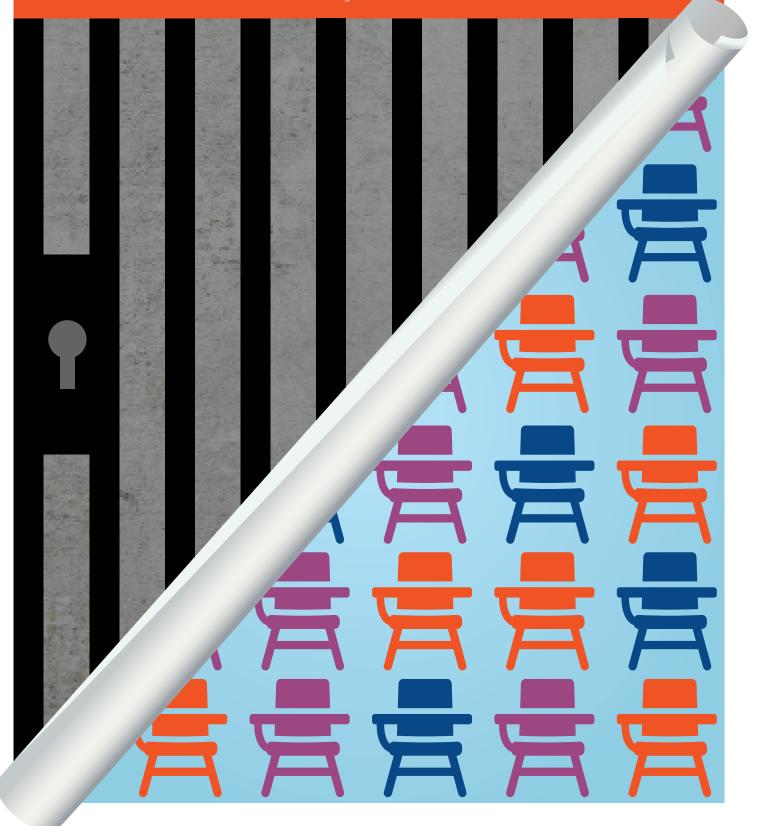


## Saving Futures, Saving Dollars: The Impact of Education on Crime Reduction and Earnings

SEPTEMBER 2013



Reaching graduation day should be a moment of pride and accomplishment for high school seniors across the country. Tragically, too many high school students spend this special day in juvenile detention facilities or otherwise apart from the class with which they should have graduated. Too often, high school dropouts wind up behind bars later in life and become caught in a cycle of recidivism that might have been avoided if they had graduated from high school.

The costs of crime in the United States are staggering. In 2008, state and local governments spent over \$200 billion on the criminal justice system.<sup>1</sup> The cost of crime to communities, states, and the nation cannot be overstated. It includes expenses such as medical care for victims, loss of victims' income or property, reduced tax revenue resulting from lost wages, and rising police payrolls and court operating budgets.

Increasing the number of students who graduate from high school and eventually complete a postsecondary degree would create significant benefits for individuals, communities, states, and the nation as a whole. The demonstrated benefits include increased lifetime earnings and tax revenues, increased purchases such as homes and cars, and lower unemployment rates. The benefits also relate to improvements in quality of life such as decreased crime and incarceration rates and improved health conditions and outcomes. The Alliance for Excellent Education (the Alliance) estimates that a 5 percentage point increase in the national high school graduation rate for male students alone would save the nation an overwhelming \$19.7 billion annually.

The nation's fiscal priorities need to be reversed when it comes to education and crime. Consider that the national average for educating a student is \$12,643 per year while the annual state average cost to house an inmate is more than double that amount, at \$28,323. In 2007, the federal government spent nearly \$37 billion on justice-related expenditures while in the following year Title I grants to school districts from the Elementary and Secondary Education Act, the largest federal investment in K-12 education, amounted to \$14 billion.

Communities gain no economic return on their education investment when they spend more than twice as much incarcerating a person as teaching them. If the nation made a comparable investment in effort and dollars in schools as it does in jails and prisons, the return would be decreased levels of criminal activity and incarceration as well as significant and life-changing impacts on the individual.

