2000 TIGER/Line files as of the date this DVD (or CD-ROM) was produced. These errors were NOT corrected to ensure that the Census 2000 TIGER/Line files match the geographic codes and names in the Census 2000 Summary File 3 (SF 3) data files.

DATA COMPRESSION

The TIGER/Line data on this disk has been compressed into an archive file to save space and reduce the number of disks required for the data and to facilitate downloading from the Internet. If the files were not compressed it would require over 40 CD-ROM disks to hold the data needed to cover the entire United States. They are compressed into the widely used zip format. Software applications to decompress files in this format are widely available.

KNOWN PROBLEMS AND ANOMALIES WITH THIS TIGER/LINE DATA SET:

ADDRESS ANOMALIES IN PUERTO RICO

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

ROAD FEATURE ANOMALIES

The Census Bureau extracts TIGER/Line files from the TIGER data base which is continually updated. During the clerical update process for some Census 2000 TIGER/Line files errors caused anomalies to be introduced into

some chains represented in Record Types 1 and 2. For these cases road features may appear in the Census 2000 TIGER/Line files unconnected to other road features (so-called floating features) or severely skewed in relation to surrounding line features of any type. We correct these errors as we find them, however, it is likely that some still exist.

Another road feature anomaly is the sporadic occurrence of road segments with a misclassified Census Feature Class Code (CFCC). The result is that complete chains for the affected road features will have segments with different CFCC values assigned erroneously. This problem could affect applications that use the CFCC values for network analysis, routing, or for assigning symbology to a feature when creating a map. We believe that these errors were introduced inadvertently during an updating operation to edit address range information on new as well as existing records. We are continuing to correct these as they are discovered.

UPDATES ON ANOMALIES

Additional problems or anomalies may be identified in the Census 2000 TIGER/Line file DVD/CD-ROMs at a later date. Users should refer to the Census 2000 TIGER/Line Errata and User Notes at URL: <http://www.census.gov/geo/www/tiger>

QUESTIONS AND ADDITIONAL INFORMATION

Questions about the Census TIGER/Line files and future plans for this and other TIGER-related products may be directed to the Products and Services Staff of the Geography Division at (301) 457-1128 or to the e-mail address geo.tiger@census.gov.

General information about TIGER-related products is available from the TIGER page on the Census Bureau's World Wide Web site (<http://www.census.gov/geo/www/tiger/>). This Web site also is a source of information that is of specific interest to TIGER/Line users and of general interest regarding the geographic programs at the Census Bureau. As appropriate, additional information about this product will be posted, such as ERRATA or USER NOTES.