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## The consequences of dropping out of high school : joblessness and jailing for high school dropouts and the high cost for taxpayers

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# **The Consequences of Dropping Out of High School**

## **Joblessness and Jailing for High School Dropouts and the High Cost for Taxpayers**

**22% Daily Jailing Rate for Young Black Men Who Drop  
Out of High School**

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## Introduction

The economic, social, and moral case for addressing the nation's existing high school dropout problems was made in a report titled Left Behind in America: The Nation's Dropout Crisis.<sup>1</sup> This report called upon the U.S. Congress and the Obama Administration to enact legislation to support programs at the local and state level to re-enroll existing high school dropouts to enable them to improve their academic achievement skills, obtain their high school diplomas or their equivalents, and bolster their employability through work experience and training. The nation's young dropouts experience a wide array of labor market, earnings, social and income problems that exacerbate their ability to transition to careers and stable marriages from their mid-20s onward. This new research paper was prepared to outline the employment, earnings, incarceration, teen and young adult parenting experiences and family incomes of the nation's young adult high school dropouts and their better educated peers in 2006 to 2008.

Young high school dropouts confront a number of labor market problems in their late teens and early 20s.<sup>2</sup> They are less likely to be active labor force participants than their better educated peers, and they frequently experience considerably higher unemployment rates when they do seek work. As a consequence, they are much less likely to be employed than their better educated peers across the nation, and gaps typically widen as national labor markets deteriorate such as during the current recession. The employment rates of the nation's 16-24 year old, out-of-school youth by their educational attainment in 2008 are displayed in Chart 1. These estimated employment rates are annual averages. Slightly less than 46 percent of the nation's young high school dropouts were employed on average during 2008. This implies an average joblessness rate during 2008 of 54% for the nation for young high school dropouts. Their employment rate was 22 percentage points below that of high school graduates, 33 percentage points below that of young adults who had completed 1-3 years of post-secondary schooling, and 41 percentage points below that of their peers who held a four year college degree. Young high

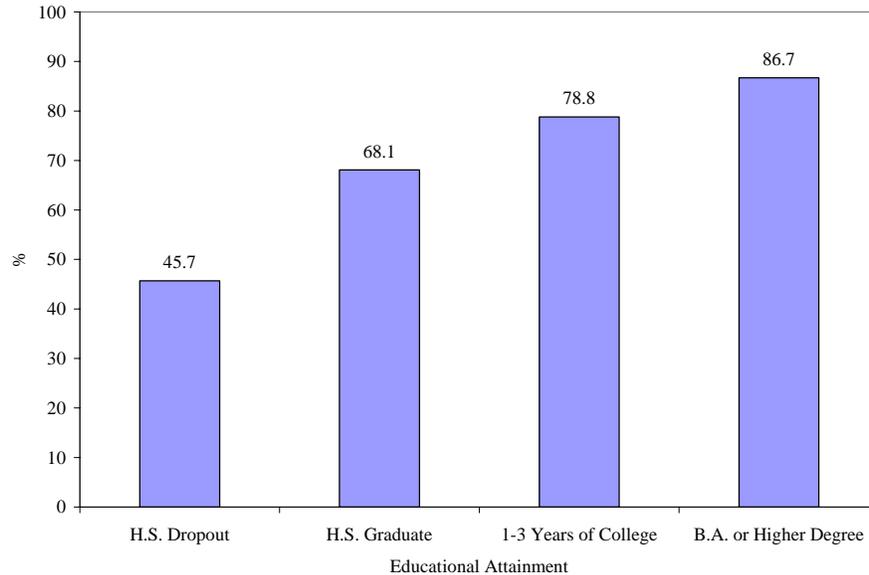
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<sup>1</sup> See: Center for Labor Market Studies, Northeastern University and the Chicago Alternative Schools Network, Left Behind in America: The Nation's Dropout Crisis, Boston, Massachusetts and Chicago, Illinois, April 2009.

<sup>2</sup> For earlier analysis of the labor market, income, and social problems of young and older high school dropouts at the national and state levels, see: (i) Andrew Sum, Neeta Fogg, and Garth Mangum, Confronting the Youth Demographic Challenge: The Labor Market Prospects of Out-of-School Youth, Sar Levitan Center for Social Policy Studies, Johns Hopkins University, Baltimore, 2000; (ii) Andrew Sum, Ishwar Khatiwada, Joseph McLaughlin, et. al., The Labor Market, Income, Social, Civic, Health, and Fiscal Consequences of Dropping Out of High School: Findings for Michigan Adults in the 21<sup>st</sup> Century, Report Prepared for the C.S. Mott Foundation, Flint, Michigan, 2008.

school dropouts were only about one-half as likely to be working as those youth holding a bachelor's or higher degree in 2008.