The significant cost of crime is not borne equally by all Americans. African Americans and Latinos are the groups most widely represented in the criminal justice system; in 2010, African American and Latino males were in custody at rates of 4,347 and 1,775 per 100,000 U.S. residents respectively, whereas just 678 white males were in custody per 100,000

## **Education and Crime**

The nation spends an average of \$12,643 a year to educate a student.<sup>2</sup>

States' average annual cost per inmate is \$28,323.<sup>3</sup>

The U.S. Department of Education spent nearly \$14 billion on Title I grants to local education agencies in 2008.<sup>4</sup>

U.S. spending on incarceration at all government levels was more than \$74 billion in 2007.<sup>5</sup>

**Share these stats #SaveFuturesSaveDollars** 

residents.<sup>6</sup> Students from these first two groups are also those most often relegated to the nation's most troubled and lowperforming schools. Nationwide, students of color struggle and often lag behind their white peers in terms of high school graduation and college and career readiness. Instead of serving as gateways to future opportunities, failing high schools often become part of the school-to-prison pipeline.

While data on the education attainment of inmates is sparse, the most recent research available from the Bureau of Justice Statistics indicates that 67 percent of inmates in America's state prisons, 56 percent of federal inmates, and 69 percent of inmates in local jails did not complete high school.<sup>7</sup> Additionally, the number of prison inmates without a high school diploma has increased over time.<sup>8</sup> Achieving the likely savings and additional revenues estimated by the Alliance mandates significant improvement for the nation's schools— especially its high schools. Approximately 78 percent of students currently graduate from America's high schools on time.<sup>9</sup> The rate is lower for African American and Latino students, who graduate overall at rates of 66 percent and 69 percent nationally.<sup>10</sup>

## Crime Reduction Through Better Education

Lower educational attainment is directly associated with increased arrest and incarceration rates, particularly in the case of males.<sup>11</sup> A 2003 study that examined education levels of state prisoners showed that "male inmates were about twice as likely as their counterparts in the general population to not have completed high school or its equivalent." Conversely, the same study found that four times as many males in the general population had attended some college or other form of postsecondary education than those in prison.<sup>12</sup>

In a 2004 article in the *American Economic Review*, researchers Lance Lochner and Enrico Moretti presented some theories about why people with more education commit fewer crimes. Many of these involve education increasing the opportunity cost—the loss that results from choosing one alternative over another—of committing crime given the investment that has been made in education, or education increasing the number of viable options for livelihood outside of criminal activity. More specifically, Lochner and Moretti found the following:

- People who have a high school diploma or a higher degree/ certificate earn higher wages through legitimate work, thus reducing the individual's perceived need to commit a crime and/or raising the potential cost of crime to that person (i.e., getting caught and being incarcerated) to unacceptable levels.
- The stigma of a criminal conviction may be greater for professional workers, who tend to have higher levels of education, than for those in lower-paying, lower-skilled jobs.
- Criminal behavior that begins during youth can continue into adulthood. By keeping adolescents in the classroom and off the streets, later criminal activity may be avoided.
- More time spent in the classroom may play a role in instilling values and developing skills that can prevent engagement in criminal actions.<sup>14</sup>

One study found that sixteen- to twenty-fouryear-old high school dropouts were sixty-three times more likely to be institutionalized than those with a bachelor's degree or higher.<sup>13</sup>

**Share this stat #SaveFuturesSaveDollars** 

Dropping out of school certainly does not automatically result in a life of crime. The vast majority of individuals who leave high school without diplomas are law-abiding citizens. High school dropouts, however, are far more *likely* than high school graduates to be arrested or incarcerated. Estimates vary somewhat. The Coalition for Juvenile Justice finds that "dropouts are three and a half times more likely than high school graduates to be arrested,"<sup>15</sup> while another survey of dropouts concludes that they are "more than eight times as likely to be in jail or prison."16 A third study found that sixteen- to twenty-four-year-old high school dropouts were sixty-three times more likely to be institutionalized than those with a bachelor's degree or higher.<sup>17</sup> However the numbers are calculated, the larger message remains the same: individuals with lower levels of education are more likely to commit crimes and be jailed than their more educated peers.

