School or the Streets Crime and America's Dropout Crisis



Acknowledgements

Fight Crime: Invest in Kids is a bipartisan anti-crime organization of over 4,000 law enforcement leaders and crime survivors nationwide. Its sheriffs, police chiefs, prosecutors and crime victims promote greater public investments in programs proven to direct kids onto better paths in life, paths that lead them away from crime and towards success.

Fight Crime: Invest in Kids' members are from all fifty states including, for example, 45 out of the 63 Major Cities Chiefs. Seattle Chief Gil Kerlikowski chairs the board and David Kass is President. Fight Crime: Invest in Kids has almost 50 staff members at its national and state offices and receives funding from major foundations, individuals and corporations. Fight Crime: Invest in Kids accepts no funds from federal, state or local governments.

Major funding for Fight Crime: Invest in Kids is provided by: The Afterschool Alliance · The Atlantic Philanthropies · The Boeing Company · The Buffett Early Childhood Fund · The Butler Family Fund · The California Endowment · The California Wellness Foundation · Robert Sterling Clark Foundation · Naomi and Nehemiah Cohen Foundation · Sam L. Cohen Foundation · Dr. Scholl Foundation · Early Childhood Investment Corporation · Frey Foundation · Bill & Melinda Gates Foundation · The Grable Foundation · Grand Victoria Foundation · The George Gund Foundation · Evelyn and Walter Haas, Jr. Fund · The Horace Hagedorn Foundation · The Irving Harris Foundation · The Heinz Endowments · The William and Flora Hewlett Foundation · The James Irvine Foundation · JEHT Foundation · The Walter S. Johnson Foundation · W.K. Kellogg Foundation · Long Island Community Foundation · McCormick Foundation · Richard King Mellon Foundation · The Charles Stewart Mott Foundation · The New York Community Trust · The David and Lucile Packard Foundation · The William Penn Foundation · The Pew Charitable Trusts · Advancing Quality Pre-K for All · Rauch Foundation · The Robins Foundation · Schumann Fund for New Jersey · The Skillman Foundation ·

For more information, or for copies of this or any report, see www.fightcrime.org.

Authors: Bill Christeson, Brian Lee, Stephanie Schaefer, David Kass and Soren Messner-Zidell. Contributors to this report: Siddhartha Aneja, Miriam Rollin, and Matt Lambert.

Publication designed by: J.L. Blackmon II. Copyright 2008, All Rights Reserved Fight Crime: Invest in Kids



1212 New York Ave. NW, Suite 300 • Washington, DC 20005 • 202.776.0027 • FAX 202.776.0110

Fight Crime: Invest in Kids

School or the Streets Crime and America's Dropout Crisis

Executive Summary

America faces a dropout crisis that poses a significant threat to public safety. Nationwide, an estimated three out of ten high school students fail to graduate from high school on time; and for many cities and minority populations, the numbers are much worse. Nationally, by one account, nearly 50 percent of African-American and nearly 40 percent of Latino youths attend high schools in which graduation is not the norm.

HIGH SCHOOL DROPOUTS ARE MORE LIKELY TO TURN TO CRIME

High school dropouts are three and one-half times more likely than high school graduates to be arrested, and more than eight times as likely to be incarcerated. Across the country, 68 percent of state prison inmates have not received a high school diploma.

According to researchers, 10 percentage-point increases in graduation rates have historically been shown to reduce murder and assault rates by approximately 20 percent. Increasing graduation rates by 10 percentage points would prevent over 3,000 murders and nearly 175,000 aggravated assaults in America each year.

HIGH-OUALITY PRE-KINDERGARTEN INCREASES GRADUATION RATES AND CUTS CRIME

Many efforts are underway nationwide to increase graduation rates, but the most tested and widely adopted school reform shown to greatly increase graduation rates is high-quality pre-kindergarten. Evidence from two long-term evaluations of the effects of pre-kindergarten programs show that participating in high-quality pre-kindergarten increases high school graduation rates by as much as 44 percent.