Chart 1:  
Employment Rates of 16-24 Year Old Out-of-School Youth in the U.S. By Educational Attainment, 2008 (Annual Averages in %)



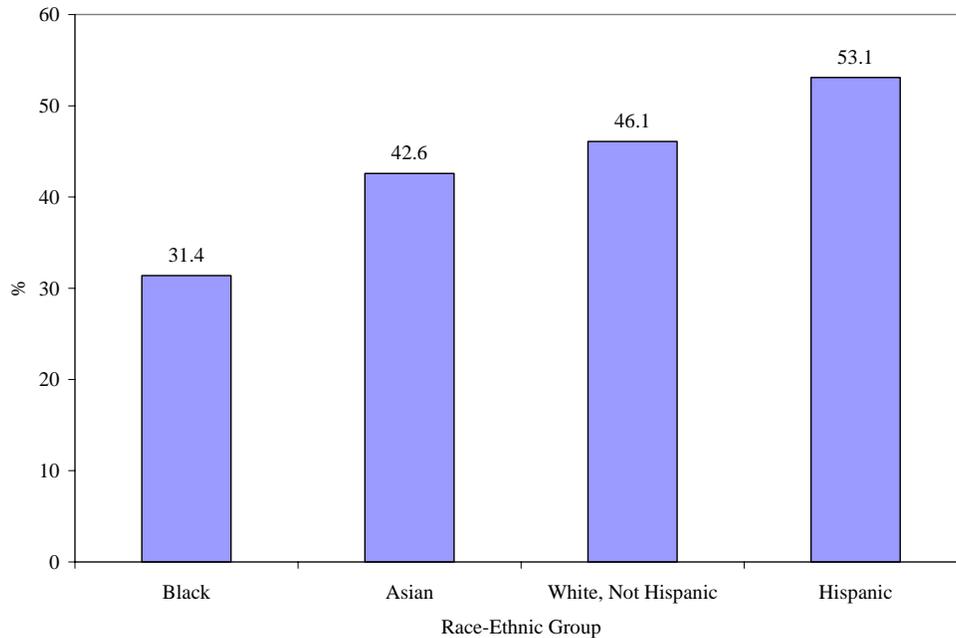
Source: January-December 2008 CPS Surveys, tabulations by authors.

The employment rates of the nation's young high school dropouts varied across gender, race-ethnic, and household income groups. Black dropouts were the least likely to be employed (31%) followed by Asians (43%), Whites (46%), and Hispanics (53%) (Chart 2). This implies a jobless rate for Blacks of 69 % followed by Asians at 57 %, Whites at 54 % and Hispanics at 47 %. The above average employment rates of Hispanic dropouts primarily reflect the sharply higher employment rates of young Hispanic immigrants, many of whom were undocumented immigrants. Earlier national research has shown that higher levels of new immigration in a state tend to significantly reduce the employment rates of the nation's teens and young adults, especially males, non-college educated youth, and native born Black and Hispanic males with limited post-secondary schooling.<sup>3</sup>

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<sup>3</sup> See: Andrew Sum, Paul Harrington, and Ishwar Khatiwada, The Labor Market and Educational Progress of America's Young Adults Since the Publication of America's Choice, Report Prepared for the New Commission on the Skills of America's Workforce, Washington, D.C., 2006.

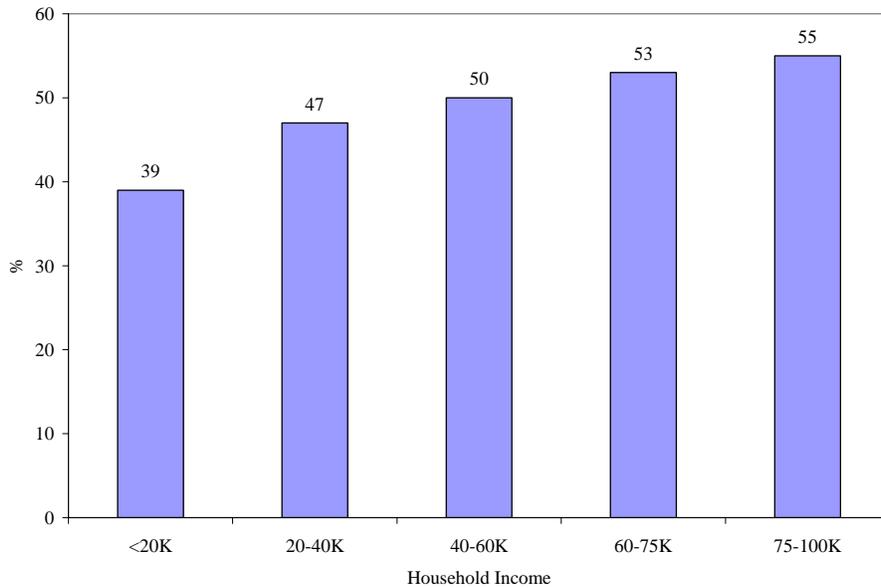
**Chart 2:**  
**Employment Rates of 16-24 Year Old High School Dropouts in the U.S., By Race-Ethnic Group, 2008 (in %)**



Source: January-December 2008 CPS Surveys, tabulations by authors.

The employment rates of young high school dropouts as well as teenagers and 20-24 year olds in general also vary with the annual incomes of the families in which they live. Young high school dropouts living in low income families (annual income under \$20,000) were least likely (38%) to be employed in 2008. As their family incomes increased, they were more likely to be working, with their employment rates ranging from 47% for those in families with incomes between \$20,000 and \$40,000 to a high of 55% for those residing in families with incomes between \$75,000 and \$100,000.

Chart 3:  
Percent of 16-24 Year Old High School Dropouts in the U.S. Who Were Employed in 2008 By Their Household Income (in \$1,000)



Source: January-December 2008 CPS Surveys, tabulations by authors.

