2007 COMPOSITE SCHOOL DISTRICT SHAPEFILES: TECHNICAL DOCUMENTATION

1.0   Abstract: 2007 Composite School District Shapefile

Data Type
Geography boundary file derived from the Census Bureau's 2007 TIGER\Line database.

Data Content
Elementary, Secondary, and Unified school district boundaries representing the 2005-2006 school year. The boundary file provides a single composite layer that includes all school districts in the United States, Puerto Rico, and U.S. Island Areas.

Data Availability
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 program.

2.0   School District Overview
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. 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.

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 12th 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 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.

Structure
The Census Bureau assigns all territory in the U.S., 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-12th or K-12th) is assigned as Unified, while a district that operates schools for children only in grades KG-8th 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 for 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 cross boundaries for other statistical geographies like Urban Areas, Metropolitan Areas, Zip Code Tabulation Areas, Census Tracts, and Block Groups.

Grade Range and Fiscal Responsibility

Although school district classifications (Elementary, Secondary, or Unified) generally reflect the grade range of schools operated by 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 that a school district operates. 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 K-8th, and pays a neighboring school district to educate children in grades 9th–12th. The Elementary district is operationally responsible for grades K-8th, 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-12th.

Spatial Data Format

The Census Bureau distributes school district boundaries formatted as shapefiles, a common industry standard for representing spatial data in points, lines, and polygons. Separate files are provided for Unified, Elementary, and Secondary districts. These data are released annually as geographic layers in the Census Bureau's TIGER/Line database. 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 from the biennial district review program have introduced some exceptions. The code value 99998 is used for some large bodies of water and 99997 is assigned to land where no official school district is defined by a state.

Pseudo Districts

In addition to regular functioning school districts, the TIGER/Line shapefiles also contain a small set of records for pseudo-school districts. These additional cases occur infrequently and 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-12th throughout the county, except in a portion of the county where a city operates a separate K-8th district. Within the territory overlapping the city, the county only operates schools that serve 9th-12th. District boundary files 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 9th-12th. Although pseudo-districts are not functioning districts, they are administratively necessary to help the Census Bureau allocate children for Title I purposes. Pseudo-districts occur in California, Kentucky, Massachusetts, Nebraska, Oregon, South Carolina, and Tennessee, and their names reflect the functional associations between the two interacting districts. A list of these pseudo-secondary school districts and their codes appears in Appendix A below.

3.0   2007 Census Bureau TIGER/Line Shapefiles

Content, Vintage, and Scope

The 2007 TIGER/Line Shapefiles contain 2000 Census geography and current geography for the United States, the District of Columbia, 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, 2007, or legal and statistical area boundaries that have been adjusted and/or corrected since the 2000 Census. This vintage enables users to see the most current boundaries of governmental units that match the data from the surveys that use 2007 geography, such as the 2007 Population Estimates and the American Community Survey. The features in this release reflect updates that were made in the MAF/TIGER database through May 2007.

Boundary Changes
The 2007 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 2005-2006 school year.

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.

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 (GBF/DIME 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   Structure and Format

Composite Files
The 2007 Composite School District shapefile combines the boundaries of all TIGER/Line school districts (Elementary, Secondary, and Unified) into a single file, rather than three separate layers. 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. Likewise, it simplifies mapmaking by providing wall-to-wall school district geographic coverage for all U.S. territory in a single file.

The TIGER/Line Elementary and Unified district boundaries are mutually exclusive, and the combination of the two exhausts the full extent of the U.S., Puerto Rico, and the Island Areas. Secondary and Elementary districts are usually 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.

Structure, Format, Naming Conventions
The 2007 composite school district boundaries are offered as a shapefile that is compressed into a ZIP file. The shapefile is a collection of six individual files with separate extensions that function together.

The name of each file is:
SCHOOLDISTRICT_SY0506_TL07.<ext>

Where:
SCHOOLDISTRICT = general descriptor for type of geography

SY0506 = School year 2005-2006
.
TL07 = original shapefiles were sourced from TIGER/Line 2007

<ext> = the file extension:

- .shp – the feature geometry
- .shx – the index of the feature geometry
- .dbf – the tabular attribute information
- .prj – the coordinate system information
- .sbn – the shape information in rectangles
- .shp.xml – the Federal Geographic Data Committee (FGDC) metadata

Datum (GCS NAD 83)
The composite shapefile includes a .prj file in the GIS industry standard well-known text (WKT) format that describes the coordinate system/projection/datum information for each shapefile. 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]]

Metadata
The composite school district shapefile includes metadata that describe various characteristics about data quality, purpose, spatial extent, attribute descriptions, valid field values, contact information, and various other features. The metadata file is compatible with a text editor, web browser, and common GIS applications, and are provided in Extensible Markup Language (XML) format, the Federal Geographic Data Committee's (FGDC) Content Standard for digital geospatial metadata (CSDGM) - shp.xml.