INCREASED INVESTMENTS IN EARLY EDUCATION ARE NEEDED

Many states are seriously considering following the lead of Oklahoma, where 68 percent of all of the state's four-year-olds are now enrolled in their voluntary, high-quality pre-kindergarten program. A few other states are already undertaking serious efforts, but most have a long way to go. Nationwide, the percent of four-year-olds served by state pre-k programs has risen from 14 percent in 2002, to 22 percent in 2007 — definite progress, but far from where states should be. Nationally, funding for Head Start, the nation's premiere pre-kindergarten program for poor kids, is sufficient to serve only half of all eligible children, and Early Head Start serves less than five percent of eligible infants and toddlers.

CUTTING DROPOUTS SAVES MONEY AND LIVES

America's dropout crisis not only threatens public safety, it also damages America's economy. Dropouts earn less, pay fewer taxes, and are more likely to collect welfare and turn to a life of crime. If America could raise male graduation rates by 10 percent, the country would save over \$15 billion every year, including almost \$10 billion in reduced crime costs alone.

LAW ENFORCEMENT LEADERS AND CRIME VICTIMS ARE UNITED

The more than 4,000 members of **Fight Crime: Invest in Kids** are convinced that in order to cut violent crime and to save lives and money, America should invest far more in high-quality early education programs.

School or the Streets Crime and America's Dropout Crisis

he more than 4,000 law enforcement leaders and crime victim members of Fight Crime: Invest in Kids are committed to taking dangerous criminals off the streets. But years of crime-fighting experience and rigorous research show that tough law enforcement is not enough. In order to most effectively reduce crime and safeguard our communities, it is necessary to take steps to prevent kids from ever becoming involved in crime in the first place.

A good education is not only critical to a young person's success in life, it is also one of the most fundamental crime-prevention tools available. Kids who stay in school and graduate are more likely to become productive citizens, and less likely to turn to crime.

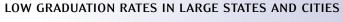
AMERICA'S DROPOUT CRISIS

America faces a dropout crisis that poses a significant threat to public safety.

An estimated three out of ten high school students do not graduate from high school on time. And of the more than 4.2 million Americans who turn 20 each year, 805,000 do not have a high school diploma or General Equivalency Degree (GED).

Nationally, nearly 50 percent of African-American and nearly 40 percent of Latino youth attend high schools from which graduation is not the norm.³

For years, the dropout crisis in America and across the nation has been a silent epidemic,⁴ drawing insufficient attention due to differing, and sometimes





2004-05 Graduation Rates, Editorial Projects in Education Research Center, 2008

very misleading, methodologies to measure high school graduation rates. Many districts have assumed, without evidence, that students who stopped showing up for class were enrolled somewhere else.

For example, North Carolina reports on its state website that 94 percent of its students graduate, whereas a more realistic estimate concluded that only 67 percent of its students graduated on time. South Dakota reports a rate of 94 percent whereas the more conservative estimate puts the figure at 76 percent, and Minnesota reports a rate of 91 percent vs. 78 percent for the more credible analysis.⁵

States across America need to adopt comprehensive data systems that track individual student data starting from the time a student enters the educational system until he or she leaves it. Lacking such data, there are different methodologies for estimating the scope of the problem, but it is clear to all researchers who study this issue that far too many young people are dropping out, putting America's future at risk.

High school dropouts are three and one-half times more likely than high school graduates to be arrested, and over eight times more likely to be in jail or prison.

Fight Crime: Invest in Kids

HIGH SCHOOL GRADUATES ARE LESS LIKELY TO TURN TO CRIME

Rigorous research has established the strong link between high school graduation and reduced crime. This is not surprising since dropping out can have the short-term effect of leaving young people unsupervised on the streets, and the long-term impact of leaving teens and adults without the skills they need to make ends meet.

