

# Education Demographic and Geographic Estimates (EDGE) Program

## Composite School District Boundaries File Documentation, 2016

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## **1.0 Composite School District Boundaries**

The NCES Composite School District Boundaries combine the boundaries of three of the U.S. Census Bureau's Topologically Integrated Geographic Encoding and Referencing (TIGER) school district layers (Elementary, Secondary, and Unified) into a single file. This simplifies the task of linking school district boundaries with other types of school district data by eliminating the need to join data to multiple boundary files. It also simplifies district-level mapping by providing wall-to-wall school district geographic coverage for all U.S. territory in a single file. This school district boundary file was developed from geographic shapefiles created by the U.S. Census Bureau and made available for download by the U.S. Department of Education's National Center for Education Statistics (NCES) through its Education Demographic and Geographic Estimates (EDGE) program.

The TIGER/Line Elementary and Unified district boundaries are mutually exclusive, and the combination of the two exhausts the full extent of the United States, Puerto Rico, and the Island Areas (American Samoa, Guam, the Commonwealth of the Northern Mariana Island, and U.S. Virgin Islands). Secondary and Elementary districts are not mutually exclusive. Most Elementary district boundaries overlap Secondary district boundaries. Although the composite school district file includes all records for both Elementary and Secondary districts, the two types of districts are difficult to visualize at the same time because they often share boundaries. Because Elementary districts are more common than Secondary districts, the composite file places Elementary district boundaries on top of Secondary district boundaries by default.

## **2.0 School District Overview**

For the purpose of the school district boundary file, school districts are geographic entities and single purpose governmental units that operate schools and provide public educational services at the local level. The Census Bureau collects school district boundaries to develop annual estimates of children in poverty to help the U.S. Department of Education determine the annual allocation of Title I funding to states and school districts. NCES also uses the school district boundaries to develop a broad collection of district-level demographic estimates from the Census Bureau's American Community Survey (ACS). The Census Bureau updates school district boundaries, names, local education agency codes, grade ranges, and school district levels biennially based on information provided by state education officials.

### **2.1 Universe**

The U.S. has more than 13,000 geographically defined public school districts. These include districts that are administratively and fiscally independent of any other government, as well as public school systems that lack sufficient autonomy to be counted as separate governments and are classified as a dependent agency of some other government—a county, municipality, township, or state. Most public school systems are Unified districts that operate regular, special, and/or vocational programs for children in Pre-Kindergarten/Kindergarten (PK/KG) through 12<sup>th</sup> grade.

The Census Bureau's school district universe is a subset of the larger NCES Common Core of Data (CCD) Local Education Agency (LEA) universe. The Census collection is limited to regular districts that are geographically defined, and it excludes non-operating districts, independent charter school districts, and educational service agencies that are part of the CCD LEA universe. These districts primarily exist to collect and transfer tax revenue to other school systems that actually provide the education services, or to provide regional special education services, vocational education programs, or financial services for member districts.

### **2.2 Structure**

The Census Bureau assigns all territory in the United States, Puerto Rico, and the Island Areas to one or more Unified, Elementary, or Secondary school districts based on the general grade range of the schools operated by the district. For example, a district that operates a complete grade range (PK-12<sup>th</sup> or KG-12<sup>th</sup>) is assigned as Unified, while a district that operates schools for children only in grades KG-8<sup>th</sup> is classified

as Elementary. Elementary and Secondary districts may serve the same territory and have overlapping boundaries, but they are not permitted to overlap boundaries of Unified districts.

The structure of school district geography varies by state and region, and districts that share the name of a county, city, or town, or operate schools for these areas may or may not be coterminous with the governmental unit. Districts in the Mid-Atlantic and New England states tend to follow county, township, or city boundaries, while districts in the Midwest, Great Plains, and Western states are generally independent of other municipal boundaries. Likewise, district boundaries may also cross boundaries for other statistical geographies like Urban Areas, Metropolitan Areas, Zip Code Tabulation Areas, Census Tracts, and Block Groups.

