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# Hispanics, High School Dropouts and the GED

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## **Executive Summary**

Just one-in-ten Hispanic high school dropouts has a General Educational Development (GED) credential, widely regarded as the best "second chance" pathway to college, vocational training and military service for adults who have not graduated from high school. By contrast, two-in-ten black high school dropouts and three-in-ten white high school dropouts have a GED, according to a Pew Hispanic Center analysis of newly available educational attainment data from the U.S. Census Bureau's 2008 American Community Survey.

The relatively low level of GED credentialing among Hispanic high school dropouts is especially notable because Hispanics have a much higher high school dropout rate than do blacks or whites. Some 41% of Hispanics ages 20 and older in the United States do not have a regular high school diploma, versus 23% of comparably aged blacks and 14% of whites.

Among Hispanics, there are significant differences between the foreign born and the native born in high school diploma attainment rates and GED credentialing rates. Some 52% of foreign-born Latino adults are high school dropouts, compared with 25% of the native born. And among Hispanic dropouts, some 21% of the native born have a GED, compared with just 5% of the foreign born.

Hispanics are the nation's largest minority group; they make up 47 million, or 15%, of the population of the United States. As of 2008, there were 29 million Hispanics ages 20 and older; of this group, 41% are native born and 59% are foreign born.

This Pew Hispanic Center report also analyzes labor market outcomes of Hispanic adults based on whether they dropped out of high school, have a GED or obtained a regular high school diploma or more. Among its key findings:

- As of 2008, Hispanic adults with a GED had a higher unemployment rate than Hispanic adults with a high school diploma—9% versus 7%.
- However, Hispanic full-time, full-year workers with a GED had about the same mean annual earnings (\$33,504) as Hispanic full-time, full-year workers with a high school diploma (\$32,972).

#### **About this Report**

The analysis examines the educational attainment and outcomes of adults ages 20 and older, based on the U.S. Census Bureau's 2008 American Community Survey (ACS). The ACS covers the entire resident population, including persons in correctional facilities and nursing homes. The 2008 ACS for the first time distinguished between respondents whose highest education was a regular high school diploma and those who earned a GED or other alternative high school credential.

#### A Note on Terminology

The terms "Latino" and "Hispanic" are used interchangeably in this report, as are the terms "foreign born" and "immigrant." "Foreign born" refers to persons born outside of the United States to parents neither of whom was a U.S. citizen. Foreign born also refers to those born in Puerto Rico. "Native born" refers to persons born in the United States and those born abroad to parents at least one of whom was a U.S. citizen.

All references to whites and blacks are to the non-Hispanic components of those populations.

Adults who have not obtained a regular high school diploma or more education are referred to as "high school dropouts." Also, adults who report their highest education level as a GED or other alternative high school credential are "high school dropouts."

#### **About the Author**

Richard Fry is a senior research associate at the Pew Hispanic Center. He has recognized expertise in the analysis of U.S. education and demographic data sets and has published more than 35 articles and monographs on the characteristics of U.S. racial, ethnic and immigrant populations. Before joining the Pew Hispanic Center in 2001, he was a senior economist at the Educational Testing Service.

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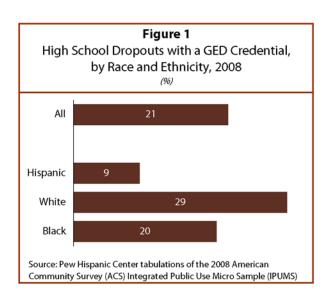
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## 1. High School Dropouts and GEDs

Further education and training is one of the paths to upward mobility for the nation's 41 million high school dropouts. Dropouts with GEDs are much more likely to pursue postsecondary education and training than dropouts lacking a GED or other alternative credential. Among young dropouts without an alternative credential, only about 1-in-10 pursues any further education. If the dropout has a GED, about 4-in-10 get additional education (National Center for Education Statistics, 1998). And dropouts with GEDs are the only ones who are considered for admission to degree-granting colleges and universities, including community colleges. A GED is also required to obtain the federal Pell grant.