## School Climate Is Critical to Countering Criminal Behavior

There is more to the crime and education connection than just the broad strokes and big picture. The combination of largely unnoticed actions undertaken by individual schools affects education climates for millions of students in thousands of schools across the country. These school climates, in turn, often profoundly affect student performance.<sup>18</sup> Nationwide, many high schools are using zero-tolerance policies that often suspend, criminalize, and incarcerate youth.<sup>19</sup> A recent study estimated that one in every nine secondary school students had been suspended in the 2009-10 academic year.<sup>20</sup> Students who are suspended once in the ninth grade are found to be twice as likely to drop out than those not suspended.<sup>21</sup> In addition, African American secondary school students are at least twice as likely as their non-African American peers to be suspended.

Instead of using restorative justice policies and other practices that properly address discipline issues in ways that build in-school relationships and engage students with their course work, many schools are pushing students out of school through the use of suspensions and expulsions. This further disconnects students from school and learning, which ultimately makes it harder for them to graduate from high school and may funnel them to criminal activity.<sup>22</sup> High schools are a main player in the school-to-prison pipeline, and reforms are needed to replace exclusionary, discriminatory, and punitive discipline practices with positive behavioral support programs as well as mental health and social work providers. The combination of academic and school climate reforms can better create high schools that keep students engaged in ways that will lead them to college and a career and away from crime and prison.

Policy at the national, state, and local levels must support effective reforms and innovative practices for engaging students and getting them to high school graduation and beyond. Interventions that bring struggling students up to grade level and experiences that bring real-world relevance into classrooms are critical, as are school environments that support excellence in teaching and learning.





## Crime Doesn't Pay—Diplomas Do

## **Education and Crime**

A 10 percent increase in the male high school graduation rate would reduce murder and assault arrest rates by about 20 percent, motor vehicle theft by 13 percent, and arson by 8 percent.<sup>23</sup>

State prison inmates without a high school diploma and those with a GED were more likely to be repeat offenders than those with a diploma.<sup>24</sup>

Share these stats #SaveFuturesSaveDollars

Working with Dr. Robynn Cox of Spelman College in Atlanta, Georgia, the Alliance estimates that the nation's annual crime savings would be approximately \$18.5 billion if the high school male graduation rate increased by only 5 percentage points. In addition to these monetary savings, there would be a substantial decrease in the number of criminal incidents around the country (see Table 1). The economic benefits of increasing the high school graduation rate appear in Table 2 and would vary from state to state: New Hampshire (at the low end) would save \$14 million, Nevada (near the middle) would save nearly \$215 million, and California (at the high end) would save more than \$2.4 billion.<sup>25</sup>

Beyond the savings related directly to crime reduction, almost \$1.2 billion in *additional annual earnings* would enter the economy if more students graduated from high school. The Alliance calculates that if the male graduation rate increased by 5 percentage points and those students went on to college at the same rates as current male high school graduates, their average earnings would increase significantly. The benefits, again, would vary from state to state: Wyoming (at the low end) would see an annual increase of \$3.5 million, Massachusetts (near the middle) would add \$26 million, and California (at the high end) would accrue an additional \$193 million. These numbers reflect only additional wages earned, without considering the added economic growth produced by each new dollar in the economy or the additional tax revenues that would be produced.

State-by-state estimates of the annual economic benefits generated from crime-related savings and additional annual earnings can be seen in Table 2.

Table 1   Increase Graduation Rates; Reduce Crime				
Type of Crime	Estimated Decrease in Incidents			
Assault	59,160			
Burglary	17,256			
Larceny	37,334			
Motor vehicle theft	31,301			
Murder	1,275			
Rape	3,816			
Robbery	1,509			

Based on national estimates from the 2009 FBI Uniform Crime Report, assuming an increase of 5 percentage points in the high school graduation rate of male students.

These savings and increased annual earnings are estimates only of increases in *male* high school graduation rates. Imprisonment rates of males are much higher than those of females. In 2009, men were imprisoned at a rate 14 times higher than women;<sup>27</sup> 93 percent of prisoners in that year were male.<sup>28</sup>

Also of note is that increasing male graduation rates by 5 percentage points would still leave many states far from having an acceptable number of high school graduates. The Alliance and groups like America's Promise Alliance have called for a national high school graduation goal of 90 percent. If all states were to achieve this goal, the savings and annual earnings estimates provided above would be much higher.