### **2.3 Grade Range and Direct Instruction**

Although school district classifications (Elementary, Secondary, or Unified) generally reflect the grade range of schools operated by a district, Census school district classifications are based on the grade range for which the school district is financially responsible, which may or may not be the grade range for which a school district provides direct instruction. For example, Elementary districts typically share territory with one or more Secondary districts that are responsible for operating schools for children in the upper grades. However, some Elementary districts are financially responsible for providing education for all grades, even though the district only operates schools that serve the elementary grades. In these cases, the Elementary district typically contracts with one or more nearby Secondary districts to provide educational services for children in the upper grades. A typical case would be a school district that operates schools for children in grades KG-8<sup>th</sup>, and pays a neighboring school district to educate children in grades 9<sup>th</sup>-12<sup>th</sup>. The Elementary district is operationally responsible for grades KG-8<sup>th</sup>, and is therefore classified as an Elementary district. However, since the district is financially responsible for all grades, the Census Bureau would define the grade range for the district as KG-12<sup>th</sup>.

### **2.4 Pseudo-School Districts**

In addition to regular functioning school districts, the TIGER/Line shapefiles also contain about 100 records for pseudo-school districts. These supplemental geographic records are used to address situations where a district may operate different grade spans in different parts of the district. For example, a county may operate schools to serve grades K-12 throughout the county, except in a portion of the county where a city operates a separate K-8 district. Within the territory overlapping the city, the county only operates schools that serve 9<sup>th</sup>-12<sup>th</sup>. District boundary records are not designed to reflect multiple grade spans, so in these cases a separate pseudo-secondary district would be created to account for the territory in the county coterminous with the city that only functions for grades 9<sup>th</sup>-12<sup>th</sup>. Although pseudo-districts are not functioning districts, they are administratively necessary to help the Census Bureau allocate children for educational program purposes.

The Census Bureau created a pseudo-elementary school district in Vermont (Chittenden Central Supervisory Union in Essex Junction (PK-8), GEOID=5050004) to represent an area where a secondary district is financially responsible for providing service for the secondary grades but a unified district is financially responsible for providing service for the elementary grades. The Census Bureau created a pseudo-unified school district in New Jersey (Joint Base McGuire-Dix-Lakehurst, GEOID=3434001) to represent an area where a unified, secondary, and elementary school district share financial responsibility for the entire K-12 grade range. The Census Bureau created pseudo-secondary school districts in California, Georgia, Illinois, Kentucky, Massachusetts, Minnesota, Oklahoma, South Carolina, Tennessee, Texas, and Vermont in areas where an elementary district was financially responsible for providing service for elementary grades but a unified district was financially responsible for providing service for the secondary grades. A list of pseudo-districts and their codes appears at the end of this document.

### **3.0 File Source Information**

The boundary file provides a single composite layer that includes all school districts in the United States, Puerto Rico, and the Island Areas. The geography boundary file is derived from the Census Bureau's 2016 TIGER/Line database. Elementary, Secondary, and Unified school district boundaries represent the 2015-2016 school year.

### **3.1 Content, Vintage, and Scope**

The 2016 TIGER/Line database includes 2010 Census geography and current geography for the United States, Puerto Rico, and the Island Areas. Current geography is defined as the latest version of the geographic extent of legally defined geographic areas as reported, generally reflecting the boundaries of governmental units in effect as of January 1<sup>st</sup>, or legal and statistical area boundaries that have been adjusted and/or corrected since the 2010 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 Population Estimates and the American Community Survey. The features in this release reflect updates that were made in the Master Address File (MAF) and TIGER database through May 2016.

### **3.2 Spatial Data Format**

The Census Bureau distributes school district boundaries formatted as shapefiles, a common standard for representing spatial data in points, lines, and polygons. The Census Bureau's annual Tiger/Line database provides separate geographic layers for Unified, Elementary, and Secondary districts. The district boundary files rely on the five-digit NCES LEAID code as a unique district identifier within states, and in most cases the code sequence corresponds to the alphabetical order of district names within a state. However, changes over time with school district restructuring and consolidation in states have introduced some exceptions. The value 99997 is the school district code assigned to water or land where no official school district is defined by a state.