Newly available Census Bureau data reveal that Hispanic high school dropouts are the least likely of the major racial/ethnic groups to have a GED (Figure 1). In 2008, fewer than 1-in-10 Hispanic dropouts had a GED. Twice as many black dropouts have a GED (20%) and more than three times as many white dropouts had a GED (29%). Thus, the major racial/ethnic group having the lowest high school graduation rate from the public schools is also the population least likely to have the "second chance" credential providing opportunities for additional education.



Part of the reason that the educational prospects of Hispanic high school dropouts are dimmer than others' prospects is the large immigrant presence among Hispanic adults. The new data suggest that it takes time for newly arrived immigrants to learn about educational opportunities, including attaining GEDs. The longer Hispanic foreign-born dropouts have been in the United States, the more likely they are to have a GED. Yet, among native-born Hispanic high school dropouts, only 21% have a GED.

<sup>&</sup>lt;sup>1</sup> This is in response to the American Community Survey question: "What is the highest degree or level of school this person has COMPLETED?" Respondents are provided 14 possible responses, including a write-in entry for grades 1 to 11. The response categories distinguish between "12th grade—no diploma," "regular high school diploma" and "GED or alternative credential."

The GED, or General Educational Development Tests, is the nation's largest dropout recovery or second chance program. Administered by the American Council on Education (ACE), the GED has standardized tests in five areas. ACE sets the minimum passing standards. States award the GED credential to test takers in their states. Some states set passing standards above the minimum, and there may be additional tests to pass (such as civics), depending on the jurisdiction. Local school districts, community colleges, correctional facilities and the military are among the major providers of GED test preparation services for dropouts.

While obtaining the GED credential opens pathways for dropouts to pursue postsecondary education, it is not clear that the GED in and of itself benefits high school dropouts. The next section shows that on some outcomes, Hispanic dropouts with GEDs fare better than uncredentialed Hispanic dropouts. In the labor market, Hispanic dropouts with GEDs may even have more favorable outcomes than Hispanics who graduated from high school with a diploma, but generally Hispanics who end their education with a GED would have been better off staying in high school and graduating.

## 2. The Value of the GED among Hispanics

This section presents some economic and social outcomes of Hispanic adults by their highest education attained. Labor market outcomes are examined for Latinos ages 20 to 64. A few non-labor market outcomes are presented for all Hispanics ages 20 and older.

#### **Employment and Hours**

In the labor market, about two-thirds of Latinos with GEDs were employed, compared with nearly three-quarters of Latinos with high school diplomas. Hispanic adults with a GED had a higher unemployment rate (9%) than Hispanics who graduated with a high school diploma (7%). Hispanics with a high school diploma were more likely than Hispanic GED holders to be full-year workers (80% versus 75%).

#### **Earnings**

Although Hispanic GED holders are less likely to have jobs and full-year work than Hispanic high school graduates, the average Hispanic GED holder may be paid more than the average Hispanic high school graduate. Among full-time, full-year workers ages 20 to 64, mean earnings for GED holders were \$33,504 compared to \$32,972 for Hispanics who ended their education with a high school diploma (Table 1).

	DROPC	DROPOUTS		
	No High School Completion	GED	High School Diploma	Some College or More
abor Market Outcomes of 20- to 64-Year-Olds				
Employed (%)	66.2%	67.1%	74.3%	80.0%
Unemployment rate (%)	8.1%	8.6%	6.6%	5.0%
Worked at least 48 weeks last year (%)	75.9%	75.3%	80.4%	80.6%
Mean usual hours worked per week	40	40	40	40
Mean earnings of full-year, full-time workers	\$27,635	\$33,504	\$32,972	\$48,621
Other Outcomes of Adults 20 Years and Older				
Married (%)	47.4%	43.1%	44.6%	46.9%
Institutionalized (%)	2.4%	5.8%	1.2%	0.7%
Veteran status (%)	1.4%	5.3%	3.6%	6.7%
Mean household income	\$50,177	\$57,995	\$62,872	\$81,868

This is a surprising pay finding. The typical GED recipient has finished around 10 years of formal schooling (Clark and Jaeger, 2006), two years less schooling than high school graduates. GED examinees do invest time to prepare and pass the tests. The median GED examinee devotes 30 hours to test preparation. But in each year of high school, a student devotes 410 hours to core curriculum classes, so the typical GED holder has not invested as much time in his or her education as a high school graduate (Boesel, Alsalam, and Smith, 1998).

