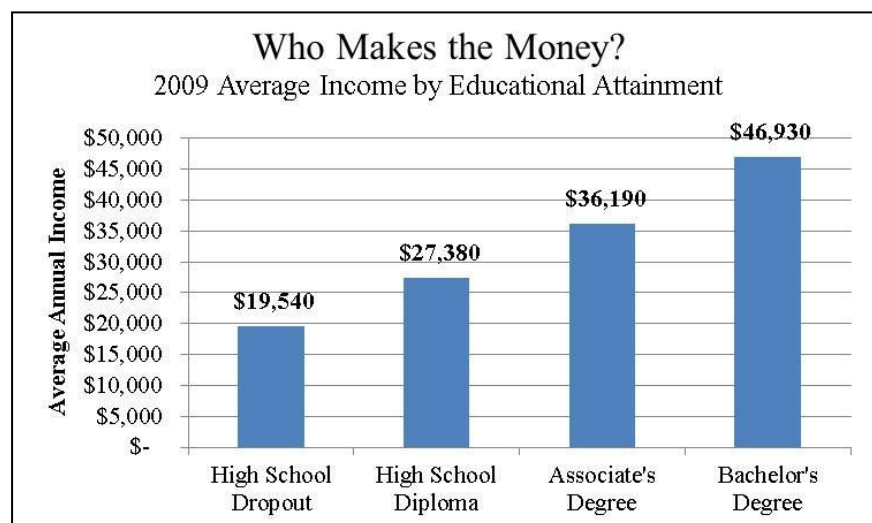


## The High Cost of High School Dropouts: What the Nation Pays for Inadequate High Schools

Every school day, nearly 7,000 students become dropouts. Annually, that adds up to about 1.2 million students who will not graduate from high school with their peers as scheduled.<sup>1</sup> Lacking a high school diploma, these individuals will be far more likely than graduates to spend their lives periodically unemployed, on government assistance, or cycling in and out of the prison system.

Most high school dropouts see the result of their decision to leave school very clearly in the slimness of their wallets. The average annual income for a high school dropout in 2009 was \$19,540, compared to \$27,380 for a high school graduate, a difference of \$7,840.<sup>2</sup> The impact on the country's economy is less visible, but cumulatively its effect is staggering.

If the nation's secondary schools improved sufficiently to graduate all of their students, rather than the 72 percent of students who currently graduate annually,<sup>3</sup> the payoff would be significant. **For instance, if the students who dropped out of the Class of 2011 had graduated, the nation's economy would likely benefit from nearly \$154 billion in additional income over the course of their lifetimes.**



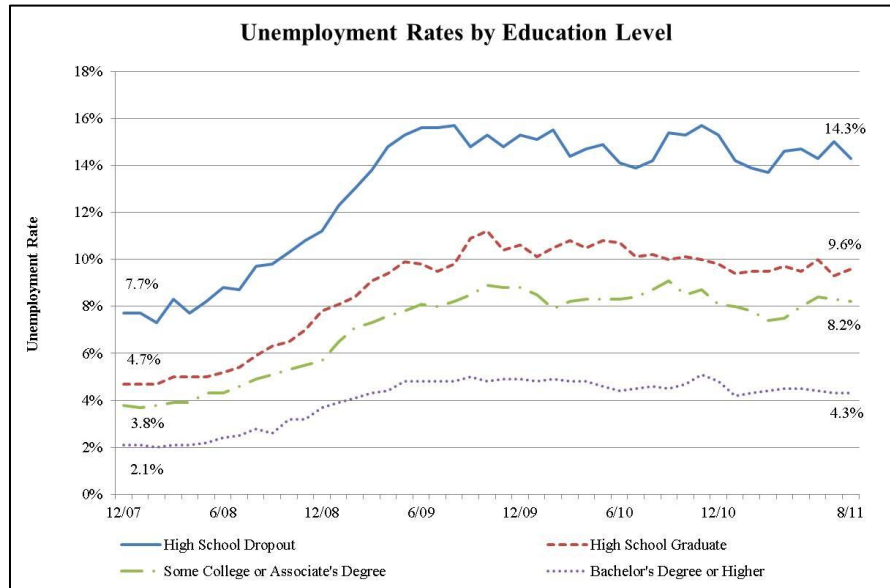
Source: U.S. Department of Education, 2011

Everyone benefits from increased graduation rates. The graduates themselves, on average, will earn higher wages and enjoy more comfortable and secure lifestyles. At the same time, the nation benefits from their increased purchasing power, collects higher tax receipts, and sees higher levels of worker productivity.