High school dropouts are three and one-half times more likely than high school graduates to be arrested, and over eight times more likely to be in jail or prison.⁶ Across the country, 68 percent of state prison inmates do not have a high school diploma.⁷

While staying in school even one year longer reduces the likelihood that a youngster will turn to crime,⁸ graduating from high school has a dramatic impact. University of California at Berkeley economist Enrico Moretti and Canadian economist Lance Lochner studied the relationship over time between changes in graduation rates and crime and concluded that a 10 percentage point increase in graduation rates reduces murder and assault rates by about 20 percent.⁹

Increasing the nation's graduation rates from an estimated 71 percent to 81 percent, therefore, would yield 400,000 more graduates annually and prevent more than 3,000 murders and nearly 175,000 aggravated assaults each year. The accompanying chart provides a state-by-state analysis of aggravated assaults and murders that could be prevented by such an increase in graduation rates.

PRE-KINDERGARTEN PROGRAMS ARE PROVEN TO IMPROVE GRAD-UATION RATES AND CUT CRIME

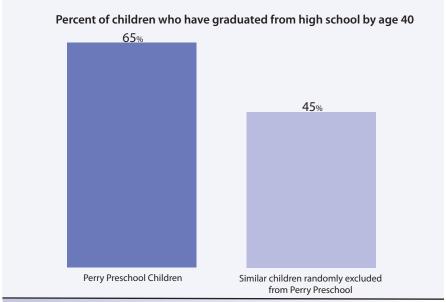
Improving graduation rates is not easy. Columbia University researcher Henry Levin and his colleagues conducted an extensive search of programs

INCREASING GRADUATION RATES CUTS MURDERS & ASSAULTS

ANNUAL IMPACT IF HIGH SCHOOL GRADUATION RATES INCREASED BY TEN PERCENTAGE POINTS

		S INCREASED BY TEN PERCENTAGE POINTS
State	Murders Prevented	Aggravated AssIts. Prevented
Alabama	76	2,093
Alaska	7	692
Arizona	93	3,856
Arkansas	41	2,245
California	497	22,291
Colorado	32	2,509
Connecticut	22	971
Delaware	8	728
Washington D.C.	34	917
Florida	226	17,408
Georgia	120	5,164
Hawaii	4	419
Idaho	7	540
Illinois	156	8,171
Indiana	74	2,085
lowa	11	1,254
	25	·
Kansas Kentucky	34	1,701
•		1,194
Louisiana	106	4,419
Maine	5	156
Maryland	109	4,402
Massachusetts	37	3,760
Michigan	143	7,317
Minnesota	25	1,784
Mississippi	45	870
Missouri	74	4,432
Montana	3	389
Nebraska	10	651
Nevada	45	2,035
New Hampshire	3	208
New Jersey	86	3,130
New Mexico	26	1,848
New York	184	9,077
North Carolina	108	5,121
North Dakota	2	108
Ohio	108	3,194
Oklahoma	41	2,595
Oregon	17	1,280
Pennsylvania	147	5,910
Rhode Island	6	276
South Carolina		
	72 2	5,011 175
South Dakota		
Tennessee	82	6,445
Texas	277	14,873
Utah	9	712
Vermont	2	116
Virginia	80	2,325
Washington	38	2,555
West Virginia	15	754
Wisconsin	33	1,784
Wyoming	2	202
Nationally	3,407	172,171

QUALITY PREKINDERGARTEN INCREASES GRADUATION RATES



Schweinhart, et al., 2004

A 10 percentage point increase in graduation rates would prevent approximately 3,400 murders and over 170,100 aggravated assaults each year.

impacting graduation and "found very few interventions that demonstrably increased high school graduation rates on the basis of rigorous and systematic evaluation."¹¹

Two of the five programs that had undergone rigorous research that Levin found to be effective were pre-kindergarten programs.¹² Pre-kindergarten is the most widely-implemented school reform that produces solid graduation rate increases.