### **3.3 Boundary Changes**

The 2016 TIGER/Line boundaries for Elementary, Secondary, and Unified school districts are collected through a biennial survey of state education officials under the auspices of the U.S. Department of Education's National Center for Education Statistics (NCES) and are current as of the 2015-2016 school year.

### **3.4 Spatial Accuracy**

The Census Bureau uses various internal and external processes to update the MAF/TIGER database and maintain the currency of TIGER/Line boundaries. While it has made a reasonable and systematic attempt to gather the most recent information available about the features in this file, 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.

### **3.5 Sources of Geographic Data**

The Census Bureau obtains data from numerous sources to update the 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 aerial imagery, and fieldwork. The Census Bureau has numerous partner programs where federal, state, and local government partners supply updates to boundaries, features, and addresses. The Census Bureau underwent a major realignment of the TIGER database in the 2000's to improve the spatial accuracy of the road network. Since this realignment, the Census Bureau has added quality standards for data sources used to update the MAF/TIGER database.

## 4.0 File Structure and Format

### 4.1 Structure, Format, Naming Conventions

The 2016 composite school district boundaries are offered in a compressed ZIP format. A shapefile is a collection of files with separate functions and suffixes that operate together.

The name of the file is: SCHOOLDISTRICT\_SY1516\_TL16.<ext>

Where:

SCHOOLDISTRICT = general descriptor for type of geography

SY1516 = School year 2015-2016

TL16 = original shapefiles were sourced from TIGER/Line 2016

<ext> = the file extension:

- .shp – The .shp file contains information about feature geometry and encapsulates information for all of the vertices needed to construct the locale polygon.
- .dbf – The .dbf file is a table that provides attributes for each feature. The table contains a unique record for each feature identified in the .shp file.
- .shx – The .shx file provides an index that supports the link between feature geometry and table attributes.
- .prj – The .prj file specifies the spatial coordinate system applied to the features. It identifies how the features are referenced and centered relative to an ellipsoidal representation of the earth.
- .shp.xml – The .shp.xml file contains metadata about the shapefile.
- .sbn – The .sbn and .sbx files are additional index files that divide features into regions to improve processing efficiency.
- .cpg – The .cpg file defines the character encoding used for the .dbf file.

### 4.2 Datum

All Census Bureau generated shapefiles are in Global Coordinate System North American Datum of 1983 (GCS NAD83). The .prj file contains the following projection specification:

```
GEOGCS["GCS_North_American_1983",DATUM["D_North_American_1983",SPHEROID["GRS_1980",6378137,298.257222101]],PRIMEM["Greenwich",0],UNIT["Degree",0.017453292519943295]]
```

### 4.3 Metadata

The composite school district shapefile includes metadata that describe various characteristics about data quality, purpose, spatial extent, publication date, attribute descriptions, valid field values, and various other features. The metadata file is provided in Extensible Markup Language (XML) format, the Federal Geographic Data Committee's (FGDC) Content Standard for digital geospatial metadata.