The below average monthly employment rates of the nation's young high school dropouts do not simply reflect a higher turnover rate of dropouts from the ranks of the employed during the year and more frequent part year employment. Young dropouts also contain a disproportionate share of individuals who were jobless throughout the entire calendar year. The March 2008 CPS work experience and income supplement to the standard March CPS survey collected information on the employment experiences and annual earnings from employment (wages and salaries plus self-employment income) of all sample household members 16 and older. We analyzed the work experience data for all 16-24 year olds to identify the percent of youth who worked at some time in calendar year 2007. The findings revealed that only 60 percent of the nation's 16-24 year old dropouts worked at some point during the year (Table 1). This implies a year-round joblessness rate of 40% among these young high school dropouts. Among their better educated peers, those with some paid employment ranged from just under 80% among high school graduates to highs of 88 to 89 percent among those completing at least some post-secondary schooling.

Table 1:  
Percent of Out-of-School 16-24 Year Olds Who Worked At Some Point in 2007 and  
Their 2007 Mean Annual Earnings\* by Educational Attainment, U.S.

Educational Attainment	(A) Percent Who Worked	(B) Mean Annual Earnings*
High School Dropout	60.4	\$8,358
High School Graduate	79.0	\$14,601
1-3 Years of College	87.7	\$18,283
Bachelor's or Higher Degree	89.4	\$24,797
All	78.4	\$15,149

Note: (\*) Mean annual earnings include those with no paid work experience during the year.  
Source: March 2008 CPS Supplement, public use files, tabulations by authors.

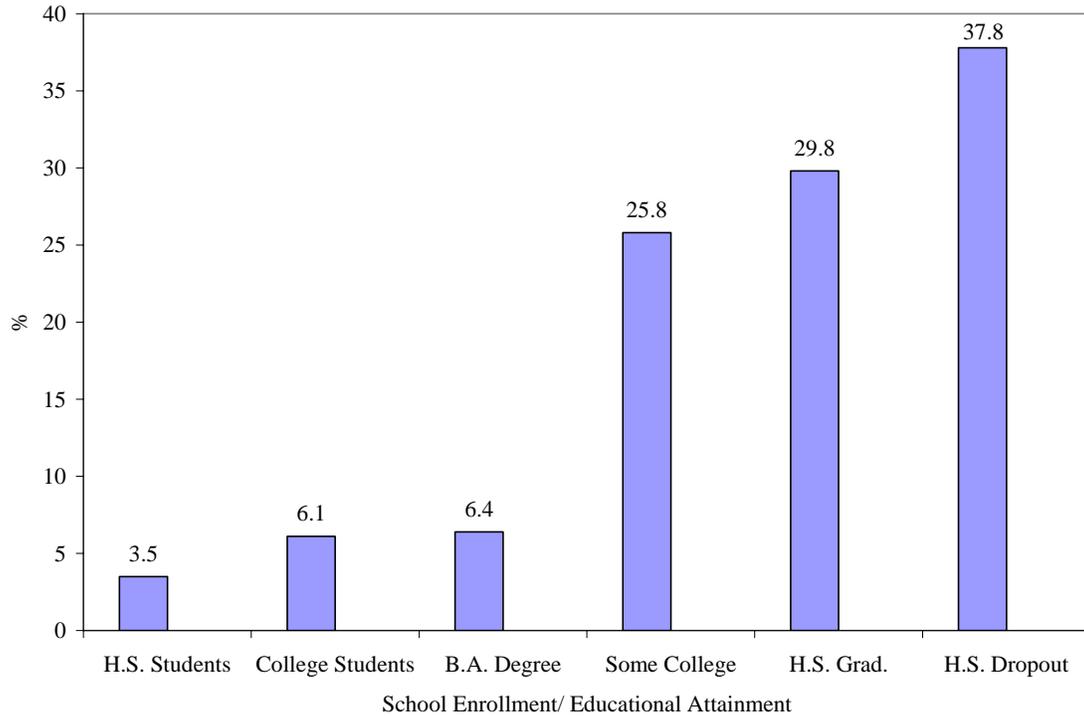
As a result of their high levels of joblessness and low weekly earnings while employed, the mean annual earnings of the nation's young dropouts in 2007 were only \$8,358 well below the average of \$15,149 for all young adults (Table 1, Column B). High school graduates with no years of post-secondary schooling achieved mean earnings of somewhat over \$14,600 while those with a bachelor's degree obtained mean earnings of approximately \$24,800, three times as high as that of young high school dropouts. Over the past few decades, the mean cumulative earnings of male high school dropouts over their working life from ages 18-64 have declined considerably, reducing their marriage rates, home ownership rates, and their fiscal contributions to federal, state, and local governments.

### **Educational Attainment and Teen and Young Adult Parenting**

Teen and young adult women parenting tend to be negatively correlated with their levels of formal schooling, educational expectations, and academic achievement. The findings of the 2006 and 2007 American Community Surveys were used to estimate the percent of young women ages 16-24 who were mothers at the time of the survey; i.e., had given birth to one or more children. Overall, 13.5% of the 18.6 million women ages 16-24 were mothers. The share of women who were mothers varied quite considerably across educational attainment/ school enrollment groups, ranging from a low of 3.5% among high school students, to 6% among Bachelor's degree holders, to just less than 30% among high school graduates to a high of nearly 38% among those women who lacked a high school diploma (Chart 4). Young female dropouts

were six times as likely to have given birth as their peers who were college students or four year college graduates.