HIGH-QUALITY PRE-KINDERGARTEN

Law enforcement leaders have long known about the impressive crime-prevention benefits of high-quality pre-kindergarten. By age 27, at-risk three-and four-year-olds left out of one effective program were five times more likely to be chronic law breakers than similar children who attended the program.¹³ And youngsters left out of another high-quality program were 70 percent more likely than program participants to have been arrested for a violent crime by age 18.¹⁴

Evidence from two long-term evaluations of the effects of pre-kindergarten programs shows that participating in effective early education also increases high school graduation rates.

The High/Scope Educational Research Foundation initiated a study of the Perry Preschool Program in Ypsilanti, Michigan, in 1962. The Perry Preschool Program is a high-quality, one- to two-year long educational program. The program includes a home-visiting component and is considered a model of effective early childhood educational programs.¹⁵

According to a long-term study following at-risk children through age 40 who attended Perry Preschool, children enrolled in Perry Preschool were 44 percent more likely to graduate from high school than similar children randomly assigned to not participate in the program. A separate analysis concluded that the Perry Preschool Program would yield 19 extra high school graduates for every 100 students provided the intervention. In

Chicago's federally-funded Child-Parent Centers have served over 100,000 three- and four-year-olds since 1967. The program is a center-based early educa-

tion program that provides pre-kindergarten and family-support services to economically-disadvantaged children.¹⁸

Researchers found that Child-Parent Center participants were 29 percent more likely to graduate from high school than similar children not enrolled in the program.¹⁹ A separate analysis concluded that this program yields 11 extra high school graduates for every 100 students provided the intervention.²⁰

PRE-KINDERGARTEN PROGRAMS ARE STILL LACKING IN MOST STATES

Oklahoma currently serves 68 percent of all of the state's four-year-olds in their voluntary, high-quality pre-kindergarten program. Combined with Head Start and programs for children with special education needs, 90 percent of Oklahoma's four-year-old children are being served by state or federal prekindergarten programs. A few other states are already undertaking serious efforts, but as the chart shows, most have a long way to go. Nationwide, the number of four-year-olds served by state prek programs has risen from 14 percent in 2002, to 22 percent in 2007 — a 57 percent increase in five years.21 That is definitely progress, but the chart also shows how much further most states need to go.

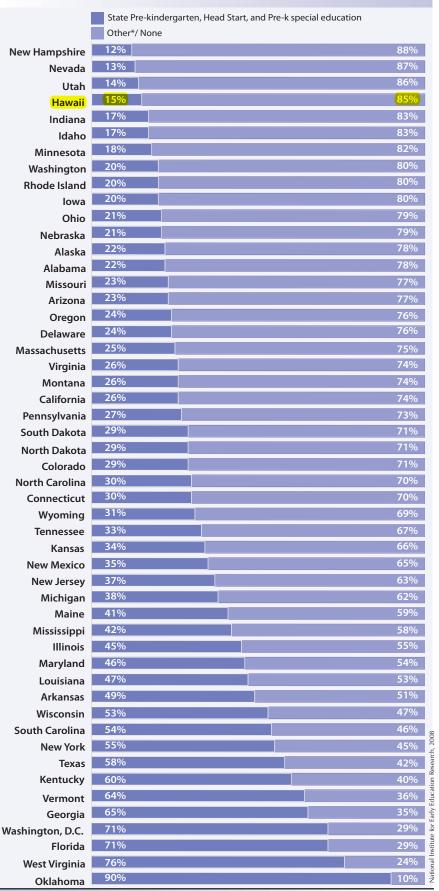
Nationally, funding for Head Start, the nation's premier pre-kindergarten program for poor kids, is sufficient to serve only half of all eligible children, and Early Head Start serves less than five percent of infants and toddlers from poor families who are eligible.

REDUCING DROPOUTS SAVES LIVES AND MONEY

America's dropout crisis not only threatens public safety, it also damages the nation's economy. Dropouts earn less, pay fewer taxes, and are more likely to collect welfare and turn to crime.