### **Economic Recession More Likely to Impact High School Dropouts**

Not only do employed high school dropouts earn less than employed high school graduates, high school dropouts are much more likely to be unemployed during economic downturns. Since the economic recession began in December 2007, the national unemployment rate has gone from 5 percent to 9.1 percent in August 2011.<sup>4</sup>

As shown in the graph below, the unemployment rate for individuals of all education levels has skyrocketed since December 2007, but high school dropouts have faced the most difficulty with finding a job. According to data from the U.S. Bureau of Labor Statistics, the unemployment rate for high school dropouts in August 2011—four years after the start of the recession—was 14.3 percent, compared to 9.6 percent for high school graduates, 8.2 percent for individuals with some college credits or an associate’s degree, and 4.3 percent for individuals with a bachelor’s degree or higher.<sup>5</sup>



Source: U.S. Department of Labor, Bureau of Labor Statistics, 2011

## **Students Who Learn More Earn More**

Recent research conducted by the Alliance for Excellent Education in partnership with Economic Modeling Specialists, Inc., an Idaho-based economic modeling firm, provides a look at the additional earnings an individual would likely expect over the course of his or her lifetime by completing high school. This analysis is based upon state-specific economic data that reflects the postrecession economic reality.

The calculations beginning on page five show the monetary benefits each state would likely accrue over the lifetimes of just one year’s worth of dropouts if those students had graduated. Calculations are based on the number of dropouts and average earnings by education level, which causes the numbers to vary from state to state: Vermont (at the low end) would likely see its economy increase by \$147 million; Massachusetts (near the middle) would likely add \$2 billion to its economy, and California’s economy (at the high end) would likely accrue an additional \$21 billion over the lifetimes of just one year’s worth of dropouts if those students had graduated. These figures are conservative and do not take into account the added economic growth generated from each new dollar put into the economy.<sup>a</sup>

All told, these additional earnings from a single high school class would likely pour a total of \$154 billion into the national economy. Unless high schools are able to graduate their students at higher rates, nearly 12 million students will likely drop out over the next decade, resulting in a loss to the nation of *\$1.5 trillion*.

<sup>a</sup> To see projections on additional economic benefits that each state would likely see as a result of increasing the high school graduation rate, visit [http://www.all4ed.org/publication\\_material/EconStates](http://www.all4ed.org/publication_material/EconStates).



## Who Does Not Graduate From High School?

- About 42 percent of Hispanic students, 43 percent of African American, and 46 percent of American Indian students will not graduate on time with a regular diploma, compared to 17 percent of Asian students and 22 percent of white students.<sup>a</sup>
- Among all races and ethnicities, males graduate at a lower rate than their female peers do—68 percent versus 75 percent.<sup>a</sup>
- Graduation rates are significantly lower in districts with higher percentages of students who are eligible for free or reduced-price lunches (a measure of poverty).<sup>b</sup>
- High school students of low-income families drop out of high school at six times the rate of their peers from high-income families.<sup>c</sup>
- The lowest-achieving 25 percent of students are twenty times more likely to drop out of high school, compared to students in the highest-achievement quartile.<sup>d</sup>

<sup>a</sup> Editorial Projects in Education, "Diplomas Count 2011: Beyond High School, Before Baccalaureate," *Education Week* 30, no. 34 (2011).

<sup>b</sup> C. Swanson, *Who Graduates? Who Doesn't? A Statistical Portrait of Public High School Graduation, Class of 2001* (Washington, DC: Urban Institute, Education Policy Center, 2004).