The higher average pay finding is found among only one group of Hispanic workers. Table 2 presents mean and median earnings for full-time, full-year Hispanic workers by gender and immigrant status. For native-born workers, high school graduates are paid more than those with GEDs. Among foreign-born workers, particularly foreign-born males, GED holders earn more than high school graduates. For example, median earnings for immigrant men who are high school graduates were \$26,478, compared with \$30,552 for immigrant men with a GED.

Table 2							
Earnings of Full-Time, Full-Year <sup>1</sup> Hispanic Workers (20- to 64- Year-Olds), by Highest Education Attained, 2008							
DROPOUTS							
	No High School Completion	GED	High School Diploma	Some College or More			
Mean Earnings for Male	es						
Native born	\$32,957	\$37,296	\$38,907	\$56,590			
Foreign born <sup>2</sup>	\$28,867	\$36,236	\$32,465	\$51,289			
Mean Earnings for Fem	ales						
Native born	\$25,014	\$29,895	\$31,293	\$43,011			
Foreign born	\$21,497	\$25,697	\$26,151	\$39,537			
Median Earnings for Ma	ales						
Native born	\$27,497	\$30,552	\$32,588	\$45,828			
Foreign born	\$24,441	\$30,552	\$26,478	\$39,717			
Median Earnings for Fe	Median Earnings for Females						
Native born	\$21,182	\$26,478	\$27,293	\$35,644			
Foreign born	\$18,331	\$23,423	\$22,405	\$32,181			
Note: Universe is the adult po	Note: Universe is the adult population not enrolled in high school. 'By definition, "full-time, full-year workers"						
worked at least 48 weeks last Puerto Rico	worked at least 48 weeks last year and usually worked at least 36 hours per week. <sup>2</sup> Includes workers born in Puerto Rico						
Source: Pew Hispanic Center tabulations of the 2008 American Community Survey (ACS) Integrated Public Use Micro Sample (IPUMS)							

The earnings payoff to Hispanic male immigrants for having a GED rather than a high school diploma may be due to a number of factors. The male GED holders are about 2.5 years older, on average, than the male high school graduates, and they are less likely to have recently arrived in the United States. Also, although English proficiency is not a prerequisite for passing the GED tests, immigrant male GED holders are more likely than immigrant male high school graduates to

be fluent in English. Fluent English speakers are paid more in the U.S. labor market (Bleakley and Chinn, 2003).

However, it is possible that GEDs have a signaling value for male immigrants. Most of the immigrants arrived in the U.S. as adults, and those who are high school graduates received their diplomas from foreign secondary schools. Employers may have difficulty evaluating workers with foreign credentials. Immigrants with GEDs may be compensated for possessing a more familiar credential.

Standard regression analysis on immigrant male earnings reveals that the GED holders are more highly paid than high school graduates even after controlling for the differences in observable characteristics. Since these data omit some important worker characteristics, however, we can conclude only that, among Hispanic male immigrants, GEDs are associated with higher earnings compared with high school graduates.<sup>2</sup>

#### **Military**

A benefit of the GED is that it provides an avenue to enlist in the nation's armed forces. Virtually all (99%) Hispanics on active duty in the U.S. military are either high school graduates or GED holders (Pew Hispanic Center, 2003). So a GED seems necessary for successful enlistment. The military prefers to recruit high school graduates. Hispanics who ended their education with a GED were slightly more likely to be military veterans than Hispanics who had a high school diploma (Table 1).<sup>3</sup>

#### Incarceration

Hispanics whose highest education is a GED are much more likely to be currently incarcerated than are other Hispanic adults (Table 1). This partly reflect the fact that correctional facilities widely provide GED preparation and testing to inmates. Though less than 1% of the population is incarcerated, more than 10% of GEDs each year are awarded by correctional facilities (Heckman and LaFontaine, 2007).

<sup>&</sup>lt;sup>2</sup> The American Community Survey does not reveal the years of schooling of GED holders and high school graduates and does not have a measure of cognitive ability.