Alternatively, increasing graduation rates will help individuals and the over-

STATE OR FEDERALLY-FUNDED PRE-KINDERGARTEN



*Other includes local public education as well as private child care and other center-based programs.

all economy. Based on the findings of Lochner and Moretti, increasing male high school graduation rates nationwide by ten percent would produce almost \$10 billion in annual crime-related savings and nearly \$5 billion in additional annual earnings, for a total benefit nationwide of over \$15 billion every year. Total benefits for each state range from \$17 million annually for South Dakota, to more than \$2 billion a year for California (see Appendix A).²²

Separate research shows that the Child-Parent Centers' pre-kindergarten programs cut crime, special education and other costs so much that the programs saved more than \$10 for every \$1 invested.²³ The High/Scope Perry Preschool program also cut crime, welfare and other costs so much that it saved \$16 (including more than \$11 in crime savings) for every \$1 invested.²⁴

Bottom line: America can't afford *not* to invest in high-quality pre-kindergarten.

Conclusion and recommendations

The law enforcement leaders and crime survivors of **Fight Crime**: **Invest In Kids** call on policymakers to cut crime by investing wisely in high-quality pre-kindergarten:

- The first step for federal and state policy-makers and regulators is to make sure states are accurately counting dropouts and graduates.
- State policy-makers should either begin or continue on with their efforts to deliver more high-quality state pre-kindergarten programs that will produce strong results.
- Federal policy-makers should increase support for Head Start, Early Head Start and the Child Care Development Block Grant and do more to ensure continual improvements in the pre-kindergarten programs paid for by those funding streams.

America cannot afford to turn its back on wise investments that will increase high school graduation rates and cut crime. Too much is at stake, including the safety of all Americans.

IMPACT OF A TEN PERCENT INCREASE IN MALE GRADUATION RATES ON ANNUAL CRIME SAVINGS AND EARNINGS BY STATE

STATE	CRIME-RELATED SAVINGS	ADDITIONAL INCOME	TOTAL BENEFITS
Alabama	164,000,000	85,000,000	249,000,000
		1 1	, ,
Alaska	20,000,000 261,000,000	16,000,000	36,000,000
Arizona Arkansas	105,000,000	106,000,000	367,000,000
		49,000,000	154,000,000
Colorado	1,505,000,000	704,000,000	2,209,000,000
Connecticut	98,000,000	85,000,000	183,000,000
Connecticut	63,000,000	63,000,000	126,000,000
Delaware	19,000,000	14,000,000	33,000,000
District of Columbia	133,000,000	6,000,000	139,000,000
Florida	664,000,000	348,000,000	1,012,000,000
Georgia	371,000,000	181,000,000	552,000,000
(Hawaii)	14,000,000	22,000,000	35,000,000
Idaho	14,000,000	27,000,000	41,000,000
Illinois	526,000,000	231,000,000	757,000,000
Indiana	191,000,000	112,000,000	303,000,000
lowa	35,000,000	53,000,000	88,000,000
Kansas	72,000,000	52,000,000	124,000,000
Kentucky	100,000,000	74,000,000	174,000,000
Louisiana	328,000,000	79,000,000	407,000,000
Maine	6,000,000	23,000,000	29,000,000
Maryland	321,000,000	101,000,000	422,000,000
Massachusetts	118,000,000	111,000,000	229,000,000
Michigan	350,000,000	210,000,000	560,000,000
Minnesota	61,000,000	94,000,000	155,000,000
Mississippi	133,000,000	52,000,000	185,000,000
Missouri	191,000,000	103,000,000	294,000,000
Montana	21,000,000	17,000,000	38,000,000
Nebraska	33,000,000	32,000,000	65,000,000
Nevada	111,000,000	44,000,000	155,000,000
New Hampshire	6,000,000	24,000,000	30,000,000
New Jersey	240,000,000	138,000,000	378,000,000
New Mexico	75,000,000	39,000,000	114,000,000
New York	573,000,000	340,000,000	913,000,000
North Carolina	303,000,000	161,000,000	464,000,000
North Dakota	4,000,000	12,000,000	16,000,000
Ohio	252,000,000	213,000,000	465,000,000
Oklahoma	126,000,000	66,000,000	192,000,000
Oregon	42,000,000	60,000,000	102,000,000
Pennsylvania	364,000,000	212,000,000	576,000,000
Rhode Island	11,000,000	18,000,000	29,000,000
South Carolina	210,000,000	90,000,000	300,000,000 17,000,000 365,000,000 1,382,000,000 78,000,000 18,000,000 358,000,000 220,000,000
South Dakota	3,000,000	14,000,000	17,000,000
Tennessee	265,000,000	100,000,000	365,000,000
Texas	856,000,000	526,000,000	1,382,000,000
Utah	30,000,000	48,000,000	78,000,000
Vermont	7,000,000	11,000,000	18,000,000
Virginia	218,000,000	140,000,000	358,000,000
Washington	100,000,000	120,000,000	220,000,000
West Virginia	39,000,000	31,000,000	70,000,000
Wisconsin	95,000,000	106,000,000	201,000,000
Wyoming	8,000,000	10,000,000	201,000,000 18,000,000
Nationally	9,854,000,000	5,573,000,000	15,427,000,000

