

Education Demographic and Geographic Estimates (EDGE) Program:

ZIP Code Tabulation Area (ZCTA)
Locale Assignments File Documentation,
2017

Education Demographic and Geographic Estimates (EDGE) Program

ZIP Code Tabulation Area (ZCTA) Locale Assignments File Documentation, 2017

MAY 2018

Douglas E. Geverdt
National Center for Education Statistics

NCES 2018-077
U.S. Department of Education



U.S. Department of Education

Betsy DeVos.
Secretary of Education

Institute of Education Sciences

Mark Schneider
Director

National Center for Education Statistics

James Lynn Woodworth
Commissioner

Administrative Data Division

Ross Santy
Associate Commissioner

The National Center for Education Statistics (NCES) is the primary federal entity for collecting, analyzing, and reporting data related to education in the United States and other nations. It fulfills a congressional mandate to collect, collate, analyze, and report full and complete statistics on the condition of education in the United States; conduct and publish reports and specialized analyses of the meaning and significance of such statistics; assist state and local education agencies in improving their statistical systems; and review and report on education activities in foreign countries.

NCES activities are designed to address high-priority education data needs; provide consistent, reliable, complete, and accurate indicators of education status and trends; and report timely, useful, and high-quality data to the U.S. Department of Education, Congress, states, other education policymakers, practitioners, data users, and the general public. Unless specifically noted, all information contained herein is in the public domain.

We strive to make our products available in a variety of formats and in language that is appropriate to a variety of audiences. You, as our customer, are the best judge of our success in communicating information effectively. If you have any comments or suggestions about this or any other NCES product or report, we would like to hear from you. Please direct your comments to

NCES, IES, U.S. Department of Education
Potomac Center Plaza (PCP)
550 12th Street SW
Washington, DC 20202

May 2018

The NCES Home Page address is <http://nces.ed.gov>.

The NCES Publications and Products address is <http://nces.ed.gov/pubsearch>.

This publication is only available online. To download, view, and print the report as a PDF file, go to the NCES Publications and Products address shown above.

Mention of trade names, commercial products, or organizations does not imply endorsement by the U.S. Government.

Suggested Citation

Geverdt, D. (2018). *Education Demographic and Geographic Estimates Program (EDGE): ZIP Code Tabulation Area (ZCTA) Locale Assignments File Documentation, 2017* (NCES 2018-077). U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved [date] from <http://nces.ed.gov/pubsearch>.

Content Contact

Doug Geverdt
(202) 245-8230
douglas.geverdt@ed.gov

Contents

1.0	ZIP Code Tabulation Area (ZCTA) Locale Assignments	1
2.0	Locale codes and assignment criteria	1
3.0	ZCTA	2
3.1	Development	2
3.2	Limitations	2
4.0	Data source	2
5.0	Structure and format	2
6.0	Record layout	3

ACRONYMS

EDGE	Education Demographic and Geographic Estimates
NCES	National Center for Education Statistics
TIGER	Topologically Integrated Geographic Encoding and Referencing
USPS	United States Postal Service
ZCTA	ZIP Code Tabulation Area

This page intentionally left blank.

1.0 ZIP Code Tabulation Area (ZCTA) locale assignments

The ZCTA Locale file is a table of NCES Locale assignments applied to each of the Census Bureau's ZIP Code Tabulation Areas (ZCTAs) included in the 2017 TIGER/Line boundaries. The assignments rely on 2017 NCES Locale boundaries and are based on the locale that accounts for the largest areal proportion of the ZCTA.

2.0 Locale codes and assignment criteria

Locale codes are a general geographic indicator developed by the Education Demographic and Geographic Estimates (EDGE) Program to help the National Center for Education Statistics (NCES) classify the types of communities where educational institutions are located. The framework includes twelve classifications: four basic types – City, Suburb, Town, Rural – that each contains three subtypes differentiated by population size (in the case of City and Suburban assignments) and proximity (in the case of Town and Rural assignments). The NCES locale framework relies on standard urban and rural definitions developed by the U.S. Census Bureau, and each type of locale is either urban or rural in its entirety. The locales can be fully collapsed into a basic urban–rural dichotomy, or expanded into a more detailed collection of twelve distinct categories. Additional documentation about the NCES locale criteria is available at <https://nces.ed.gov/programs/edge/Geographic/LocaleBoundaries>. The NCES classifications and corresponding two-digit locale codes are as follows:

City – Large (11): Territory inside an Urbanized Area and inside a Principal City with population of 250,000 or more.

City – Midsize (12): Territory inside an Urbanized Area and inside a Principal City with population less than 250,000 and greater than or equal to 100,000.

City – Small (13): Territory inside an Urbanized Area and inside a Principal City with population less than 100,000.

Suburban – Large (21): Territory outside a Principal City and inside an Urbanized Area with population of 250,000 or more.