Chart 4:  
Percent of 16-24 Year Old Women in the U.S. Who Were Mothers By Educational Attainment/  
School Enrollment Status, 2006-2007 Averages

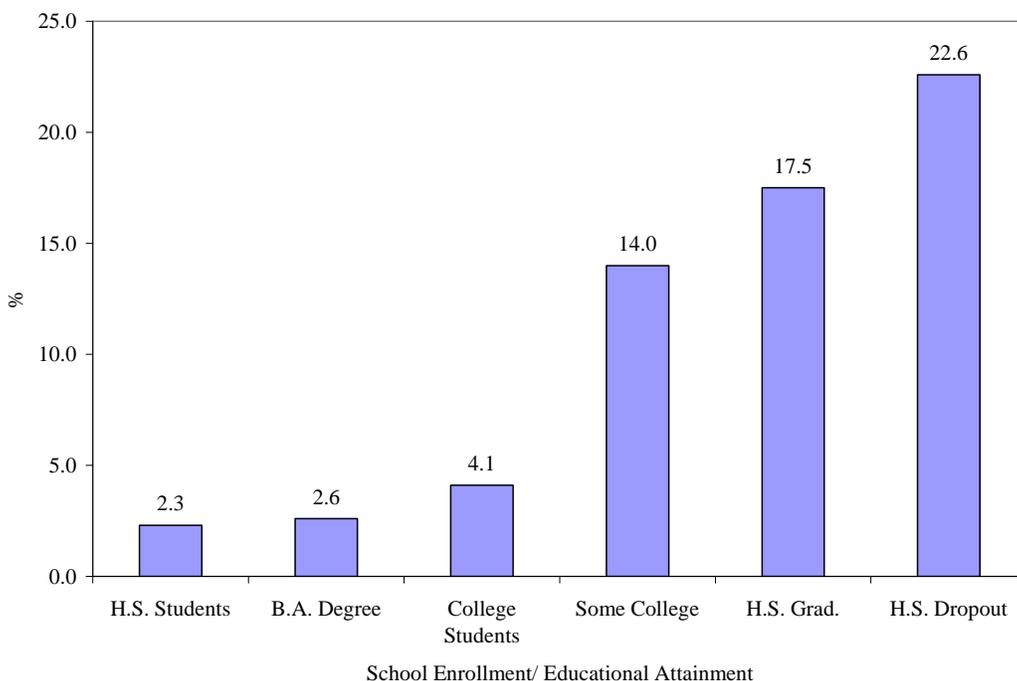


Source: 2006-2007 American Community Surveys, public use files, tabulations by authors.

Of those young women who had become mothers, 60 percent were not married at the time of the ACS surveys. Mothers who were dropouts had a very similar incidence of single parenting . Multiplying the share of young women who were mothers by the fraction who were unmarried yields estimates of the fraction of women who were single mothers at the time of the 2006-2007 American Community Surveys. Overall, 8 percent of the nation’s 16-24 year old women were single mothers in 2006-2007. The share of these women who were single mothers varied from lows of 2 to 3 percent among high school students and Bachelor’s degree holders to highs of 17 percent among high school graduates and just under 23 percent among high school dropouts (Chart 5). Young high school dropouts were nearly 9 times as likely to have become single mothers as their counterparts with bachelor degrees. A very high share of these young

unwed mothers lacking high school diplomas were poor/ near poor and dependent on government assistance and in-kind transfers to support themselves and their children.

**Chart 5:**  
**Percent of 16-24 Year Old Women in the U.S. Who Were Single Mothers By Educational Attainment/ School Enrollment Status, 2006-2007**



Source: 2006-2007 American Community Surveys, public use files, tabulations by authors.

### **The Incarceration Rates of 16-24 Year Old Dropouts in the U.S. and Those of Their Better Educated Peers**

During the past two decades, there has been explosive growth in the number of adults who were inmates of the nation's correctional institutions (local, state, and federal prisons and jails).<sup>4</sup> In 2008, approximately one in one-hundred U.S. adults were housed in such correctional institutions, a substantial share of whom were young (under 30) and male.<sup>5</sup> Since 2006, the American Community Surveys have conducted interviews with residents of group quarters,

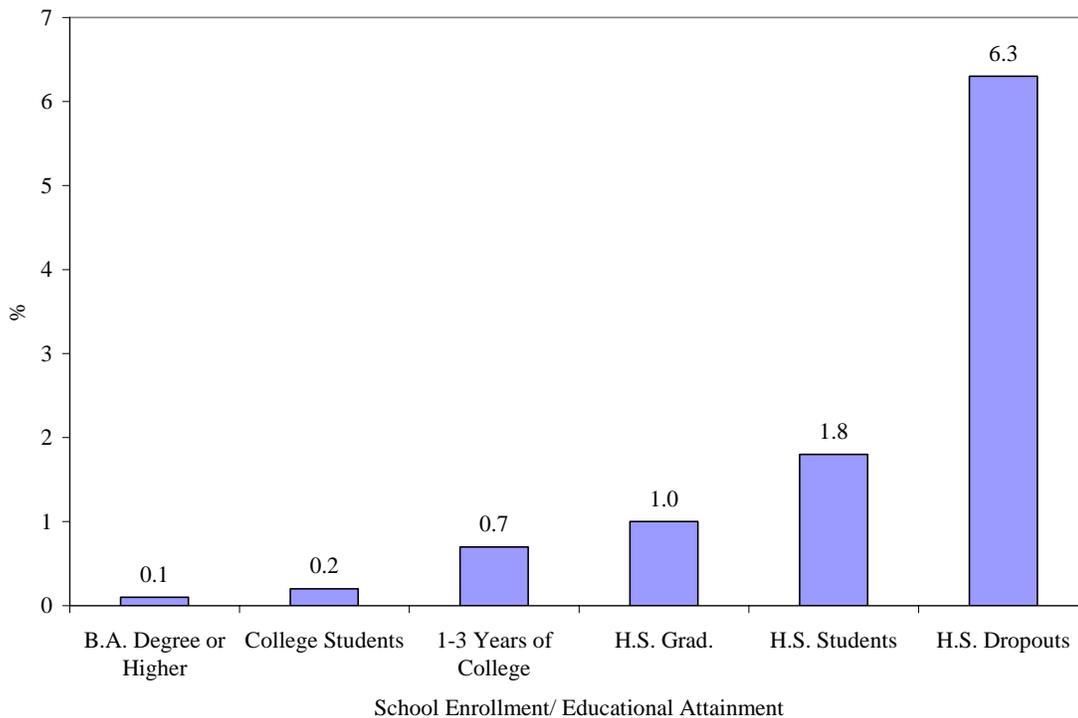
<sup>4</sup> See: (i) Bruce Western, Punishment and Inequality in America, Russell Sage Foundation, New York, 2006; (ii) Devah Pager, Marked: Race, Crime, and Finding Work in an Era of Mass Incarceration, The University of Chicago Press, Chicago, 2007.