APPENDIX A

Appendix A

STATE GRADUATION RATES

APPENDIX B

State	Graduation Rate
Alabama	61%
Alaska	68%
Arizona	73%
Arkansas	73%
California	70%
Colorado	74%
Connecticut	78%
Delaware	60%
Washington DC	58%
Florida	61%
Georgia	58%
Hawaii	67%
Idaho	77%
Illinois	77%
Indiana	74%
lowa	83%
Kansas	74%
Kentucky	72%
Louisiana	55%
Maine	77%
Maryland	74%
Massachusetts	75%
Michigan	70%
Minnesota	78%
Mississippi	62%
Missouri	76%
Montana	76%
Nebraska	80%
Nevada	45%
New Hampshire	77%
New Jersey New Mexico	83%
New Mexico New York	54% 68%
North Carolina	
North Dakota	67% 79%
Ohio	76%
Oklahoma	71%
Oregon	70%
Pennsylvania	80%
Rhode Island	71%
South Carolina	56%
South Dakota	
Tennessee	65%
Texas	68%
Utah	79%
Vermont	80%
Virginia	73%
Washington	69% :: £
West Virginia	76% 65% 68% 79% 80% 73% 69% 73% 69% 73% 80%
Wisconsin	90%
Wyoming	74 %
Nationally	71%
itationally	# 1 /V

7 Appendix B

- 1. Editorial Projects in Education. (2007). Ready for what? Preparing students for college, careers, and life after high school. Bethesda, MD: Education Week. Retrieved on July 16, 2008 from http://www.edweek.org/media/ew/dc/2007/40national_SGBo7.pdf This estimate of graduation rates uses ninth grade students as the baseline for estimating who graduates within four years. Because a higher proportion of students have been held back in ninth grade as compared to other grades, some analysts have argued that this approach overestimates the severity of the dropout crisis compared to, for example, using the number of eighth grade students as the baseline. We are aware of this ongoing debate, but choose to use the ninth-grade baseline data in this report because it is available for cities as well as states. While serious researchers — lacking accurate actual data — may not agree on the best method for deriving graduation rate estimates, they all agree that too many students are dropping out and failing to graduate from high school. And the focus of our report is not on what the exact rate is but rather what would happen to crime if you could increase graduation rates by ten percentage
- 2. Levin, H., Belfield, C., Muennig, P., & Rouse, C. (2007). *The costs and benefits of an excellent education for all of America's children*. New York: Columbia University, Teachers College.
- 3. Balfanz, R. & Legters, N. (2004). Locating the dropout crisis: Which high schools produce the Nation's dropouts? Where are they located? Who attends them? Baltimore, MD: John Hopkins University, Center for Social Organization of Schools.
- 4. Bridgeland, J.M., Dilulio, J.J., & Morison, K.B. (2006). The silent epidemic: Perspectives of high school dropouts. Washington, DC: Civic Enterprises. Retrieved on November 12, 2007 from http://www.gatesfoundation.org/nr/downloads/ed/TheSilentEpidemic3-oFINAL.pdf
- 5. Education First North Carolina School Report Cards. (n.d.). 2005-06 school year. Retrieved on July 16, 2008 from