## 5.0 Record Layout

### Composite School District Shapefile Record Layout for SCHOOLDISTRICT\_SY1516\_TL16

Field	Length	Type	Description
STATEFP	2	String	State FIPS code
GEOID	7	String	School district identifier; a concatenation of the current state FIPS code and school district local education agency code. The GEOID is consistent with the NCES LEAID except in the case of pseudo-districts.
NAME	100	String	Current school district name
LSAD	2	String	Legal or statistical area description, currently 00 for all school districts
LOGRADE	2	String	Current lowest grade covered by school district
HIGRADE	2	String	Current highest grade covered by school district
MTFCC	5	String	MAF/TIGER Feature Class Code: G5400 = Elementary School District, G5410 = Secondary School District, G5420 = Unified School District
SDTYP	1	String	Current school district type: A=Pseudo, B=DoD, C=Interstate, D=BIA, E=Same Name
FUNCSTAT	1	String	Current functional status: E=Active government providing special-purpose functions, F=Fictitious Entity created to fill the Census Bureau geographic hierarchy
ALAND	14	Number	Current land area
AWATER	14	Number	Current water area
INTPTLAT	11	String	Current latitude of the internal point
INTPTLON	12	String	Current longitude of the internal point
ELSDLEA	5	String	Current elementary school district local education agency code. ELSDLEA is a unique identifier within state and is equivalent to GEOID when prefixed with STATEFP.
UNSDLEA	5	String	Current unified school district local education agency code. UNSDLEA is a unique identifier within state and is equivalent to GEOID when prefixed with STATEFP.
SCSDLEA	5	String	Current secondary school district local education agency code. SCSDLEA is a unique identifier within state and is equivalent to GEOID when prefixed with STATEFP.

## 6.0 Appendix A - Pseudo School Districts

2015-2016 School District Review Program Pseudo-School Districts (stored as Unified School Districts)

Column headers:

STATEFP ACS state FIPS code  
 SDLEA ACS secondary school district local education agency code  
 NAME ACS secondary school district name

STATEFP	SDLEA	NAME
34	34001	Joint Base McGuire-Dix-Lakehurst

2015-2016 School District Review Program Pseudo-School Districts (stored as Elementary School Districts)

Column headers:

STATEFP ACS state FIPS code  
 SDLEA ACS secondary school district local education agency code  
 NAME ACS secondary school district name

STATEFP	SDLEA	NAME
50	50004	Chittenden Central Supervisory Union in Essex Junction (PK-8)

2015-2016 School District Review Program Pseudo-School Districts (stored as Secondary School Districts)

Column headers:

STATEFP ACS state FIPS code  
 SDLEA ACS secondary school district local education agency code  
 NAME ACS secondary school district name

STATEFP	SDLEA	NAME
06	06001	Yosemite Unified School District in Bass Lake
06	06002	Yosemite Unified School District in Raymond-Knowles
06	06003	Twin Rivers Unified School District in Elverta
06	06004	Twin Rivers Unified School District in Robla
06	06005	Scott Valley Unified School District in Forks of Salmon
06	06006	Trinity Alps Unified School District in Burnt Ranch
06	06007	Trinity Alps Unified School District in Coffee Creek
06	06009	Trinity Alps Unified School District in Douglas City
06	06010	Trinity Alps Unified School District in Junction City
06	06011	Trinity Alps Unified School District in Lewiston
06	06012	Trinity Alps Unified School District in Trinity Center
06	06013	Turlock Unified School District in Chatom Union
06	06014	Turlock Unified School District in Keyes Union
06	06015	Santa Cruz City High School District (9-12) in Soquel
06	06016	Dinuba Unified (9-12) in Kings River Union
06	06017	Dinuba Unified (9-12) in Monson-Sultana Joint Union
06	06018	Washington Unified School District (9-12)
06	06019	Santa Barbara Unified School District (7-12)