<sup>5</sup> See: Pew Center for Research on the States, One in 100, Washington, D.C., 2008.

including correctional institutions. Data from the 2006 and 2007 ACS surveys were analyzed to identify the number of 16-24 year olds across the nation in selected educational attainment groups who were institutionalized.<sup>6</sup>

During the 2006-2007 time period, 1.4% of the nation's 16-24 year olds (men and women combined) were institutionalized of whom nearly 93% were residing in correctional facilities (jails, prisons, juvenile detention centers). The share of these young adults who were institutionalized varied widely across educational attainment/ schooling groups with high school dropouts being the most likely to be incarcerated. Only 1 in 1,000 bachelor degree holders were institutionalized versus .7% of out-of-school adults who completed 1-3 years of post-secondary schooling, 1.0% of high school graduates, and 6.3% of high school dropouts lacking a GED certificate. The incidence of institutionalization problems among young high school dropouts was more than 63 times higher than among young four year college graduates.

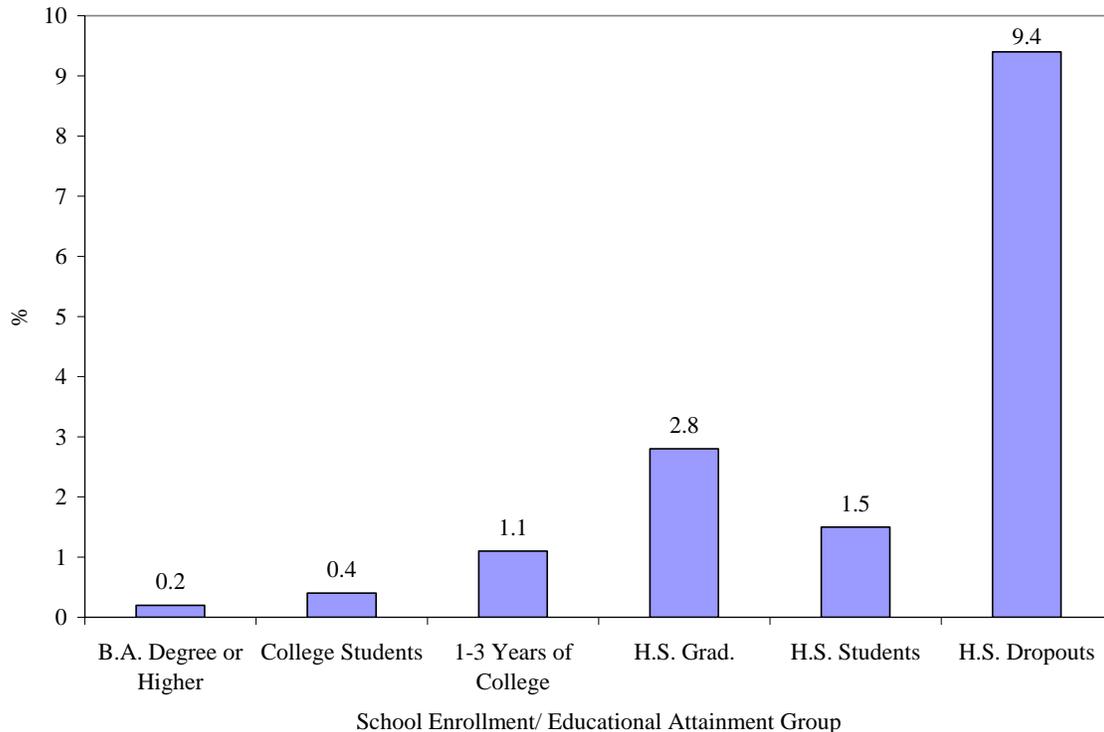
Chart 6  
Percent of the Nation's 16-24 Year Olds Who Were Institutionalized in 2006-2007 By School Enrollment/ Educational Attainment Group



<sup>6</sup> The U.S. Census Bureau does not identify the specific type of institution in which an individual was housed at the time of the ACS survey. A small fraction of institutionalized young adults were living in long term healthcare facilities (nursing homes, mental hospitals), but the vast majority (93%) were residing in adult correctional institutions and juvenile detention facilities.