It is important not to lose sight of the big picture; these estimates represent cost savings to governments and communities, but they also represent the potential for a better standard of living, more community leaders, more heads of households and stable family units, improved parenting, and less violence in the communities, all of which are savings from the emotional and psychological impacts of crime. School reforms that produce more high school graduates would not just decrease the prison population, they would also change the lives of students and their families, and result in fewer victims due to prevented crimes. More than one-third of jail inmates said the main reason they quit school was because of academic problems, behavior problems, or lost interest.<sup>26</sup>

**Share this stat #SaveFuturesSaveDollars** 



# High School Improvement Is Key to Graduating More Students

Increasing the number of students who graduate requires even more intense focus by educators and community leaders to improve the nation's high schools. Low graduation rates are particularly severe in urban and poor rural areas and in schools serving large numbers of students of color and low-income students.<sup>29</sup> According to the National Center for Education Statistics, only about 66 percent of African American and 69 percent of Latino students graduate from high school on time, compared to 83 percent of their white peers.<sup>30</sup> These disparities carry over to prison, where African Americans and Latinos make up a disproportionate percentage of the prison population. In 2009, African American and Latino males made up over 60 percent of the nation's male inmates,<sup>31</sup> despite these groups comprising less than 30 percent of the nation's population.<sup>32</sup>

African Americans and Latinos are similarly overrepresented in the juvenile justice system. In 2010, 62 percent of juveniles committed to juvenile justice facilities were African American or Latino; for juveniles who were detained by the system in the same year, African Americans and Latinos made up nearly 70 percent of the total.<sup>33</sup>

The economic and equity arguments are as intertwined here as elsewhere: graduating more students from high school and closing achievement gaps not only makes economic sense, it is also a civil rights imperative.

The economic and equity arguments are as intertwined here as elsewhere: graduating more students from high school and closing achievement gaps not only makes economic sense, it is also a civil rights imperative.

**Share this stat #SaveFuturesSaveDollars** 

Of African American males who graduated from high school and went on to attend some college in 2000, only 5 percent were incarcerated.<sup>34</sup>

Of white males who graduated from high school and went on to attend some college in 2000, only 1 percent were incarcerated.<sup>35</sup>

**Share these stats #SaveFuturesSaveDollars** 

Transforming high schools with the goal of having every student graduate ready for college and a career is not easy. There is no silver bullet, but researchers and educators are developing and implementing innovative programs and interventions to help students graduate successfully-even those who enter ninth grade performing far below grade level. For example, schools can increase opportunities for "deeper learning," which engages students and provides them with the complex critical thinking, problem-solving, collaboration, and communication skills that are mandatory in today's job market. Through the power of digital learning, technology can be paired with effective teaching to transform the educational experience. Other approaches, such as Linked Learning in California, are also gaining traction as districts and schools pioneer ways to make learning relevant while also personalizing student learning by combining rigorous academics, student supports, meaningful work-based learning opportunities, and technical training. Educational approaches like these are designed to make learning more relevant and engaging and to better position students for the demands of life after high school.

Much is known about what students need to achieve at high levels academically, and some schools, districts, and organizations are working together to apply this knowledge with excellent results. One such organization is Communities in Schools (CIS), which has been able to find success connecting with students and reducing dropout rates. CIS works with public schools and districts to assess the individual needs of a system and then partners with community organizations, parents, local businesses, and social service agencies to fill those needs. Schools thus become the centers of communities and serve students not just in the classroom but through wraparound services as well. For less than \$200 per student, CIS has been able to help achieve an 88 percent graduation rate in the schools with which the organization works, and 81 percent of graduates go on to some postsecondary education.<sup>36</sup> Given that the annual gap in spending between educating and incarcerating an individual is nearly \$16,000, \$200 seems a small price to pay to produce a high school graduate with a chance at a better life.