06	06020	Lammersville Joint Unified School District (9-12)
06	06021	Bishop Unified School District in Round Valley (9-12)
06	06022	Santa Paula Unified (9-12) in Briggs
06	06023	Santa Paula Unified (9-12) in Mupu
06	06024	Santa Paula Unified (9-12) in Santa Clara
06	06025	Hamilton Unified School District in Capay (9-12)
06	06026	Woodlake Unified School District (9-12) in Stone Corral
06	06027	Woodlake Unified School District (9-12) in Three Rivers Union
06	06028	Exeter Unified School District (9-12) in Sequoia Union
06	06029	Exeter Unified School District (9-12) in Outside Creek
06	06031	Tracy Unified School District (9-12) in Banta
06	06032	Tracy Unified School District (9-12) in Jefferson
06	06033	Tracy Unified School District (9-12) in New Jerusalem
06	06034	Perris Union High School District in Menifee (9-12)
06	06035	Perris Union High School District in Nuview (9-12)
06	06036	Perris Union High School District in Romoland (9-12)
06	06037	Alhambra Unified (9-12) School District
06	06038	Healdsburg Unified (7-12) in Alexander Valley Union
06	06039	Healdsburg Unified (9-12) in West Side Union
06	06053	Gonzales Unified (9-12) School District
06	06107	Porterville Unified (9-12) School District
13	13053	Chattahoochee County for Fort Benning
13	13215	Muscogee County for Fort Benning
17	17901	Flanagan-Cornell District 74 in Cornell
17	17902	Flanagan-Cornell District 74 in Pontiac
17	17903	Flanagan-Cornell District 74 in Rooks Creek
21	21001	Laurel County School District for East Bernstadt ISD
21	21002	Pulaski County School District for Science Hill ISD
21	21003	Elizabethtown Independent School District for West Point ISD
21	21004	Jefferson County School District in Anchorage ISD
21	21005	Campbell County School District in Southgate ISD
25	22222	Mohawk Trail Regional School District in Hawley and Charlemont towns
25	25002	North Adams School District in Clarksburg (9-12)
25	25003	Gill-Montague School District in Erving (7-12)
25	25005	Swampscott School District in Nahant (7-12)
25	25006	Pittsfield School District in Richmond (9-12)
25	25007	Mohawk Trail School District in Rowe (7-12)
25	25008	Adams-Cheshire School District in Savoy (7-12)
25	25009	North Adams School District in Florida (9-12)
25	25010	Fairhaven/New Bedford School Districts in Acushnet (9-12)
25	25012	Nauset/Provincetown School Districts in Turo (7-12)
25	25013	Mount Greylock/New Lebanon (NY) School Districts in Hancock (7-12)
25	25014	North Adams School District in Monroe (9-12)
25	25015	Lee/Berkshire Hills in Farmington River Regional (7-12)
27	27001	Park Rapids Public School District in Pine Point (9-12)
27	27002	Clinton-Graceville-Beardsley-Wheaton-Sisseton/Wilmot (SD) in Browns Valley (9-12)
27	27003	Minneota-Ivanhoe Public School Districts in Ivanhoe (7-12)

27	27004	Marshall-Minneota-RTR Public Schools in Lynd (9-12)
27	27005	Marshall-Tracy Public Schools in Milroy (9-12)
27	27006	Heron Lake-Okabena-Fulda-Worthington in Round Lake-Brewster (9-12)
27	27007	St. Louis-Northland in Nett Lake (7-12)
40	40001	Secondary Coverage Area in White Oak Public Schools (9-12)
45	45013	Beaufort County School District within Beaufort Marine Corps Air Station
45	45079	Richland County School District 2 within Fort Jackson
47	47001	Anderson County School District in Clinton
47	47002	Arlington Community Schools in Lakeland (6-12)
47	47029	Cocke County School District in Newport
47	47031	Coffee County School District in Manchester
47	47033	Crockett County School District in Alamo
47	47034	Crockett County School District in Bells
47	47073	Hawkins County School District in Rogersville
47	47077	Henderson County School District in Lexington
47	47079	Henry County School District in Paris
47	47107	McMinn County School District in Athens
47	47108	McMinn County School District in Etowah
47	47123	Monroe County School District in Sweetwater
47	47143	Rhea County School District in Dayton
47	47149	Rutherford County School District in Murfreesboro
47	47187	Williamson County School District in Franklin
47	47189	Wilson County School District in Lebanon
48	48021	Elgin/Giddings Independent School Districts (9-12) in McDade
48	48143	Stephenville Independent School District (9-12) in Bluff Dale
48	48285	Hallettsville Independent School District (9-12) in Vysehrad
48	48449	Mount Pleasant Independent School District (9-12) in Winfield