Suburban – Midsize (22): Territory outside a Principal City and inside an Urbanized Area with population less than 250,000 and greater than or equal to 100,000.

Suburban – Small (23): Territory outside a Principal City and inside an Urbanized Area with population less than 100,000.

Town – Fringe (31): Territory inside an Urban Cluster that is less than or equal to 10 miles from an Urbanized Area.

Town – Distant (32): Territory inside an Urban Cluster that is more than 10 miles and less than or equal to 35 miles from an Urbanized Area.

Town – Remote (33): Territory inside an Urban Cluster that is more than 35 miles from an Urbanized Area.

Rural – Fringe (41): Census-defined rural territory that is less than or equal to 5 miles from an Urbanized Area, as well as rural territory that is less than or equal to 2.5 miles from an Urban Cluster.

Rural – Distant (42): Census-defined rural territory that is more than 5 miles but less than or equal to 25 miles from an Urbanized Area, as well as rural territory that is more than 2.5 miles but less than or equal to 10 miles from an Urban Cluster.

Rural – Remote (43): Census-defined rural territory that is more than 25 miles from an Urbanized Area and also more than 10 miles from an Urban Cluster.

Because ZCTAs may contain multiple types of locales, final assignments are based on the locale that accounts for the largest areal proportion of the ZCTA. If a single locale accounts for a majority of the ZCTA area, the ZCTA is assigned the locale. If no single locale accounts for a majority of the area, then the ZCTA is assigned to the basic type that accounts for a majority of the area, and then assigned to the largest subtype within the basic category. If no subtype or basic type accounts for a majority of the ZCTA area, the ZCTA is assigned based on a simple plurality.

3.0 ZCTA

3.1 Development

ZIP Code tabulation areas (ZCTAs) are geographic approximations of U.S. Postal Service (USPS) 5-digit ZIP Code service areas that the Census Bureau uses to present statistical data from censuses and surveys. The Census Bureau defines ZCTAs by allocating each census block that contains addresses to a single ZIP Code tabulation area, usually to the ZCTA that reflects the most frequently occurring ZIP Code for the addresses within that block. Blocks that do not contain addresses but are completely surrounded by a single ZIP Code tabulation area (enclaves) are assigned to the surrounding ZCTA; those surrounded by multiple ZCTAs are added to a single ZCTA based on the longest shared border. The Census Bureau identifies 5-digit ZIP Code tabulation areas using a 5-character numeric code that represents the most frequently occurring USPS ZIP Code within that ZCTA. This code may contain leading zeros.

There were significant changes to the construction of ZCTA boundaries between 2000 and 2010. Only legitimate five-digit areas were defined for 2010, therefore there was no longer full nationwide coverage. The 2010 ZCTAs better represented actual ZIP Code service areas because the Census Bureau initiated a process before creation of 2010 blocks to add block boundaries that split polygons with large numbers of addresses using different ZIP Codes. For additional discussion of ZCTA development and use, see: <http://www.census.gov/geo/reference/zctas.html>.

3.2 Limitations

The Census Bureau does not update ZCTA boundaries throughout the decade, and this condition poses some limitations for using the ZCTA locale file. First, although the geographic relationship between 2010 ZCTA polygons and the extent of 2010 ZIP Code service areas is likely to be quite close, there may be differences between the two. Second, the geographic relationship between 2010 ZCTA boundaries and post-2010 USPS ZIP Code service areas may become less reliable over time if USPS adjusts the spatial extent of these areas to improve delivery service. Third, because the 2010 ZCTA universe did not include the complete set of 2010 USPS ZIP Codes, some ZIP Codes may not have a corresponding match in the ZCTA file. This lack of correspondence may increase over time if USPS retires or introduces new ZIP

Codes after 2010. Lastly, the ZCTA delineation process primarily uses residential addresses and is biased towards ZIP Codes used for city-style mail delivery, thus there may be ZIP Codes that cover primarily nonresidential or post office box addresses that may not have a corresponding ZCTA.

4.0 Data source

ZCTA boundaries for the 2017 ZCTA Locale file were sourced from the U.S. Census Bureau’s TIGER/Line shapefile collection. Current geography in the 2017 TIGER/Line shapefiles generally reflects the boundaries of governmental units in effect as of January 1, 2017, and other legal and statistical area boundaries that have been adjusted and/or corrected since the 2010 Census. This vintage includes boundaries of governmental units that match the data from the surveys that use 2016 geography, such as the Population Estimates and the American Community Survey.

5.0 Development of Census urban definition: Summary background

The ZCTA locale file is provided as a SAS table (edge_zcta2017_locale.sas7bdat) and a dBase file (EDGE_ZCTA2017_LOCALE.dbf). In both cases, there is a single file for the United States.

6.0 Record layout

The ZCTA Locale File Record Layout

Field	Length	Type	Description
ZCTA5CE10	5	String	ZCTA code
LOCALE	2	String	Locale assignment