The Linked Learning approach in California has also shown positive results in reducing dropout rates and increasing retention rates, particularly among underrepresented student populations. One example is Construction Tech Academy (CTA), a construction-themed high school in San Diego, California. CTA's overall graduation rate during the 2009-10 academic year was 85 percent, compared with 82 percent in the rest of the district. More impressive, however, are the graduation rates of its Hispanic students (84 percent) and English language learners (ELLs) (71 percent) in comparison with the district's (74 percent and 59 percent respectively).<sup>37</sup> Deeper learning—the concept of preparing students to know and master core academic content, think critically and solve complex problems, work collaboratively, communicate effectively, and be self-directed and able to incorporate feedback—has also been effective at engaging economically disadvantaged students and students of color.

Across the country, schools in deeper learning networks are changing the classroom experience by making it student centered and student directed. One of these networks, the Internationals Networks for Public Schools (Internationals), has demonstrated success in New York City with a student population that has both much higher rates of participation in the free and reduced-price lunch program and many more students of color than the state average.<sup>38</sup> Notably, all Internationals students are recent immigrants with low levels of English language proficiency. Despite the challenges with which students come into the Internationals system, high school graduation rates for these students are much higher than in the ELL populations in New York City and New York State,<sup>39</sup> and the dropout rate for Internationals students is less than half.<sup>40</sup> For the Class of 2011, nearly 80 percent of Internationals seniors had college acceptances.<sup>41</sup> If this and other deeper learning networks' success could be replicated, especially in at-risk districts and communities, more students would graduate from high school and likely be kept on a path toward personal and professional success.

The United States can invest in students now and ensure that they graduate from high school—or it can pay more later if the students do not. Improving high schools will lead to increased graduation rates, which, in turn, will result in lowered crime and incarceration rates and increased economic activity. Individuals, communities, states, and the nation will be the beneficiaries as both lives and dollars are saved.