<sup>&</sup>lt;sup>3</sup> This is not a result of nativity differences. For example, among native-born Hispanic adults, those with a GED are more likely to be veterans than those with regular high school diploma.

<sup>&</sup>lt;sup>4</sup> The American Community Survey reveals the size of the institutionalized population, not the incarcerated population. However, most Hispanic adults who are institutionalized are in correctional facilities.

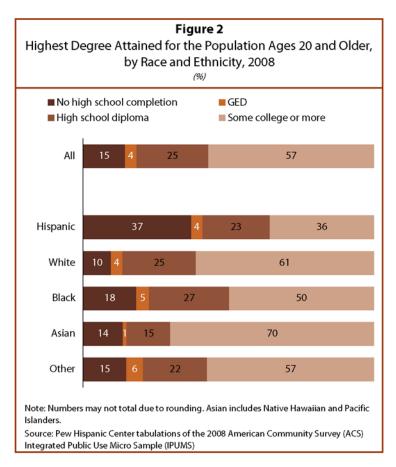
## 3. How Many Dropouts?

The new educational attainment data enable more accurate tallies of the size of the nation's high school dropout population. Previously, adults who ended their education with a GED were not distinguishable from those with regular high school diplomas, and the high school dropout population was therefore underestimated.

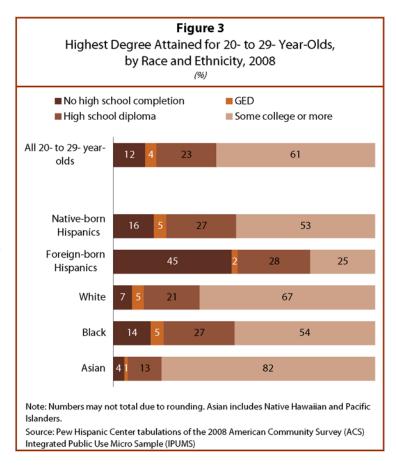
In 2008, about 41 million adults ages 20 and older, or 18% of that age group, had not obtained at least a high school diploma(Figure 2). The number of adults lacking a high school diploma or more education would be underestimated by 9

million adults if those whose highest education is a GED were tallied as high school graduates with a regular diploma, and the dropout rate would be 15% rather than 18%.

In comparison with the 41% of Hispanics adults ages 20 and older who were high school dropouts, 23% of black adults had not attained at least a high school diploma. White adults (14%) and adults of Asian origin (15%) were less likely to be high school dropouts.



The outcomes of young adults are of particular interest because they reflect the recent performance of the education system. In 2008, about onethird of Hispanic 20- to 29year-olds were high school dropouts. However, some of the Hispanic 20- to 29-yearolds were immigrants who arrived in the U.S. during adulthood and never enrolled in U.S. schools. Among nativeborn Hispanic 20- to 29-yearolds (who were educated in U.S. schools), 20% were high school dropouts (Figure 3). The dropout rates for 20- to 29year-old whites (12%), blacks (19%) and Asians or Pacific Islanders (6%) were lower.



## 4. The GED among Hispanics

Some Hispanic adults are more likely than others to have a GED (Table 3). More Hispanic males (4%) than females (3%) have a GED. Hispanic adults who speak only English at home or speak English "very well" are more likely to have a GED (5%) than Hispanics with limited English speaking skills (3%). The language differences are not because the GED is an English language-based battery of tests. The GED tests are also given in Spanish. Latino adults of Mexican, Puerto Rican and Dominican origin are more likely to have GEDs than Latinos of other origins. Hispanics residing in institutions (correctional facilities and nursing homes) are much more likely than those living in other residences to have a GED.

The prevalence of GED attainment among Hispanic adults varies across states (Table 4). Nationally, 4% of Latinos have a GED as their highest educational credential. In some states as little as 2% of Latinos have GEDs, while in Wyoming 10% of Hispanic adults report their highest degree is a GED. The state variation likely reflects the nativity differences of Hispanics across states as well as the nature of each state's adult education systems.