http://www.ncschoolreportcard.org/src/stateDetails.jsp? Page=I&pYear=2005-2006. South Dakota Department of Education. (n.d.). 2005 report card. Retrieved on July 16, 2008 from

https://sis.ddncampus.net:8081/nclb/portal/portal.xsl?&extractID=7. Minnesota Department of Education. (2005). State of Minnesota — Report card information. Retrieved on July 16, 2008 from http://education.state.mn.us/ReportCard2005/schoolDistrictInfo.do? SCHOOL_NUM=000&DISTRICT_NUM=9999&DISTRICT_TYPE=99. Editorial Projects in Education. (2007). Ready for what? Preparing students for college, careers, and life after high school. Bethesda, MD: Education Week. Retrieved on July 16, 2008 from http://www.edweek.org/media/ew/dc/2007/40national_SGB07.pdf

- 6. Catterall, J.S. (1985). On the social cost of dropping out. Stanford, CA: Center for Education Research; Bridgeland, J.M., Dilulio, J.J., & Morison, K.B. (2006). The silent epidemic: Perspectives of high school dropouts. Washington, DC: Civic Enterprises. Retrieved on November 12 from http://www.gatesfoundation.org/nr/downloads/ed/TheS ilentEpidemic3-o6FINAL.pdf
- 7. Harlow, C.W. (2003). Education and correctional populations. Retrieved on June 1, 2007 from http://www.ojp.usdoj.gov/bjs/pub/pdf/ecp.pdf
- 8. Lochner, L. & Moretti, E. (2004). The effect of education on crime: Evidence from prison inmates, arrests, and self reports. *The American Economic Review*, *94*(1), 155-189.
- 9. Lochner, L. & Moretti, E. (2004). The effect of education on crime: Evidence from prison inmates, arrests, and self reports. *The American Economic Review*, *94*(1), 155-189.