Approximately 90 percent of the inmates of correctional institutions were males in recent years. Given the high degree of concentration of imprisonment problems among males, we conducted a separate analysis of the incarceration rates of young males by their school enrollment/ educational attainment status (Chart 7). Here again, the incarceration rates of these young males are found to vary considerably with their educational attainment. Nearly 1 of every 10 young male high school dropouts was institutionalized on a given day in 2006-2007 versus fewer than 1 of 33 high school graduates, 1 of 100 of those out-of-school young men who completed 1-3 years of post-secondary schooling, and only 1 of 500 men who held a bachelor's or higher degree.

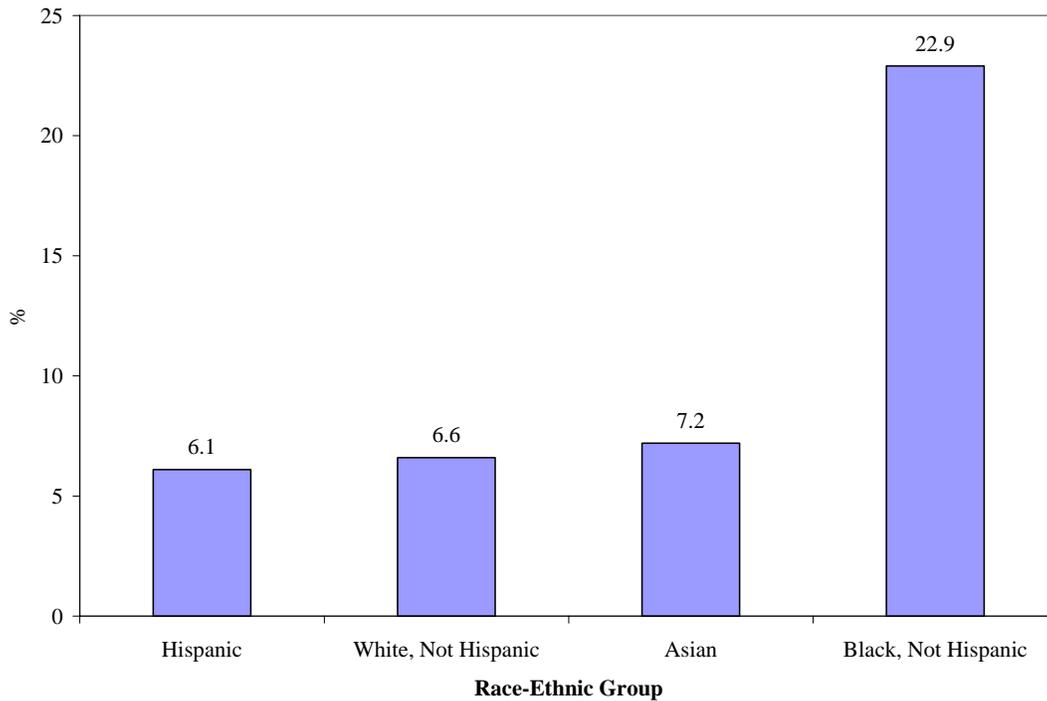
Chart 7:  
Percent of 16-24 Year Old Males in the U.S. Who Were Institutionalized in 2006-2007 By Selected School Enrollment/ Educational Attainment Group



For men in each race-ethnic group, incarceration rates were highest among high school dropouts. Among the nation's male high school dropouts, however, institutionalization rates were considerably higher among young Black men than they were among members of the other

three major race-ethnic groups. Approximately 23 of every 100 young Black male adults were institutionalized versus only 6 to 7 of every 100 Asians, Hispanics, and Whites (Chart 8).

Chart 8:  
Percent of 16-24 Year Old Male High School Dropouts in the U.S. Who Were Incarcerated in Juvenile Homes, Jails, and Prisons in 2006-2007 by Race-Ethnic Group



In every race-ethnic group, young male dropouts were overwhelmingly more likely to be incarcerated than their peers who graduated from a four year college or university. For all young males, high school dropouts were 47 times more likely to be incarcerated than their similar aged peers who held a four year college degree. The relative odds were very substantial among Blacks (38\*), Whites (66\*), and Asians (72\*) (Table 2). In remarks to a 2006 Chicago conference on high school dropout problems in Illinois, then State Senate President Emil Jones noted that “Dropping out of high school was an apprenticeship for prison.” Those remarks, unfortunately, describe the actual situation for the nation’s young minority men with a high degree of accuracy. Given the severe labor market difficulties faced by many young male dropouts, ex-offenders with limited formal schooling and academic proficiencies run the highest risk of becoming recidivists and imposing large incarceration, probation, and parole costs on the rest of society.