**Table 3**Highest Degree Attained for the Hispanic Population Ages 20 and Older, 2008
(% unless otherwise noted)

	DROPOUTS					
	No High School		High School	Some College		
	Completion	GED	Diploma	or More	Total	
Total (in thousands)						
	10,841	1,083	6,709	10,402	29,035	
Sex						
Male	39	4	24	33	100	
Female	35	3	22	39	100	
Age						
20 to 29	29	4	27	40	100	
30 to 39	37	4	23	36	100	
40 to 49	37	4	22	37	100	
50 to 59	39	4	20	37	100	
60 and older	54	3	19	24	100	
Native Born by Age						
20 to 29	16	5	27	53	100	
30 to 39	16	6	23	55	100	
40 to 49	17	6	25	52	100	
50 to 59	20	5	25	50	100	
60 and older	42	5	22	31	100	
Foreign Born <sup>1</sup> by Age						
20 to 29	45	2	28	25	100	
30 to 39	49	3	24	25	100	
40 to 49	48	3	20	29	100	
50 to 59	50	3	18	29	100	
60 and older	61	2	17	20	100	
English Ability						
Speaks only English	17	5	24	54	100	
Speaks very well	20	5	25	51	100	
Speaks with difficulty	59	3	21	17	100	
National Origin						
Mexican	43	4	23	30	100	
Puerto Rican	25	6	23	45	100	
Cuban	23	3	24	49	100	
Salvadoran	50	3	22	26	100	
Dominican	34	4	22	40	100	
Guatemalan	53	2	20	25	100	
Colombian	15	3	24	58	100	
Honduran	49	2	20	28	100	
Ecuadorian	29	3	25	42	100	
Peruvian	11	2	27	60	100	
Other Hispanic	18	4	23	55	100	
Residence Type						
Household	37	4	23	36	100	
Non-institutional group quarters	30	5	22	43	100	
Institutionalized	54	13	17	15	100	

Note: Universe is the adult population not enrolled in high school. Numbers may not total due to rounding. <sup>1</sup>Includes adults born in Puerto Rico. Source: Pew Hispanic Center tabulations of the 2008 American Community Survey (ACS) Integrated Public Use Micro Sample (IPUMS)

**Table 4**Highest Degree Attained for the Hispanic Population
Ages 20 and Older, 2008

Agi	(%)	, 2000	
	DROPO	LITS	
		013	Litale Calcassi
	No High School		High School Diploma or
	Completion	GED	More
United States			
	37	4	59
By State			
Alabama	36	3	61
Alaska			
Arizona	39	4	57
Arkansas	54	3	44
California	41	2	57
Colorado	36	6	58
Connecticut	30	5	65
Delaware	41	4	55
District of Columbia	43	3	54
Florida	26	4	71
Georgia	43	3	54
Hawaii	11	7	82
Idaho	45	4	51
Illinois	39	4	57
Indiana	39	5	56
lowa	39	5	57
Kansas	39	4	57
Kentucky	37	5	59
Louisiana	30	3	68
Maine			
Maryland	39	2	59
Massachusetts	33	5	62
Michigan	34	5	61
Minnesota	37	5	58
Mississippi	42	2	56
Missouri	33	4	62
Montana			
Nebraska	43	4	53
Nevada	43	3	54
New Hampshire			
New Jersey	29	3	67
New Mexico	28	5	67
New York	35	5	61
North Carolina	47	2	50
North Dakota			
Ohio	28	4	68
Oklahoma	42	5	53
Oregon	44	4	53
Pennsylvania	33	5	62
Rhode Island	40	4	55
South Carolina	40	4	56
South Carolina	40	4	56
South Dakota			
Tennessee Texas	43	4	53
Utah	40 36	5	55 61
	36	3	61
Vermont			
Virginia	33	3	64
Washington Wash Virginia	40	5	55
West Virginia			
Wisconsin	35	4 10	60
Wyoming	25	10	66

Note: Universe is the adult population not enrolled in high school. Numbers may not total due to rounding. Educational attainment not shown for states with fewer than 200 Hispanic adults ages 20 and older in the 2008 American Community Survey Source: Pew Hispanic Center tabulations of the 2008 American Community Survey (ACS) Integrated Public Use Micro Sample (IPUMS)

## 5. Hispanic Immigrants and the GED

Hispanic immigrants are one of the country's least educated populations. More than half of Hispanic immigrants do not have at least a high school diploma (52%), twice the rate of native-born Hispanics (25%). As Table 5 shows, more recently arrived immigrant Hispanic adults are not much better educated than Hispanic immigrants who have been in the United States for decades. With the exception of adults who arrived before 1970, a majority of immigrant Hispanic adults in 2008 were high school dropouts.

