



National Center for Education Statistics
U.S. Department of Education

School District Geographic Relationship Files

Technical Documentation

Education Demographic and Geographic
Estimates (EDGE) Program



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1.0 ABSTRACT

The NCES School District Geographic Relationship Files (GRFs) are tables that identify complete spatial associations between geographically defined school districts and other types of geographic areas. The files are designed to help answer spatially-oriented questions like: How many congressional districts are represented in a school district? How many school districts in the U.S. serve more than one county? Which ZIP codes or census tracts are included in a school district? And what portion of a school district is contained within a metropolitan area? The GRFs were constructed from the Census Bureau's Topologically Integrated Geographic Encoding and Referencing (TIGER) database and include associations between school districts and American Indian, Alaska Native, and Native Hawaiian areas (AIANNH), counties, Core Based Statistical Areas (CBSA), Consolidated Statistical Areas (CSA), Zip Code Tabulation Areas (ZCTA), Urban Areas, Congressional Districts (CD), places, county subdivisions, census tracts, and census block groups. For a detailed explanation of the geographic areas, visit the Census Bureau's [TIGER Technical Documentation](#).

2.0 CENSUS BUREAU TIGER SHAPEFILES

2.1 Content, Vintage, and Scope

The TIGER database includes decennial Census geography and current geography for the United States, Puerto Rico, and the Island Areas (American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and U.S. Virgin Islands). The decennial Census geographic vintage is identified in the file and variable names for Urban Areas and ZCTAs. Current geography is defined as the latest version of the geographic extent of legally defined geographic areas as reported to the U.S. Census Bureau, generally reflecting the boundaries of governmental units in effect as of January 1st, or legal and statistical area boundaries that have been adjusted and/or corrected since the last decennial Census. This vintage enables users to see the most current boundaries of governmental units that match the data from the surveys that use the geography, such as the American Community Survey. The features in this release reflect updates that were made in the TIGER database through May of the identified year.

2.2 Boundary Changes

The TIGER boundaries for Elementary, Secondary, Unified, and Administrative school districts are collected for NCES by the Census Bureau through an annual survey of state education officials.

2.3 Spatial Accuracy

The Census Bureau uses various internal and external processes to update the Master Address File (MAF) and TIGER database and to maintain the currency of TIGER boundaries, but it 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.

2.4 Sources of Geographic Data

The Census Bureau obtains data from numerous sources to update the MAF/TIGER database. Initially, the Census Bureau used the U.S. Geological Survey (USGS) 1:100,000-scale Digital Line Graph (DLG), USGS 1:24,000-scale quadrangles, the Census Bureau's 1980 geographic base files and a variety of miscellaneous maps for selected areas outside the contiguous 48 states to create the TIGER database (predecessor to the current MAF/TIGER database).

The Census Bureau makes additions and corrections to its database mainly through partner supplied data (federal, state, local, and private partners), the use of remotely sensed imagery, and fieldwork. The Census Bureau has numerous partner programs where federal, state, and local government partners supply updates to boundaries, features, and addresses.

3.0 STRUCTURE AND FORMAT

Each GRF consists of one file for the entire United States. The file set includes:

- grfx_lea_aiannh
- grfx_lea_blkgrp
- grfx_lea_cbsa
- grfx_lea_cd
- grfx_lea_county
- grfx_lea_cousub
- grfx_lea_csa
- grfx_lea_place
- grfx_lea_uaceyy
- grfx_lea_tract
- grfx_lea_zcta5ceyy

Where:

AIANNH	American Indian, Alaska Native, Native Hawaiian Area
BLKGRP	Block group
CBSA	Core Based Statistical Areas (Micropolitan and Metropolitan)
CD	Congressional District
COUNTY	County
COUSUB	County subdivision
CSA	Combined Statistical Area
GRF	Geographic Relationship File
LEA	Local Education Agency (school district)
PLACE	Place (incorporated place and Census designated place)
TRACT	Census tract
UACE	Urban area
XX	TIGER data release year (e.g., “23” for 2023)
YY	Decennial Census Year (e.g., “20” for 2020)
ZCTA5CE	Zip Code Tabulation Area

4.0 RECORD LAYOUTS

LEA American Indian, Alaska Native, Native Hawaiian Area Geographic Relationship File Record Layout