# Table 2: Impact of a 5 Percent Increase in Male High School GraduationRates on Crime Reduction and Earnings42

**Share these stats #SaveFuturesSaveDollars** 

Stata	Annual Crime-Related	Annual Additional	Total Benefit to
State	Savings	Earnings	State Economy
Alabama	\$ 367,000,000	\$ 16,000,000	\$ 383,000,000
Alaska	\$ 40,900,000	\$ 4,200,000	\$ 45,100,000
Arizona	\$ 406,000,000	\$ 27,000,000	\$ 433,000,000
Arkansas	\$ 225,000,000	\$ 8,700,000	\$ 233,700,000
California	\$ 2,440,000,000	\$ 193,000,000*	\$ 2,633,000,000
Colorado	\$ 217,000,000	\$ 18,000,000	\$ 235,000,000
Connecticut	\$ 141,000,000	\$ 18,000,000	\$ 159,000,000
Delaware	\$ 58,000,000	\$ 3,800,000	\$ 61,800,000
District of Columbia	\$ 18,500,000	\$ 1,800,000	\$ 20,300,000
Florida	†	\$ 58,000,000	\$ 58,000,000
Georgia	\$ 622,000,000	\$ 38,000,000	\$ 660,000,000
Hawaii	\$ 36,100,000	\$ 3,900,000	\$ 40,000,000
Idaho	\$ 35,400,000	\$ 4,700,000	\$ 40,100,000
Illinois	\$ 844,000,000	\$ 49,000,000	\$ 893,000,000
Indiana	\$ 360,000,000	\$ 26,000,000	\$ 386,000,000
lowa	\$ 75,000,000	\$ 9,400,000	\$ 84,400,000
Kansas	\$ 151,000,000	\$ 8,400,000	\$ 159,400,000
Kentucky	\$ 184,000,000	\$ 15,000,000	\$ 199,000,000
Louisiana	\$ 560,000,000	\$ 16,000,000	\$ 576,000,000
Maine	\$ 27,100,000	\$ 4,400,000	\$ 31,500,000
Maryland	\$ 507,000,000	\$ 30,000,000	\$ 537,000,000
Massachusetts	\$ 316,000,000	\$ 26,000,000	\$ 342,000,000
Michigan	\$ 695,000,000	\$ 43,000,000	\$ 738,000,000
Minnesota	\$ 107,000,000	\$ 23,000,000	\$ 130,000,000
Mississippi	\$ 188,000,000	\$ 9,900,000	\$ 197,900,000
Missouri	\$ 463,000,000	\$ 21,000,000	\$ 484,000,000
Montana	\$ 30,900,000	\$ 2,500,000	\$ 33,400,000
Nebraska	\$ 55,500,000	\$ 5,400,000	\$ 60,900,000
Nevada	\$ 215,000,000	*	\$ 215,000,000
New Hampshire	\$ 14,000,000	\$ 5,900,000	\$ 19,900,000
New Jersey	\$ 367,000,000	\$ 45,000,000	\$ 412,000,000
New Mexico	\$ 213,000,000	\$ 5,800,000	\$ 218,800,000
New York	\$ 967,000,000	\$ 87,000,000	\$ 1,054,000,000
North Carolina	\$ 580,000,000	\$ 28,000,000	\$ 608,000,000
North Dakota	\$ 13,200,000	\$ 1,500,000	\$ 14,700,000
Ohio	\$ 535,000,000	\$ 47,000,000	\$ 582,000,000
Oklahoma	\$ 283,000,000	\$ 13,000,000	\$ 296,000,000
Oregon	\$ 114,000,000	\$ 11,000,000	\$ 125,000,000
Pennsylvania	\$ 737,000,000	\$ 48,000,000	\$ 785,000,000
Rhode Island	\$ 38,000,000	\$ 4,200,000	\$ 42,200,000
South Carolina	\$ 431,000,000	\$ 16,000,000	\$ 447,000,000
South Dakota	\$ 21,700,000	\$ 2,500,000	\$ 24,200,000
Tennessee	\$ 595,000,000	*	\$ 595,000,000
Texas	\$ 1,640,000,000	\$ 119,000,000	\$ 1,759,000,000
Utah	\$ 56,700,000	\$ 9,500,000	\$ 66,200,000
Vermont	\$ 10,500,000	*	\$ 10,500,000
Virginia	\$ 362,000,000	\$ 33,000,000	\$ 395,000,000
Washington	\$ 229,000,000	\$ 32,000,000	\$ 261,000,000
West Virginia	\$ 99,500,000	\$ 5,700,000	\$ 105,200,000
Wisconsin	\$ 192,000,000	\$ 21,000,000	\$ 213,000,000
Wyoming	\$ 17,900,000	\$ 3,500,000	\$ 21,400,000
United States total	\$ 18,500,000,000	\$ 1,200,000,000	\$ 19,700,000,000

† Data not available because crime data was unavailable. ‡ Data not available because male graduation rate data was unavailable.

\* Computed using 2007-08 AFGR (averaged freshman graduation rate) data.

### **Endnotes**

1. T. Kyckelhahn, Justice Expenditures and Employment Extracts, 2008 (Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics, 2012), http://www.bjs.gov/index.cfm?ty=pbdetail&iid=4333 (accessed June 5, 2013).

2. U.S. Department of Education, National Center for Education Statistics, *The Condition of Education 2012*, Indicator 20: Public School Expenditures (NCES 2012-045) (Washington, DC: Author, 2012), http://nces.ed.gov/pubs2012/2012045\_5.pdf (accessed August 15, 2013).

3. T. Kyckelhahn, *Justice Expenditures and Employment, FY 1982-2007—Statistical Tables* (Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics, 2011), http://bjs.ojp.usdoj.gov/content/pub/pdf/jee8207st.pdf (accessed February 13, 2013).

4. First Focus, "Title I Grants to Local Education Agencies," http:// childrensbudget.org/index/programs/do/display/program\_id/19 (accessed April 15, 2013).

5. Kyckelhahn, Justice Expenditures and Employment, FY 1982-2007— Statistical Tables; First Focus, "Title I Grants to Local Education Agencies."

6. L. E. Glaze, *Correctional Populations in the United States*, 2010 (Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics, 2011), http://www.bjs.gov/content/pub/pdf/cpus10.pdf (accessed June 5, 2013).

7. State and federal inmate estimates are from the U.S. Bureau of Justice Statistics (BJS), *Survey of Inmates in State and Federal Correctional Facilities, 2004* (Washington, DC: U.S. Department of Justice, 2004), and unpublished analysis performed and verified by BJS Corrections Unit statisticians, December 2009. Jail inmates estimate is from C. W. Harlow, *Education and Correctional Populations,* BJS Special Report (Washington, DC: U.S. Department of Justice, 2003), http://bjs.gov/content/pub/pdf/ecp.pdf (accessed August 5, 2013).