Table 2:  
The Incidence of Incarceration Rates Among 16-24 Year Old Male High School Dropouts and Those With a Bachelor's or Higher Degree By Race-Ethnic Group

	(A)	(B)	(C)
	H.S. Dropouts	B.A. Degree	H.S. Dropouts/ B.A. Degree
All	9.4	0.2	47*
Asian	7.2	0.1	72*
Black	22.9	0.6	38*
Hispanic	6.1	0.9	7*
White	6.6	0.1	66*

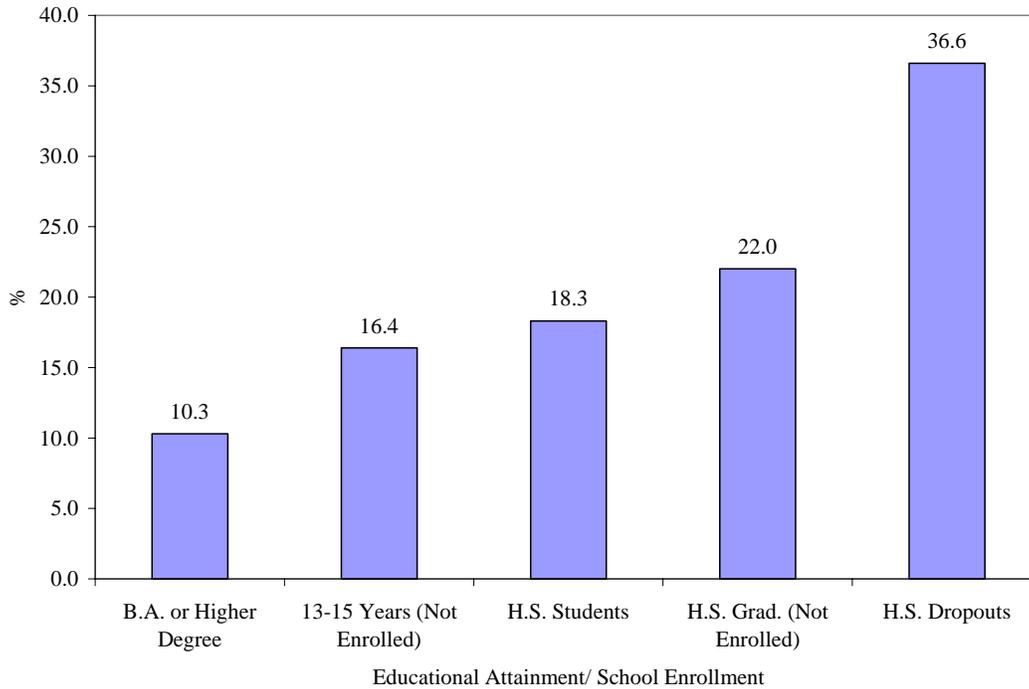
### **The Income Inadequacy Problems of the Families of the Nation's Young Dropouts**

A relatively high fraction of the nation's young high school dropouts were raised as adolescents in families that frequently experienced severe income inadequacy problems. Given the limited earnings potential of many young high school dropouts, comparatively few of them have the economic resources to form independent households, including young mothers. Many young dropouts remain living at home with their parents or other relatives in families with limited annual incomes.<sup>7</sup> In 2006-2007, one of every five of the nation's young adults was residing in families that were classified as either poor or near poor (under 125% of the federal government's official poverty income thresholds). The incidence of these severe income inadequacy problems was highest by far among young high school dropouts, with nearly 37 of every 100 dropouts living in poor/ near poor families. The incidence of such poverty/ near poverty problems declined steadily with the level of formal schooling of the out-of-school young adults. The incidence of such problems was 22% among high school graduates not enrolled in college, 16% for those completing 1-3 years of post-secondary schooling, and only 10% for those with a bachelor's or higher degree.

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<sup>7</sup> Many single mothers escape the most severe income inadequacy problems by remaining at home with their parents. If they had formed their own households, more of them would have been classified as poor or near poor on the basis of their own incomes.

Chart 9:  
Percent of the Nation's 16-24 Year Olds in 2006-2007 Who Were Members of Poor/ Near Poor Families By Educational Attainment/ School Enrollment Status



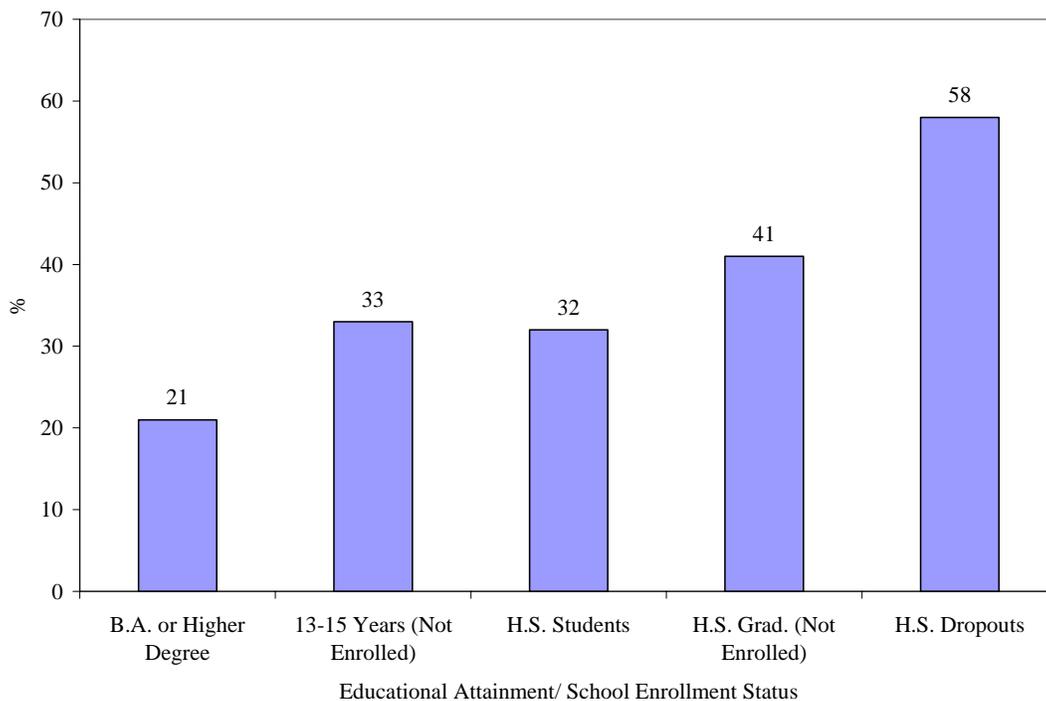
The nation's young high school dropouts in 2006-2007 were nearly four times as likely as their peers with a bachelor's or higher academic degree to be living in a family with an annual money income below 125% of the poverty line. Many of these families were dependent on cash income transfers and in-kind benefits from federal and state government (food stamps, rental subsidies, Medicaid benefits, federal and state EITC credits) to support themselves.