The relatively poor education of Hispanic immigrants reflects the fact that most Hispanic immigrants are educated not in the U.S. but in less developed countries. Hispanic immigrants who arrived in the U.S. early in childhood and thus were enrolled in U.S. elementary and secondary schools are much better educated. Of those who arrived under the age of 10, only about one-quarter were high school dropouts in 2008, and their education approximates that of native-born Hispanic adults (Table 5). Most immigrant Hispanic adults arrived in the United States after age 14 (80%), and a majority of them were high school dropouts.

Despite their high dropout rates, Hispanic immigrants have low levels of GED credentialing. Only 3% of Hispanic immigrants have GEDs, compared with 4% for the entire U.S. adult population. Hence, the potential for Hispanic immigrant dropouts to improve their lot through further postsecondary education and training is very limited because they lack the required credential.

There is some evidence, though, that as Hispanic immigrants spend more time in the United States, their skills and education improve. For example, immigrants' English language proficiency improves with duration of residence (Chiswick and Miller, 1998). Many adult immigrants are enrolled in school, and their educational attainment increases as they spend more time in the United States (Betts and Lofstrom, 2000).

<sup>&</sup>lt;sup>5</sup> This does not imply that the education levels of Hispanic immigrants coming to the United States have not improved over time. Hispanic immigrants coming to the U.S. today are clearly better educated upon arrival than those who arrived in earlier decades were upon arrival (Fry, 2006). Table 5 cannot be used to make inferences about the educational quality of immigration cohorts because it is a static snapshot. For example, to compare today's recent arrivals to immigrants who came in the 1970s, we would wish to know the educational attainment of the 1970s immigrants when they arrived here. But Table 5 does not reveal that. Table 5 shows the educational attainment of 1970s immigrants in 2008, not when they first got here. Between when they got here and 2008, some 1970s Hispanic immigrants emigrated, some died and some increased their educational attainment.

Though there is only suggestive evidence, it does appear that Hispanic immigrants increasingly obtain GEDs the longer they reside in the United States. Table 5 indicates that only 1% of recently arrived immigrants have a GED. Among those who have been in the United States for 10 years or more, at least 3% have a GED. So with more time in the United States, more Hispanic immigrants may acquire GEDs.

<b>Table 5</b> Highest Degree Attained for the Hispanic Foreign-Born <sup>1</sup> Population Ages 20 and Older, 2008				
	DROPOL	(%) ITS		
	No High School Completion	GED	High School Diploma	Some College or More
Arrival Cohort				
2005 to 2008	51	1	23	24
2000 to 2004	51	2	25	23
The 1990s	51	3	23	23
The 1980s	49	3	21	27
The 1970s	51	4	18	28
Before 1970	44	3	20	33
Age at Arrival				
Younger than 5	23	4	25	47
5 to 9	27	4	27	42
10 to 14	42	3	24	31
15 or older	54	3	21	22
<sup>1</sup> Includes adults born in	enter tabulations of the 20		ŕ	,

<sup>&</sup>lt;sup>6</sup> Echoing the previous footnote's discussion, the evidence is only "suggestive" because Table 5 does not follow the GED rate of a given group of immigrants over time. To accomplish that, one would need GED rates at earlier points in time, but the U.S. Census Bureau did not ascertain possession of a GED until 2008.