#### 8. Ibid.

9. R. Stillwell and J. Sable, *Public School Graduates and Dropouts from the Common Core of Data: School Year 2009–10* (NCES 2013–309REV) (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 2013), http://nces.ed.gov/pubs2013/2013309rev.pdf (accessed August 5, 2013).

10. Ibid.

11. Harlow, Education and Correctional Populations.

12. Ibid.

13. A. Sum et al., *The Consequences of Dropping Out of High School* (Boston, MA: Center for Labor Market Studies, Northeastern University, 2009), http://www.americaspromise.org/~/media/Files/Resources/ Consequences\_of\_Dropping\_Out\_of\_High\_School.ashx (accessed February 13, 2013).

14. L. Lochner and E. Moretti, "The Effect of Education on Crime: Evidence from Prison Inmates, Arrests and Self-Reports," *American Economic Review* 94, no. 1 (2004): 155–89.

15. Coalition for Juvenile Justice, *Abandoned in the Back Row: New Lessons in Education and Delinquency Prevention* (Washington, DC: Author, 2001).

16. J. Bridgeland, J. Dilulio, and K. Morison, *The Silent Epidemic: Perspectives of High School Dropouts* (Washington, DC: Civic Enterprises, 2006).

17. Sum et al., The Consequences of Dropping Out of High School.

18. Center for Public Education, *Keeping Kids in School: What Research Tells Us About Preventing Dropouts* (Alexandria, VA: Author, 2007), http://www.centerforpubliceducation.org/Main-Menu/Staffingstudents/Keeping-kids-in-school-At-a-glance/Keeping-kids-in-school-Preventing-dropouts. html (accessed June 5, 2013); W. K. Hoy and J. W. Hannum, "Middle School Climate: An Empirical Assessment of Organizational Health and Student Achievement," *Educational Administration Quarterly* 33, no. 3 (August 1997): 290–311.

19. American Psychological Association Zero Tolerance Task Force, "Are Zero Tolerance Policies Effective in the Schools? An Evidentiary Review and Recommendations," *American Psychologist* 63, no. 9 (December 2008): 852–62, http://www.apa.org/pubs/info/reports/zero-tolerance. pdf (accessed April 15, 2013).

20. D. Losen and T. Martinez, *Out of School and Off Track: The Overuse of Suspensions in American Middle and High Schools* (Los Angeles, CA: UCLA Center for Civil Rights Remedies at the Civil Rights Project, April 2013).

21. R. Balfanz, V. Byrnes, and J. Fox, "Sent Home and Put Off-Track: The Antecedents, Disproportionalities, and Consequences of Being Suspended in the Ninth Grade," paper presented at the Closing the School Discipline Gap: Research to Practice conference, January 10, 2013, Indiana University, http://civilrightsproject.ucla.edu/events/2013/closing-the-school-discipline-gap-conference-research-papers/closing-the-school-discipline-gap-research-to-practice (accessed August 5, 2013).

22. Ibid.

23. E. Moretti, "Does Education Reduce Participation in Criminal Activities?," research presented at the 2005 Symposium on the Social Costs of Inadequate Education, Teachers College, Columbia University, New York, NY, October 2005.