- 10. Federal Bureau of Investigation. (2006). *Crime in the United States 2006*. Washington, D.C.: U.S. Department of Justice. Retrieved on July 16, 2008 from
- http://www.fbi.gov/ucr/cius2006/data/table_05.html; Based on 17,034 reported homicides and 860,833 reported aggravated assaults in 2006.
- 11. Levin, H., Belfield, C., Muennig, P., & Rouse, C. (2007). The costs of an excellent education for all of America's children. New York: Teachers College, University of Columbia.
- 12. The other three cited by Levin were First Things First in Kansas City, K-12 teacher salary increases, and much smaller class sizes. First Things First in Kansas City combined smaller learning communities with staff who monitored and assisted individual students and their families, plus educational enhancements. It yielded 16 extra high school graduates for every 100 students provided the intervention according to an analysis done by Belfield and Levin. But efforts to replicate that success elsewhere show that more work is needed before First Things First is ready to be rolled out nationwide. Increasing the salaries of K through 12 teachers can yield an additional five extra high school graduates out of every 100 students, and smaller K-3 classes of 13 to 17 children would yield an additional 11 graduates per 100 students according to Belfield and Levin. Another program that has been praised by experts in the field, Check and Connect, uses monitors who check on troubled student's progress and connect the troubled youth to school with individual attention, encouragement to get their families more effectively involved, and community services if needed. An evaluation by Sinclair et al., in 1998 showed that ninth grade students not in the program were three times more likely to drop out than participating students. No doubt there are other solid programs impacting graduation rates that have yet to be rigorously evaluated.
- 13. Schweinhart, L. J., Barnes, H. V., & Weikart, D. P. (1993). Significant benefits: The High/Scope Perry Preschool study through age 27. Ypsilanti, MI: High/Scope Press.14. Reynolds, A. J., Temple, J. A., Robertson, D. L., & Mann, E. A. (2001). Long-term effects of an early childhood intervention on educational achievement and juvenile arrest: A 15-year follow-up of low-income children in public schools. Journal of the American Medical Association, 285(18), 2339-2346. Reynolds, A. J., Temple, J. A., Ou, S., Robertson, D. L., Mersky, J. P., Topitzes, J. W., & Niles, M. D. (2007). Effects of a school-based, early childhood intervention on adult health and well-being: A 19-year follow-up of lowincome families. Archives of Pediatrics & Adolescent Medicine, 161(8), pp. 730-739
- 15. Schweinhart, L.J., Montie, J., & Xiang, Z., Barnett, W.S., Belfield, C.R., & Nores, M. (2004). *Lifetime effects: The High/Scope Perry Preschool study through Age 40*. High/Scope Educational Research Foundation. Ypsilanti MI: High/Scope Press.
- 16. Schweinhart, L.J., Montie, J., Xiang, Z., Barnett, W.S., Belfield, C.R., & Nores, M. (2005). *Lifetime effects: The High/Scope Perry Preschool study through age 40*. Ypsilanti, Ml: High/Scope Press.
- 17. Levin, H., Belfield, C., Muennig, P., & Rouse, C. (2007). *The costs of an excellent education for all of America's children*. New York: Teachers College, University of Columbia.
- 18. Reynolds, A. J., Temple, J. A., Ou, S., Robertson, D. L., Mersky, J. P., Topitzes, J. W., & Niles, M. D. (2007). Effects of a school-based, early childhood intervention on adult health and well-being: A 19-year follow-up of low-income families. *Archives of Pediatrics & Adolescent Medicine*, 161(8), pp. 730-739.
- 19. Reynolds, A. J., Temple, J. A., Robertson, D. L., & Mann, E. A. (2001). Long-term effects of an early

- childhood intervention on educational achievement and juvenile arrest. *Journal of the American Medical Association*, 285(12), 2339-2380.
- 20. Levin, H., Belfield, C., Muennig, P., & Rouse, C. (2007). *The costs of an excellent education for all of America's children*. New York: Teachers College, University of Columbia.
- 21. Barnett, W.S., Hustedt, J.T., Friedman, A.H., Stevenson Boyd, A., Ainsworth, P., (2007). *The state of preschool 2007*. Rutgers Graduate School of Education.
- 22. Based on calculations done by Alliance for Excellent Education, which uses Lochner and Moretti's research on the effects of a one percent increase in the male high school graduation rate on crime savings and additional annual earnings. Alliance for Excellent Education. (2006). Saving futures, saving dollars: The impact of education on crime reduction and earnings. Washington, D.C.: Alliance for Excellent Education. Retrieved on July 17, 2008 from
- http://www.all4ed.org/files/archive/publications/Saving Futures.pdf; Lochner, L. & Moretti, E. (2004). The effect of education on crime: Evidence from prison inmates, arrests, and self reports. The American Economic Review, 94(1), 155-189.
- 23. Reynolds, A.J., & Temple, J.A., (2006, January 20). Prevention and cost-effectiveness in early intervention: A 20-year follow-up of a Child-Parent Center cohort. Minneapolis, McEvoy Lecture Series on Early Childhood and Public Policy, Humphrey Institute of Public Affairs, University of Minnesota.
- 24. Schweinhart, L.J., Montie, J., & Xiang, Z. (2004). *Lifetime effects: The High/Scope Perry Preschool study through Age 40*. High/Scope Educational research Foundation. Unpublished Manuscript.

Endnotes 8

www.fightcrime.org
For more information, or access to other reports.