RECORD LAYOUT

Composite School District Shapefile Record Layout for SCHOOLDISTRICT_SY0506_TL07

Field	Length	Type	Description
STATEFP	2	String	State FIPS code
SCSDLEA	5	String	Current secondary school district local education agency code
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
FUNCSTAT	1	String	Current functional status: E=Active government providing special-purpose functions, F=Fictitious Entity created to fill the Census Bureau geographic hierarchy
ELSDLEA	5	String	Current elementary school district local education agency code
UNSDLEA	5	String	Current unified school district local education agency code
GEOID	7	String	School district identifier; a concatenation of the current state FIPS code and school district local education agency code

APPENDIX A - PSEUDO SCHOOL DISTRICTS

2005-2006 School District Review Program Pseudo-School Districts (stored as Secondary School Districts)

Column headers:
STATEFP   2007 state FIPS code
SDLEA   2007 secondary school district local education agency code
NAME   2007 secondary school district name

STATEFP	SDLEA	NAME
06	06107	Porterville Unified (9-12)
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
25	22222	Mohawk Trail Regional School District in Hawley Town and Charlemont Town
31	80050	Ainsworth Affiliation
31	80100	Alliance Affiliation
31	80150	Amherst Affiliation
31	80200	Anselmo-Merna Affiliation
31	80250	Ansley Affiliation
31	80300	Ashland-Greenwood Affiliation
31	80350	Auburn Affiliation
31	80400	Axtell Affiliation
31	80450	Bancroft-Rosalie Affiliation
31	80500	Battle Creek Affiliation
31	80550	Bayard Affiliation
31	80600	Beemer Affiliation
31	80650	Boone Central Affiliation
31	80700	Bridgeport Affiliation
31	80750	Broken Bow Affiliation
31	80800	Bruning-Davenport Affiliation
31	80850	Callaway Affiliation
31	80900	Cedar Bluffs Affiliation
31	80950	Cedar Rapids Affiliation
31	81000	Centura Affiliation
31	81050	Chadron Affiliation
31	81100	Chambers Affiliation
31	81150	Clarkson Affiliation
31	81200	Conestoga Affiliation
31	81250	Cozad City Affiliation
31	81300	Crawford Affiliation
31	81350	Crete Affiliation
31	81400	David City Affiliation
31	81450	Dorchester Affiliation
31	81500	East Butler Affiliation
31	81550	Elba Affiliation
31	81600	Elkhorn Valley Affiliation
31	81650	Elm Creek Affiliation
31	81700	Elwood Affiliation
31	81750	Eustis-Farnam Affiliation
31	81800	Ewing Affiliation

31	81850	Falls City Affiliation
31	81900	Fillmore Central Affiliation
31	81950	Fremont Affiliation
31	82000	Fullerton Affiliation
31	82050	Gering Affiliation
31	82100	Gibbon Affiliation
31	82150	Gothenburg Affiliation
31	82200	Hay Springs Affiliation
31	82250	Hemingford Affiliation
31	82300	Hershey Affiliation
31	82350	Hitchcock Co Affiliation
31	82400	Holdrege Affiliation
31	82450	Homer Affiliation
31	82500	Howells Affiliation
31	82550	Humboldt Table Rock Steinauer Affiliation
31	82600	Humphrey Affiliation
31	82650	Johnson-Brock Affiliation
31	82700	Kearney Affiliation
31	82750	Lakeview Affiliation
31	82800	Leigh Affiliation
31	82850	Lexington Affiliation
31	82900	Leyton Affiliation
31	82950	Lincoln Affiliation
31	83000	Litchfield Affiliation
31	83050	Loomis Affiliation
31	83100	Lyons-Decatur Northeast Affiliation
31	83150	Madison Affiliation
31	83200	Malcolm Affiliation
31	83250	Maxwell Affiliation
31	83300	Maywood Affiliation
31	83350	McCook Affiliation
31	83400	Mead Affiliation
31	83450	Meridian Affiliation
31	83500	Milford Affiliation
31	83550	Morrill Affiliation
31	83600	Nebraska City Affiliation
31	83650	Nebraska Unified District 1 Affiliation
31	83700	Neligh-Oakdale Affiliation
31	83750	Newman Grove Affiliation
31	83800	Norfolk Affiliation
31	83850	Norris SD 160 Affiliation
31	83900	North Loup Scotia Affiliation
31	83950	North Platte Affiliation
31	84000	O'Neill Affiliation
31	84050	Ogallala Affiliation
31	84100	Ord Affiliation
31	84150	Overton Affiliation
31	84200	Palmyra District O R 1 Affiliation
31	84250	Paxton Affiliation
31	84300	Pender Affiliation
31	84350	Pierce Affiliation

31	84400	Plainview Affiliation
31	84450	Plattsmouth Affiliation
31	84500	Pleasanton Affiliation
31	84550	Ponca Affiliation
31	84600	Prague Affiliation
31	84650	Ravenna Affiliation
31	84700	Raymond Central Affiliation
31	84750	Rep/Twin Valley Affiliation
31	84800	Sargent Affiliation
31	84850	Scottsbluff Affiliation
31	84950	Shickley Affiliation
31	85000	Sidney Affiliation
31	85050	Silver Lake Affiliation
31	85100	So Sioux City Affiliation
31	85150	St Paul Affiliation
31	85200	Stanton Affiliation
31	85250	Stapleton Affiliation
31	85300	Sumner-Eddyville-Miller Affiliation
31	85350	Sutherland Affiliation
31	85400	Syracuse-Dunbar-Avoca Affiliation
31	85450	Tecumseh Affiliation
31	85550	Tri County Affiliation
31	85600	Twin River Affiliation
31	85650	Unified Niobrara-Lynch Affiliation
31	85700	Wahoo Affiliation
31	85750	Waverly SD 145 Affiliatioin
31	85800	Weeping Water Affiliation
31	85900	West Point Affiliation
31	85950	Wilber-Clatonia Affiliation
31	86000	Wisner-Pilger Affiliation
41	41034	Klamath Falls City Overlap Area
41	41035	Klamath County Overlap Area
45	45013	Beaufort County SD within Beaufort Marine Corps Air Station
45	45079	Richland County School District 02 within Fort Jackson
47	47001	Anderson County School District in Clinton
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	47103	Lincoln County School District in Fayetteville
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