24. Harlow, Education and Correctional Populations.

25. The changes in crime rates from increasing high school graduation rates come from Lochner and Moretti, "The Effect of Education on Crime," whose research the Alliance has used in the past for crime-related savings estimates. Changes in the number of crimes were calculated using Lochner and Moretti's methods, which estimate the percentage change in arrests for crimes like murder, rape, robbery, assault, burglary, larceny, and motor vehicle theft based on a 1 percentage point increase in the male high school graduation rate. For this Alliance analysis, 2009 Uniform Crime Report (UCR) data on the number of arrests in each state were multiplied by the percentage change in arrests due to a 5 percentage point increase in the male high school graduation rate. Once the change in arrests is calculated, the change in the number of offenses for each crime category is determined by multiplying the changes in arrests by the ratio of total offenses (from the 2009 UCR data) to total arrests for each crime category and state. To calculate the social savings from these reduced crimes, cost estimates developed by E. McCollister, M. T. French, and H. Fang ("The Cost of New Crime-Specific Estimates for Policy and Program Evaluation," Drug and Alcohol Dependence 108, no. 1-2 (April 2010): 98-109) were multiplied by the change in the number of offenses. These cost estimates include expenditures beyond incarceration, including the costs of property loss, criminal victimization, lost productivity, police protection, and legal and adjudication costs. Inclusion of these costs provides a more complete picture of what crime costs individuals and society. Increased earnings were calculated using unpublished data from the Alliance's economic model, which estimates the economic benefits of graduating more students from high school and reducing high school dropouts.

#### 26. Ibid.

27. H. C. West and W. J. Sabol, "Prisoners in 2009" (Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics, 2010), http://bjs.ojp.usdoj.gov/content/pub/pdf/p09.pdf (accessed April 15, 2013).

28. Ibid.

29. C. B. Swanson, *Closing the Graduation Gap: Educational and Economic Conditions in America's Largest City* (Bethesda, MD: Editorial Projects in Education, 2009), http://www.americaspromise.org/-/media/Files/ Our%20Work/Dropout%20Prevention/Cities%20in%20Crisis/Cities\_ In\_Crisis\_Report\_2009.ashx (accessed April 15, 2013).

30. Stillwell and Sable, Public School Graduates and Dropouts from the Common Core of Data.

31. H. C. West, "Prison Inmates at Midyear 2009—Statistical Tables" (Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics, 2010), http://www.bjs.gov/content/pub/pdf/pim09st.pdf (accessed April 15, 2013).

32. U.S. Census Bureau, "Overview of Race and Hispanic Origin: 2010" (Washington, DC: Author, 2011), http://www.census.gov/prod/cen2010/ briefs/c2010br-02.pdf (accessed August 15, 2013).

33. M. Sickmund et al., "Easy Access to the Census of Juveniles in Residential Placement" (Washington, DC: U.S. Department of Justice, National Center for Juvenile Justice, 2011), http://www.ojjdp.gov/ojstatbb/ ezacjrp/ (accessed April 15, 2013).

34. S. Raphael, *The Socioeconomic Status of Black Males: The Increasing Importance of Incarceration* (Berkeley, CA: Goldman School of Public Policy, University of California, Berkeley, 2004).

35. Ibid.

36. Communities in Schools, "Unlocking Potential: 2011 Annual Report" (Arlington, VA: Author, 2011), http://www.communitiesinschools.org/ media/uploads/attachments/ANNUAL\_REPORT\_LO-RES.pdf (accessed April 15, 2013).

37. M. Saunders et al., *Linked Learning: A Guide to Making High School Work* (Los Angeles, CA: UCLA Institute for Democracy, Education, and Access, 2013).

38. Internationals Network for Public Schools, *Annual Report 2010-2011*, http://internationalsnps.org/wp-content/uploads/FINAL%20 INPS\_2011AnnualReport.pdf (accessed August 5, 2013).

39. Ibid.

40. Ibid.

41. Ibid.

42. Using McCollister, French, and Fang, "The Cost of Crime to Society."

### **Acknowledgments**

This report was written by Bill DeBaun and Martens Roc, members of the Alliance for Excellent Education's policy and advocacy team.

Support for this paper was provided in part by State Farm<sup>®</sup>. Opinions expressed are those of the authors and do not necessarily reflect the views of State Farm<sup>®</sup>.

The **Alliance for Excellent Education** is a Washington, DC-based national policy and advocacy organization that works to improve national and federal education policy so that all students can achieve at high academic levels and graduate from high school ready for success in college, work, and citizenship in the twenty-first century. www.all4ed.org.

Alliance for Excellent Education 1201 Connecticut Avenue, NW, Suite 901 Washington, DC 20036 p 202 828 0828 · f 202 828 0821 www.all4ed.org





Alliance for Excellent Education 1201 Connecticut Avenue, NW, Suite 901 Washington, DC 20036 p 202 828 0828 · f 202 828 0821 www.all4ed.org