<sup>c</sup> U.S. Department of Education, National Center for Education Statistics, *The Digest of Education Statistics 2010 (NCES 2011-015)* (Washington, DC: U.S. Government Printing Office, 2011), Table 116, p. 181.

<sup>d</sup> A. P. Carnevale, *Help Wanted ... College Required* (Washington, DC: Educational Testing Service, Office for Public Leadership, 2001).

## More High School Graduates Benefit Society

Obviously, dropouts are a drain on the nation's economy and the economies of each state. Lower local, state, and national tax revenues are the most obvious consequence of higher dropout rates; even when dropouts are employed, they earn significantly lower wages than do graduates. State and local economies suffer further when they have less-educated populations, as they find it more difficult to attract new business investment. Simultaneously, these entities must spend more on social programs when their populations have lower educational levels.

The nation's economy and competitive standing also suffer when there are high dropout rates. Among developed countries, the United States ranks twenty-first in high school graduation rates and fifteenth in college attainment rates among twenty-five- to thirty-four-year-olds.<sup>6</sup> Dropouts represent a tremendous loss of human potential and productivity, and they significantly reduce the nation's ability to compete in an increasingly global economy. Furthermore, recent estimates project that the future domestic workforce demands will require higher levels of education among U.S. workers. However, without significant improvements in the high school and postsecondary completion rates, the nation is on track to fall short by up to 3 million postsecondary degrees by 2018.<sup>7</sup>

High school graduates, on the other hand, provide both economic and social benefits to society. In addition to earning higher wages—resulting in corresponding benefits to local, state, and national economic conditions—high school graduates live longer,<sup>8</sup> are less likely to be teen parents,<sup>9</sup> and are more likely to raise healthier, better-educated children. In fact, children of parents who graduate from high school are far more likely to graduate from high school, compared to children of parents without high school degrees.<sup>10</sup> High school graduates are also less likely to commit crimes,<sup>11</sup> rely on government health care,<sup>12</sup> or use other public services such as food stamps or housing assistance.<sup>13</sup> Additionally, high school graduates engage in civic activity, including voting and volunteering in their communities, and at higher levels.<sup>14</sup>



## **What Are the Benefits of Increasing the High School Graduation Rate?**

Researchers have examined various annual and lifetime benefits associated with improved high school graduation rates.

- Compared to a high school dropout, a single high school graduate yields a public benefit of over \$200,000 more in lower government spending and higher tax revenues. If the number of dropouts were cut in half, the government would likely see a total of \$45 billion in savings and additional revenue.<sup>a</sup>
- If the male graduation rate were increased by only 5 percent, the nation would see an annual savings of \$4.9 billion in crime-related costs.<sup>b</sup>
- Cutting the dropout rate of a single high school class in half would likely support as many as 54,000 new jobs and would likely increase the gross domestic product by as much as \$9.6 billion.<sup>c</sup>

<sup>a</sup> H. Levin, et al., "The Costs and Benefits of an Excellent Education for All of America's Children" (New York, NY: Center for Cost-Benefit Studies of Education Teachers College, Columbia University, 2007).

<sup>b</sup> Alliance for Excellent Education, "Saving Futures, Saving Dollars: The Impact of Education on Crime Reduction and Earnings" (Washington, DC: Author, 2006).

<sup>c</sup> Alliance for Excellent Education, "Education and the Economy: Boosting the Nation's Economy by Improving High School Graduation Rates" (Washington, DC: Author, 2011).

## **Reducing Dropouts by Improving High Schools**

To increase the number of students who graduate from high school, the nation's secondary schools must address the reasons why most students drop out. In a recent survey of high school dropouts, respondents indicated that they felt alienated at school and that no one noticed if they failed to show up for class. High school dropouts also complained that school did not reflect real-world challenges. More than half of the respondents said that the major reason for dropping out of high school was that they felt their classes were uninteresting and irrelevant.<sup>15</sup>

Others leave because they are not doing well academically. According to the 2009 National Assessment of Educational Progress in reading, only about 30 percent of entering high school freshmen read proficiently,<sup>16</sup> which generally means that as the material in their textbooks becomes more challenging, they drop even further behind.