A number of poverty and welfare reform researchers in recent years have used higher income standards to define inadequacy, including 200% of the federal government's official poverty line.<sup>8</sup> Families with annual incomes under 200% of the official poverty income threshold are classified as low income. During calendar years 2006-2007, approximately 35 percent of all 16-24 year olds across the nation were living in low income families. Again, high school dropouts were the most likely to experience such low income problems. Fifty-eight percent of young dropouts were living in low income families over the above two year period versus 41% of out-of-school high school graduates, 33% of those with 1-3 years of college, and only 21% of

<sup>8</sup> For a review of alternative income criteria for defining inadequacy, see: Garth Mangum, Stephen Mangum, and Andrew Sum, The Persistence of Poverty in the United States, Johns Hopkins University Press, Baltimore, 2003.

those with a bachelor's or higher degree (Chart 10). The lower incomes of the families in which dropouts reside make it more difficult for them to finance future levels of schooling and training in institutions off the job, thereby reducing their future gains in human capital with adverse effects on their future earnings and incomes. High school dropouts, when employed, are the least likely to receive formal training from their employers.<sup>9</sup>

Chart 10:  
Percent of the Nation's 16-24 Year Olds in 2006-2007 Who Were Members of Low Income Families By Educational Attainment/ School Enrollment Status



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<sup>9</sup> See: Jia Zhao, The Training Experiences of Young Adults in the U.S., Who Gets Trained and Why Does it Matter?, Masters Thesis, Department of Economics, Northeastern University, Boston, 2008.

## The Lifetime Net Fiscal Contributions of Adults 18 to 64 Years Old, U.S., 2007

Over their working lives, the average high school dropout will have a negative net fiscal contribution to society of nearly -\$5,200 while the average high school graduate generates a positive lifetime net fiscal contribution of \$287,000. The average high school dropout will cost taxpayers over \$292,000 in lower tax revenues, higher cash and in-kind transfer costs, and imposed incarceration costs relative to an average high school graduate. Adult dropouts in the U.S. in recent years have been a major fiscal burden to the rest of society. Given the current and projected deficits of the federal government, the fiscal burden of supporting dropouts and their families is no longer sustainable.

Table 3:  
The Lifetime Net Fiscal Contributions of Adults 18-64 Years Old By  
Educational Attainment, U.S., 2007

Educational Attainment	(A) Annual Federal, State, and Local Tax Payments	(B) Annual Cash and In-Kind Transfers Plus Imposed Incarceration Costs	(C) Lifetime Net Fiscal Impact
<12 or 12, No H.S. Diploma	6,087	6,197	-5,191
H.S. Diploma/GED	9,938	3,551	287,384
Some College	13,244	2,508	461,661
Bachelor Degree	20,580	1,236	793,079
Master's or Higher Degree	29,876	1,061	1,094,945
Total	14,239	2,934	531,328

### Summary and Conclusions

This research paper has identified a series of employment, earnings, income, and social difficulties faced by the nation's young adults lacking regular high school diplomas or their equivalent. These social and incarceration problems of young dropouts are quite severe among all gender and race-ethnic groups but are frequently more severe among men and Blacks. For many dropouts, these labor market and earnings problems will persist over their entire working lives, and for men they have intensified over the past few decades, with steep declines in their lifetime earnings and incomes and attendant adverse consequences on their marriage behavior.

Similar to the lyrics of a recent country western song, many male high school dropouts “don’t make it here anymore.”<sup>10</sup>

In his first speech to the U.S. Congress, President Obama noted that by leaving high school without a diploma dropouts not only quit on themselves but “it is quitting on your country...”<sup>11</sup> It is fair to add that our country’s labor markets also have quit on them, failing to provide the employment and real earnings opportunities to male dropouts it once did especially in the Golden Era from 1947-1973. There is an overwhelming national economic and social justice need to prevent existing high school students from dropping out without earning a diploma and to encourage the re-enrollment and eventual graduation of those dropouts who have already left the school system. In the absence of concerted efforts to bolster their academic achievement, their formal schooling, their occupational skills, and their cumulative work experience, their immediate and long term labor market prospects are likely to be quite bleak in the U.S. economy even after the end of the current economic recession, which for many of these youth has turned into a labor market depression.

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<sup>10</sup> See the song by James McMurtry, “We Can’t Make It Here Anymore,” 2004.

<sup>11</sup> President Obama, “Address to Joint Session of Congress, February 24, 2009,” Available at: [www.whitehouse.gov](http://www.whitehouse.gov).