

## METHODOLOGICAL NOTE

### Who Is Considered a “Disconnected Youth”?

Youth disconnection rates in this report are calculated by Measure of America using employment and enrollment data from the 2018 American Community Survey (ACS) of the US Census Bureau. Disconnected youth, also referred to as opportunity youth, are teenagers and young adults between the ages of 16 and 24 who are neither in school nor working. Young people in this age range who are working or in school part-time or who are in the military are not considered disconnected. Youth who are actively looking for work are considered disconnected.

Several data sources exist that can be used for calculating youth disconnection. As a result, researchers working with different datasets, or using different definitions of what constitutes disconnection, can arrive at different numbers for this indicator. A good summary of these various definitions can be found on a Huffington Post blog piece from September 2016 [here](#).

Measure of America uses the Census Bureau’s ACS for four reasons: (1) it is reliable and updated annually; (2) it allows for calculations by state and metro area as well as by more granular census-defined neighborhood clusters within metro areas; (3) it includes young people who are in group quarters, such as juvenile or adult correctional facilities, supervised medical facilities, and college dorms; and (4) it counts students on summer break as being enrolled in school.

### Methods

In this report, the youth disconnection rates and numbers at the national, state, congressional district, and metro area levels use 2018 data. Estimates at the county and public use microdata area (PUMA) level use 2014–2018 (five-year) data. Time series data are one-year estimates from the relevant year.

The ACS is an annual survey conducted by the Census Bureau that samples a subset of the overall population. As with any data drawn from surveys, there is some degree of sampling and nonsampling error inherent in the data. Thus, comparisons between similar values on any indicator should be made with caution since these differences may not be statistically significant.

In order to arrive at the percentage of disconnected youth, the total number of disconnected young people and the total number of young people overall are calculated for each geographic area from the ACS Public Use Microdata Sample. Not in school means that a young person has not attended any educational institution and has also not been home schooled at any time in the three months prior to the survey date. Not working means that a young person is either unemployed or not in the labor force at the time they responded to the survey. Disconnected youth are young people who are simultaneously not in school and not working. This population cannot be estimated by simply adding the number of young people not enrolled in school to the number of young people not working because many students in this age range do not work and many young workers are not in school.

### Calculating Metro Area Youth Disconnection and Identifying the Largest Metro Areas

The US Census Bureau provides a list of metropolitan statistical areas (MSAs) by population size. The top one hundred MSAs include Madison, Wisconsin. But because the standard error of the youth disconnection estimate for this metro area was too large to provide a reliable estimate, this MSA is not included in this report.

The employment and enrollment data needed to calculate youth disconnection for metro areas are not available directly by metro area from the ACS. Metro areas were custom built up by Measure of America from the PUMAs that make up metro areas. In cases where a PUMA falls partially within two or more metro areas, it is included in the metro area where it has the largest population. If the PUMA falls partly in and partly outside a metro area, it is included in the metro area.

Due to changes in the definitions of metro areas by the White House Office of Management and Budget (OMB), findings from this report for specific metro areas are not directly comparable to findings from Measure of America's first three reports on youth disconnection: *One in Seven: Ranking Youth Disconnection in the 25 Largest Metro Areas*, *Halve the Gap by 2030: Youth Disconnection in America's Cities*, and *Zeroing In on Place and Race: Youth Disconnection in America's Cities*. They are comparable to the previous three reports: *Promising Gains, Persistent Gaps: Youth Disconnection in America*, *More Than a Million Reasons for Hope: Youth Disconnection in America Today*, and *Making the Connection: Transportation and Youth Disconnection*.

### Counties

US county and county equivalent (as defined by the federal government) estimates are custom tabulations provided by special arrangement with the US Census Bureau. Counties range in size from over 10 million to under one hundred residents. Because many counties are relatively small, disconnected youth rates for each county in this report are calculated using five-year estimates from 2014–2018. Counties with disconnected youth populations considered statistically unreliable have been removed from the analysis.

### Urban-Rural Classification of Counties

There are multiple definitions of urban and rural areas used by different federal agencies in the United States. In this report, the youth disconnection estimates for each of the six urban-rural categories use the taxonomy developed by the US Centers for Disease Control and Prevention's National Center for Health Statistics (NCHS). Its schema places each of the 3,154 counties in the United States into one of six categories: large central metro, large fringe metro, medium metro, small metro, micropolitan, and non-core. Further details on this classification are here. For ease of communication, these six categories have been renamed to commonly used terms: urban centers, suburbs, medium-sized cities, small cities, towns, and completely rural areas. The table above contains the definitions used by NCHS in classifying counties.

Based on the most recent NCHS county categorizations (2013), each county was assigned to a category in the above schema. Then, using county-level estimates prepared for MOA by the Census Bureau, we calculated an aggregate disconnected youth rate for each of the six county classifications by dividing the total number of disconnected youth in a given county classification by the total number of people ages 16–24 in a given county classification.