The nation can no longer afford to have more than one-quarter of its students leave high school without a diploma. High schools must be improved to give all students the excellent education that will prepare them for college and a career, and to be productive members of society.

**For more information about the state of America's high schools, and to find out what individuals and organizations can do to support effective reform at the local, state, and federal levels, visit the Alliance for Excellent Education's website at [www.all4ed.org](http://www.all4ed.org).**



## Estimated Additional Lifetime Income If High School Dropouts Had Graduated With Their Class in 2011

State	Estimated Graduation Rate (SY 2007-08) <sup>1</sup>	Projected Number of Nongraduates for Class of 2011 <sup>1</sup>	Total Additional Lifetime Income If Dropouts Had Graduated <sup>2</sup>
Alabama	64.8%	23,007	\$2,548,000,000
Alaska	66.3%	3,584	\$742,000,000
Arizona	67.0%	25,632	\$3,064,000,000
Arkansas	69.7%	11,405	\$974,000,000
California	73.0%	139,421	\$20,782,000,000
Colorado	73.3%	16,833	\$2,918,000,000
Connecticut	79.2%	9,094	\$1,395,000,000
Delaware	67.6%	3,475	\$483,000,000
District of Columbia	43.0%	2,372	\$388,000,000
Florida	63.9%	83,516	\$9,478,000,000
Georgia	58.8%	60,580	\$7,806,000,000
Hawaii	65.8%	5,523	\$597,000,000
Idaho	75.6%	5,192	\$540,000,000
Illinois	78.8%	37,491	\$4,913,000,000
Indiana	72.8%	22,742	\$2,920,000,000
Iowa	79.6%	7,933	\$968,000,000
Kansas	75.8%	9,062	\$953,000,000
Kentucky	72.8%	15,482	\$2,117,000,000
Louisiana	59.6%	21,744	\$3,251,000,000
Maine	76.5%	3,479	\$428,000,000
Maryland	76.8%	17,697	\$3,055,000,000
Massachusetts	77.5%	13,388	\$2,015,000,000
Michigan	73.6%	37,721	\$5,076,000,000
Minnesota	78.0%	14,311	\$2,043,000,000
Mississippi	61.4%	16,102	\$1,624,000,000
Missouri	76.9%	17,962	\$2,319,000,000
Montana	75.8%	2,925	\$312,000,000
Nebraska	77.3%	5,391	\$468,000,000
Nevada	44.3%	22,359	\$2,235,000,000
New Hampshire	78.2%	3,808	\$372,000,000
New Jersey	86.9%	13,987	\$2,592,000,000
New Mexico	57.1%	12,760	\$1,289,000,000
New York	71.8%	67,922	\$9,774,000,000
North Carolina	72.8%	34,168	\$4,404,000,000
North Dakota	80.2%	1,593	\$205,000,000
Ohio	74.3%	39,366	\$4,802,000,000
Oklahoma	70.0%	14,727	\$1,676,000,000
Oregon	72.6%	12,187	\$1,390,000,000
Pennsylvania	77.7%	33,373	\$4,089,000,000
Rhode Island	69.7%	3,601	\$501,000,000
South Carolina	58.6%	27,209	\$3,409,000,000
South Dakota	78.7%	2,228	\$259,000,000
Tennessee	76.9%	18,195	\$2,249,000,000
Texas	66.6%	129,339	\$18,071,000,000
Utah	71.9%	10,511	\$1,264,000,000
Vermont	82.7%	1,227	\$147,000,000
Virginia	72.7%	29,251	\$3,990,000,000
Washington	65.6%	30,592	\$4,844,000,000
West Virginia	71.7%	6,727	\$659,000,000
Wisconsin	81.3%	13,746	\$1,756,000,000
Wyoming	71.3%	2,032	\$159,000,000
<b>United States</b>	<b>71.7%</b>	<b>1,154,132</b>	<b>\$154,313,000,000</b>



<sup>1</sup>Editorial Projects in Education, “Diplomas Count 2011: Beyond High School, Before Baccalaureate,” special issue, *Education Week* 30, no. 34 (2011).