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## **Appendix A: Data Quality**

The new educational attainment data provide a snapshot of the highest education level of adults, but they do not reveal the fraction of adults who have ever obtained a GED. Some adults who obtain a GED go on to college and complete college credits. These individuals have at least some college education and are not included in the proportion of adults whose highest credential is a GED. Recent estimates indicate that at least 6% of Hispanic young adults complete high school via the GED. Combining GED test data with 2000 Census data, Heckman and LaFontaine (2007) find that 7% of Hispanic 20- to 24-year-olds finished high school via the GED. The U.S. Bureau of Labor Statistics recently reported that at age 22, 6% of Hispanics had a GED and were not enrolled in college (Bureau of Labor Statistics, 2010). Youths who obtained a GED and were enrolled in college are not included in this figure. Hispanic 22-year-olds were less likely than their white and black peers to have a GED and not be enrolled in college.

The finding that 5% of native-born Hispanics' highest education attainment is a GED seems consistent with the estimates that at least 6% of young Hispanics finish high school via GED. We do not know how many Hispanic GED holders go on to postsecondary education. But about 40% of youths (of all races and ethnicities) who obtain a GED enroll in some form of postsecondary education (National Center for Education Statistics, 1998). Many enroll in certificate and other non-degree programs, but about 20% enroll in a two- or four-year program. Assuming that young Hispanic GED holders pursue degree programs at a similar rate to other GED holders, the 5% of native-born Hispanics who have ended their education with a GED implies that 6.25% finished high school via the GED.

# **Appendix B: Educational Attainment and Census Data Sources**

The National Center for Education Statistics regularly publishes status high school completion rates (National Center for Education Statistics, 2009a). Researchers interested in gauging the performance of high schools in graduating students on time with regular high school diplomas have noted some of the deficiencies of the NCES status completion rates and have utilized alternative methodologies and data sets to estimate the rate of on-time high school graduation (Heckman and LaFontaine, 2007).

The 2008 American Community Survey does not yield graduation rates, and inferences regarding the performance of American public schools may not be warranted. Household surveys such as the American Community Survey are more indicative of final educational attainment and better gauge the success of the entire educational system, including the "second chance" adult education system and correctional facilities as well as public schools.

The NCES status high school completion rates are based on the Current Population Survey (CPS) and have two notable features. First, individuals who complete a GED or alternative credential are included with high school graduates as high school completers, and thus NCES does not distinguish between graduates with regular high school diplomas and GED recipients. Second, the Current Population Survey is restricted to the civilian, non-institutionalized population.

Using the 2008 American Community Survey, we can quantify the importance of these two features for the measurement of high school completion and high school graduation.

The top panel of Table B1 reports the educational attainment of 20- to 29-year-olds for the total population (including both the institutionalized and those in the armed forces). About 5% of native-born Hispanic, black and white young adults have a GED as their highest educational attainment, but it varies by gender. Confirming Heckman and LaFontaine (2007), black males are the most likely to end their education with a GED.

The fact that the Current Population Survey is restricted to the civilian, noninstitutionalized population is problematic mainly because it omits the institutionalized population. The bottom panel of Table B1 reports the educational attainment of 20to 29-year-olds in the civilian population. The educational attainment of young adults in the civilian population is very similar to those in the total population. There are not that many young adults in the armed forces to make much of a difference.

The restriction to the non-institutionalized population makes more of a difference, particularly for black males. Comparing the educational attainment of the non-institutionalized population (the center panel of Table B1) to the total population, the distributions appear nearly identical for females. But for young men, the non-

	(%)		
	DROPO	_	
	No High School Completion	GED	High School Diploma or More
otal Population			
Males	14	5	80
Native-born Hispanics	18	6	76
Whites	8	5	86
Blacks	17	7	76
Females	10	3	87
Native-born Hispanics	13	4	84
Whites	6	4	90
Blacks	11	3	85
on-Institutionalized Popu	lation		
Males	13	5	82
Native-born Hispanics	17	5	78
Whites	8	5	87
Blacks	14	5	80
Females	10	3	87
Native-born Hispanics	13	4	84
Whites	6	3	90
Blacks	11	3	86
ivilian Population			
Males	15	5	80
Native-born Hispanics	19	6	75
Whites	8	6	86
Blacks	18	7	76
Females	10	3	87
Native-born Hispanics	13	4	83
Whites	6	4	90
Blacks	12	3	85

institutionalized population is better educated because youths in correctional facilities and mental hospitals are not included. For black men, 80% of the non-institutionalized population have received at least a high school diploma, while 76% of all young black men have at least a high school diploma.