## Public Use Microdata Areas and the Eight Community Types

For the first time ever, this report includes youth disconnection estimates for each public use microdata area in the country. PUMAs are the smallest geographic unit of the Public Use Microdata Sample. They are defined by the US Census Bureau, are built out of census tracts and counties, and have populations of at least 100,000 people. Due to this population threshold, urban areas may contain multiple PUMAs within a county whereas in rural areas a PUMA may cover multiple counties. There are 2,351 PUMAs within the 50 US states.

In order to help make sense of these many geographic units, the PUMAs have been broken into eight categories. The categories were created using a k-means clustering algorithm to group PUMAs based on their similarity, as defined by two factors: the youth disconnection rate and the logarithm of the population density. Population density was calculated using 2018 ACS population estimates and areas calculated from a PUMA shapefile from IPUMS USA.

## Voter Turnout Analysis

In election years, the US Census Bureau's Current Population Survey collects data on reported voting and registration. This report examines the relationships between state-level youth disconnection rates and the percentage of the citizen 18- to 24-year-old population that reported voting in 2012, 2014, 2016, and 2018. We compare turnout in 2014 and 2018 to assess how changes in midterm turnout rates are associated with youth disconnection rates.

### TYPE OF COUNTY

### DEFINITION

**URBAN CENTERS**  
(Large Central metro)

Counties within metro areas with populations **1,000,000 or more**

**SUBURBS**  
(Large fringe metro)

Counties within metro areas with populations **1,000,000 or more that are not urban centers**

**MEDIUM-SIZED CITIES**  
(Medium metro)

Counties within metro areas with populations **between 250,000 and 999,999**

**SMALL CITIES**  
(Small metro)

Counties containing cities with populations **between 50,000 and 249,999**

**TOWNS**  
(Micropolitan)

Counties within metro areas with populations **between 10,000 and 49,999**

**COMPLETELY RURAL AREAS**  
(Non-core)

Counties **with no cities larger than 10,000**

## DEFINITIONS

**Disability** – Disability status in this report refers to any enduring emotional, physical, or mental condition that makes everyday activities like walking, dressing, or remembering things difficult and restricts an individual’s ability to work or to perform basic required tasks without assistance. This is self-reported; individuals who report having such a condition in the ACS are counted as having a disability. Those who do not are counted as not having a disability.

**Group Quarters** – The US Census Bureau refers to people who live in any kind of non-household living arrangement as living in “group quarters”. These can be institutional group quarters such as correctional or supervised medical facilities or non-institutional group quarters such as college or university dormitories, military bases, or group homes. One of the primary advantages of using the ACS as the data source for this research is that the survey includes young people living in group quarters.

**Metro Area** – Metro areas used in this report are formally known as metropolitan statistical areas (MSAs), geographic areas defined by the OMB and used by the US Census Bureau and other government entities. MSAs constitute counties grouped around an urban center and include outlying suburban and exurban counties from which a substantial percentage of the population commutes to the urban center for work.

**PUMA** – Public use microdata areas, or PUMAs, are the smallest geographic unit of the Public Use Microdata Sample. They are defined by the US Census Bureau, are built out of census tracts and counties, and have populations of at least 100,000 people.

**Regions** – In the discussion of regional differences in disconnected youth rates, we use the four regions of the United States (Midwest, Northeast, South, and West) as defined by the US Census Bureau.

**Racial and Ethnic Groups** – Racial and ethnic groups in this report are based on definitions established by the OMB and used by the Census Bureau and other government entities. Since 1997, this office has recognized five racial groups and two ethnic categories. The racial groups include Asian, black, Native American, Native Hawaiian and Other Pacific Islander, and white. The ethnic categories are Latino and not Latino. People of Latino ethnicity may be of any race. In this report, members of each of these racial groups include only non-Latino members of these groups. All references to Asians, blacks, Native Americans, and whites include only those who are non-Latino. Throughout the report, the Asian racial group combines the OMB categories of both Asian and Native Hawaiian and Other Pacific Islander. Due to the very small population sizes of some of the racial and ethnic groups in some states and metropolitan areas, we cannot always present reliable estimates of youth disconnection for these groups. These are denoted in the report’s tables.

In recognition of the fact that these racial groups are not monolithic, this report includes youth disconnection rates for seven of the largest Asian subgroups and the five largest Latino/a subgroups in the United States. The selection of these groups is based on national population estimates from the 2018 one-year ACS. The most populous Asian subgroups also include Japanese and Pakistani residents, but because the standard errors of the youth disconnection estimates for these groups were too large to provide reliable estimates, they are not included in this report.

**Unreliable** – With one exception, estimates with a coefficient of variance of greater than 0.2 are considered unreliable and are omitted from the report. Estimates at the PUMA-level with a coefficient of variance of greater than 0.3 are considered unreliable so that more geographies could be examined.