<sup>2</sup>The Alliance for Excellent Education estimated the additional lifetime income if one class of dropouts were to graduate by using an economic input-output model created by Economic Modeling Specialists, Inc. These rounded findings are based on state-level data demonstrating the difference in average annual earnings between individuals without a high school diploma and those who hold high school diploma as their highest education attainment level. Assumptions include a one percent earnings growth rate, a four percent discount rate, and a 45 year working life. The national figure is the sum of that for each state. These figures represent a change in methodology from previous iterations; average earnings differences are now state-specific and assumptions have been modified to reflect the current economic reality.

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## Endnotes

<sup>1</sup> Editorial Projects in Education, “Diplomas Count 2011: Beyond High School, Before Baccalaureate,” special issue, *Education Week* 30, no. 34 (2011).

<sup>2</sup> T. D. Snyder and S. A. Dillow, *Digest of Education Statistics 2010* (2011-015), (Washington, DC: U.S. Department of Education, National Center for Education Statistics, Institute of Education Sciences, 2011).

<sup>3</sup> Editorial Projects in Education, “Diplomas Count 2011.”

<sup>4</sup> U.S. Department of Labor, Bureau of Labor Statistics, “Labor Force Statistics from the Current Population Survey,” <http://data.bls.gov/cgi-bin/surveymost?ln> (accessed September 7, 2011).

<sup>5</sup> Ibid.

<sup>6</sup> Organisation for Economic Co-operation and Development, *Education at a Glance 2008* (Paris: Author, 2008).

<sup>7</sup> A. P. Carnevale, N. Smith, and J. Strohl, *Help Wanted: Projections of Jobs and Education Requirements Through 2018* (Washington, DC: Georgetown University Center on Education and the Workforce, 2010).

<sup>8</sup> P. Muennig, “Health Returns to Education Interventions,” paper prepared for the symposium Social Costs of Inadequate Education, October 24–25, 2005, Teachers College, Columbia University, New York, NY.

<sup>9</sup> R. Haveman, B. Wolfe, and K. Wilson, “Childhood Events and Circumstances Influencing High School Completion,” *Demography* 28, no. 1 (2001).

<sup>10</sup> B. L. Wolfe and R. H. Haveman, “Social and Non-market Benefits from Education in an Advanced Economy,” paper prepared for Conference Series 47, Education in the 21st Century: Meeting the Challenges of a Changing World, June 2002, Federal Reserve Bank of Boston, Boston, MA.

<sup>11</sup> S. Raphael, “The Socioeconomic Status of Black Males: The Increasing Importance of Incarceration” (Berkley, CA: Goldman School of Public Policy, University of California, 2004).

<sup>12</sup> Muennig, “Health Returns to Education Interventions.”

<sup>13</sup> I. Garfinkel, B. Kelly, and J. Waldfogel, “Public Assistance Programs: How Much Could be Saved with Improved Education?,” paper prepared for the symposium Social Costs of Inadequate Education, October 24–25, 2005, Teachers College, Columbia University, New York, NY.

<sup>14</sup> J. Junn, “The Political Costs of Unequal Education,” paper prepared for the symposium Social Costs of Inadequate Education, October 24–25, 2005, Teachers College, Columbia University, New York, NY.

<sup>15</sup> J. Bridgeland and J. di Iulio, *The Silent Epidemic: Perspectives of High School Dropouts* (Washington, DC: Civic Enterprises, 2006).

<sup>16</sup> U.S. Department of Education, National Center for Education Statistics, *The Nation’s Report Card: Reading 2009* (NCES 2010–458) (Washington, DC: U.S. Government Printing Office, 2009).