Integrated Public Use Micro Sample (IPUMS)

The difference between NCES-type reported high school completion rates and the high school diploma rate of all young adults can be inferred from Table B2. For example, for native-born Hispanic females, NCES procedures indicate that 88% of native-born Hispanic females have completed high school (based on the bottom panel, 4% have a GED and 84% have obtained at least a regular high school diploma), while the top panel indicates that 84% of all native-born Hispanic female young adults have at least a high school diploma. For young women, the difference is almost entirely due to the handling of GEDs.

For young men, particularly young black men, both GEDs and the population universe matter. For example, for young black males, NCES procedures would yield 85% of young black males completing high school (5% by GED and 80% by obtaining at least a high school diploma). But only 76% of all young black males have at least a regular high school diploma. That is a 9 percentage point difference, and it is only partly due to whether or not to include GEDs. The exclusion of the institutionalized population matters for young black males.

Educational Attainmer	<b>Table B2</b> nt of Adults 20-	to 29- Yea	ar-Olds, 2008	
	(%)			
	DROPOUTS			
	No High School Completion	GED	High School Diploma or More	
<b>Total Population</b>				
Males	14	5	80	
Native-born Hispanics	18	6	76	
Whites	8	5	86	
Blacks	17	7	76	
Females	10	3	87	
Native-born Hispanics	13	4	84	
Whites	6	4	90	
Blacks	11	3	85	
Civilian Non-Institutionaliz	ed Population			
Males	13	5	81	
Native-born Hispanics	17	5	78	
Whites	8	5	87	
Blacks	14	5	80	
Females	10	3	87	
Native-born Hispanics	13	4	84	
Whites	6	3	90	
Blacks	11	3	86	
Note: Universe is the adult popula total due to rounding. Integrated Public Use Micro Samp		igh school. Nu	ımbers may not	

## **Appendix C: Data Sample**

The analysis uses the University of Minnesota Population Center's Integrated Public Use Micro Sample of the 2008 American Community Survey (ACS). Documentation is available at <a href="http://usa.ipums.org/usa/doc.shtml">http://usa.ipums.org/usa/doc.shtml</a>. The year 2008 is the latest one available. The ACS is a 1% sample of the resident population and is designed to collect long-form Decennial Census data on an annual basis. The 2008 ACS data collection is the first year in which the questionnaire disaggregated the responses on the highest level of schooling question to distinguish completing high school by receipt of a high school diploma separately from obtaining a high school equivalent (e.g., GED).

In part because of its large sample size, the ACS has become a primary source of data on the educational attainment of the U.S. population. For example, the U.S. Census Bureau now publishes state-level educational attainment data from the ACS in its P20 reports (Crissey, 2009). The National Center for Education Statistics now publishes detailed status high school dropout rates using the ACS (National Center for Education Statistics, 2009b).

The Census Bureau has conducted evaluations of the quality of the educational attainment data collected in the ACS and compared it to the March Current Population Survey (the long-standing source of data on educational attainment). It finds that the ACS data are generally consistent with the CPS; however, the CPS reveals a higher fraction of the population completing high school and a smaller fraction reporting "12th grade, no diploma" (Scanniello, 2007). The differences between the two surveys in the level of high school attainment may reflect the differences in the mode of collecting the data. The ACS is primarily a mail-back survey; the CPS is collected by a telephone interviewer. In the latter case, respondents do not have a list of the educational attainment categories in front of them and hence may be less likely to report a detailed category such as "12th grade, no diploma."

The sample analyzed herein consists of adults ages 20 and older. Following National Center for Education Statistics' practice in tabulating high school completion rates, adults enrolled in school and who had not completed high school were excluded from the analysis. Among the foreign born in the sample, in a small number of cases (0.3%) the number of years since migration exceeds the immigrant's age. These respondents with anomalous data were excluded from the sample. The sample analyzed had 2,220,070 adults: 301,507 respondents who were either not U.S. citizens at birth or were born in Puerto Rico and 1,918,563 native-born respondents. The sample included 236,749 Hispanic adults.