Field	Length	Type	Description
LEAID	7	String	Local education agency ID
NAME_LEAXX	100	String	Local education agency name
AIANNH	5	String	American Indian, Alaska Native, Native Hawaiian area ID with component type (aiannh comptyp)
NAME_AIANNHXX	100	String	American Indian, Alaska Native, Native Hawaiian area name
COUNT	8	Number	Total number of American Indian, Alaska Native, Native Hawaiian areas in LEA
LANDAREA	8	Number	Land area – square miles
WATERAREA	8	Number	Water area – square miles

LEA - Block Group Geographic Relationship File Record Layout

Field	Length	Type	Description
LEAID	7	String	Local education agency ID
NAME_LEAXX	100	String	Local education agency name
BLKGRP	12	String	Block group ID (state county tract block group)
COUNT	8	Number	Total number of block groups in LEA
LANDAREA	8	Number	Land area – square miles
WATERAREA	8	Number	Water area – square miles

LEA - CBSA Geographic Relationship File Record Layout

Field	Length	Type	Description
LEAID	7	String	Local education agency ID
NAME_LEAXX	100	String	Local education agency name
CBSA	5	String	CBSA ID
NAME_CBSAXX	100	String	CBSA name
COUNT	8	Number	Total number of CBSAs in LEA
LANDAREA	8	Number	Land area – square miles
WATERAREA	8	Number	Water area – square miles

LEA - CD Geographic Relationship File Record Layout

Field	Length	Type	Description
LEAID	7	String	Local education agency ID
NAME_LEAXX	100	String	Local education agency name
STCDZZZ	4	String	Congressional district ID (where ZZZ indicates which Congressional district is represented in current TIGER)
COUNT	8	Number	Total number of congressional districts in LEA
LANDAREA	8	Number	Land area – square miles
WATERAREA	8	Number	Water area – square miles

LEA - County Geographic Relationship File Record Layout

Field	Length	Type	Description
LEAID	7	String	Local education agency ID
NAME_LEAXX	100	String	Local education agency name
STCOUNTY	5	String	County ID
NAME_COUNTYXX	100	String	County name
COUNT	8	Number	Total number of counties in LEA
LANDAREA	8	Number	Land area – square miles
WATERAREA	8	Number	Water area – square miles

LEA - County Subdivision Geographic Relationship File Record Layout

Field	Length	Type	Description
LEAID	7	String	Local education agency ID
NAME_LEAXX	100	String	Local education agency name
COUSUB	10	String	County subdivision ID (state county county sub)
NAME_COUSUBXX	100	String	County subdivision name
COUNT	8	Number	Total number of county subdivisions in LEA
LANDAREA	8	Number	Land area – square miles
WATERAREA	8	Number	Water area – square miles

LEA - CSA Geographic Relationship File Record Layout

Field	Length	Type	Description
LEAID	7	String	Local education agency ID
NAME_LEAXX	100	String	Local education agency name
CSA	3	String	CSA ID
NAME_CSAXX	100	String	CSA name
COUNT	8	Number	Total number of CSAs in LEA
LANDAREA	8	Number	Land area – square miles
WATERAREA	8	Number	Water area – square miles

LEA - Place Geographic Relationship File Record Layout

Field	Length	Type	Description
LEAID	7	String	Local education agency ID
NAME_LEAXX	100	String	Local education agency name
PLACE	7	String	Place ID
NAME_PLACEXX	100	String	Place name
COUNT	8	Number	Total number of places in LEA
LANDAREA	8	Number	Land area – square miles
WATERAREA	8	Number	Water area – square miles

LEA - Tract Geographic Relationship File Record Layout

Field	Length	Type	Description
LEAID	7	String	Local education agency ID
NAME_LEAXX	100	String	Local education agency name
TRACT	11	String	Tract ID (state county tract)
COUNT	8	Number	Total number of tracts in LEA
LANDAREA	8	Number	Land area – square miles
WATERAREA	8	Number	Water area – square miles

LEA - UACEYY Geographic Relationship File Record Layout

Field	Length	Type	Description
LEAID	7	String	Local education agency ID
NAME_LEAXX	100	String	Local education agency name
UACEYY	5	String	Urban area ID
NAME_UACEYY	100	String	Urban area name
COUNT	8	Number	Total number of urban areas in LEA
LANDAREA	8	Number	Land area – square miles
WATERAREA	8	Number	Water area – square miles

LEA - ZCTA5CEYY Geographic Relationship File Record Layout

Field	Length	Type	Description
LEAID	7	String	Local education agency ID
NAME_LEAXX	100	String	Local education agency name
ZCTA5CEYY	5	String	ZCTA ID
COUNT	8	Number	Total number of ZCTAs in LEA
LANDAREA	8	Number	Land area – square miles
WATERAREA	8	Number	Water area – square miles