



Opportunity Youth Methods Guide

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Summary

Identifying opportunity youth for those between age 16-19 is straightforward, as ACS has a single table which has the number of students either unemployed or out of the labor force for both those who are in school and out of school. However, for individuals ages 20-24, the team had to make some assumptions about school enrollment and education status (as the data was available in separate tables). This is problematic because those in school and those not enrolled in school have different likelihoods of participating in the labor force. Using individual-level data from IPUMS USA, we find that labor force participation rate is about 80 percent for those not in school and about 60 percent for those in school. The unemployment rate did not significantly differ between the two groups.

We also find that labor force participation rate significantly differs across racial and ethnic groups. For example, almost 90% of 20-24-year-olds who identify as white and are not in school were in the labor force compared to slightly more than 60% of 20–24-year-olds who identify as Black in a similar situation. In order to capture the differences in the labor force participation rate by race and ethnicity, we weighted the labor participation rate for each racial and ethnic group (non-Hispanic Asian, non-Hispanic black, Hispanic/Latino, non-Hispanic white, and other) to obtain the average labor participation rate for those who are not in school in every census tract. We use this to calculate the number of students who are out of the labor force and also out of school. Among those who are in the labor force, we multiply the unemployment rate to obtain the number of 20-24 year olds who are unemployed and out of school. We add the two numbers to obtain the number of opportunity youth between the ages of 20 and 24. We divided the total number of opportunity youth by the total population ages 16-24.



Detailed Guide

Prepared by NDSC Team, August 2020

Age Group 16-19

- The ACS provides all of the data points for this age group, it breaks down labor force participation and employment within school enrollment rates in **table B14005**
- Calculations:
 - Add Males Not in School and Not Employed or in Labor Force: HD01_VD10 + HD01_VD11 + HD01_VD14 + HD01_VD15
 - Add Females Not in School and Not Employed or in Labor Force: HD01_VD24 + HD01_VD25 + HD01_VD28 + HD01_VD29
 - Add the male and female calculations together to get the number of opportunity youth ages 16-19

Age Group 20-24

- **STEP A: Calculating the correct number of 20-24 year olds in each race**
 - In ACS Tables B01001B-I, only white is broken out as non-Hispanic, leading to Hispanic individuals being double counted in all of the other race groups. This throws off our numbers of 20-24 year olds by over 100% in some census tracts. So, we need to calculate the number of 20-24 year olds by race, taking ethnicity into account.
 - We do this by taking the *percent of each race that is 20-24 years old* from the *B01001B-I tables* and *multiplying that percent by the total non-Hispanic population of each race* (total population by race found in the Race & Ethnicity dataset folder)
 - When you add up all of the races, there are still some variations between the given total 20-24 year old population and the one we've just calculated, but significantly less than before – all but about 40 census tracts are under 10% difference, and many are 0 or less than 1%.
- **STEP B: Use IPUMS to Determine % of 20-24 of each race who are Not in School and In the Labor Force**

	2010	2011	2012	2013	2014	2015	2016	2017	2018
White	.8403297	.844018	.8606831	.8510514	.8448249	.843521	.8452413	.8369764	.8384763
Black	.7086454	.7004927	.6922802	.6971582	.6963522	.7078366	.7200416	.7302762	.7346571
Hispanic	.7837568	.7831111	.7815187	.7860642	.7863587	.7916355	.798061	.8002718	.804343
Asian	.7931934	.7897932	.77314	.7761047	.7795141	.7807842	.7919323	.802137	.8137596
Other	.7996474	.7927365	.7935	.8102653	.7903241	.8042193	.8064545	.8128321	.8153969

- **STEP C: Calculating 20-24 Opportunity Youth**
 - Import population file that you calculated in step A



- Merge with ACS S1401 to get the percent of 20-24 year olds enrolled in school and multiply (1 - that percent) by YOUR 20-24 total population (aggregate of all races from step A) to get the **number of 20-24 year olds that are not enrolled in school**
- Merge with ACS S2301 to get the unemployment rate for 20-24 year olds
- Create scalars of all of the data points that you got in Step B from IPUMS
- Calculations
 - **Labor Force Participation Rate for not in school**: SUM of all races (20-24 year old population of each race * IPUMS scalar for each race) / total 20-24 population
 - **Not in School Not in Labor Force**: **number of 20-24 not enrolled in school** * (1- **labor force participation rate for not in school**)
 - **Not in School Unemployed** = **number of 20-24 not enrolled in school** * **labor force participation rate for not enrolled in school** * unemployment rate 20-24
 - NOTE: Assumes unemployment rate is the same for those in school and those not in school. Parth and I checked on this at the county level using IPUMS data and it's a solid assumption
 - **Opportunity Youth 20-24** = **Not in School Unemployed** + **Not in School Not in Labor Force**

Final Step:

- Add number of Opportunity Youth 16-19 and 20-24 together to get count
- Divide by total population 16-24 to get percent