

PENNSYLVANIA

REPORT

Pre-K Key to Cutting Pennsylvania Prison Costs and Boosting School Success

Pennsylvania could realize over \$150 million in societal benefits by increasing access to high-quality pre-k programs

StrongNation.org/FightCrime

Acknowledgements

Council for a Strong America is a national, bipartisan nonprofit that unites five organizations comprised of law enforcement leaders, retired admirals and generals, business executives, pastors, and prominent coaches and athletes who promote solutions that ensure our next generation of Americans will be citizen-ready.

Fight Crime: Invest in Kids

Thousands of police chiefs, sheriffs, prosecutors and violence survivors protecting public safety by promoting solutions that steer kids away from crime.

Supported by tax-deductible contributions from foundations, individuals, and corporations.

Major funders:

W. Clement and Jessie V. Stone Foundation, Alliance for Early Success, William Penn Foundation, Vanguard Strong Start for Kids Program[™], The Grable Foundation

The views expressed here do not necessarily reflect the views of these foundations.

Authors:

Sarah Baizer, Senior Research Associate Sandra Bishop-Josef, Ph.D., Research Director Bruce Clash, Pennsylvania State Director Chris Beakey, Communications Director

March 2018

©2018 Council for A Strong America. All Rights Reserved.



is spent each year in Pennsylvania on state and local corrections.

The more than 5,000 law enforcement leaders around the nation who are members of Fight Crime: Invest in Kids including 180 here in Pennsylvania—have a direct message for everyone who cares about the impact and cost of crime: Pay now or pay much more later.

Pennsylvania's prisons are full of people serving time for serious and costly crimes. High school dropouts are more likely to end up in prison. But it doesn't have to be that way: Providing at-risk kids with high-quality early learning programs can reduce crime and the resulting costs, other expenditures, and long-term negative impacts on society.

Law enforcement leaders know that one of the best ways to keep young people from dropping out of school and becoming criminals is to make sure they have a foundation for success in their earliest years. By providing access to high-quality We are tough on criminals because public safety is our top priority. But if investing in high-quality pre-k keeps kids from turning into criminals, that both saves us money and forms kids into productive and lawabiding adults.

Thomas P. Hogan Chester County District Attorney early education for kids today, we can see less crime and incarceration in the future.

Law enforcement leaders base these views on both personal experiences and research. A study that followed children who participated in a high-quality pre-k and "parent-coaching" program through Chicago's Child-Parent Centers found that children not served by the program were 70 percent more likely to be arrested for a violent crime by age 18 than those who participated. Recent studies of state pre-k programs have found significant increases in participants' later academic performance—including high school graduation—and also important decreases in their need for special education and in being held back in school. Pre-k has impressive results when it is of high quality.

Reducing crime by improving the availability and quality of pre-k is one of the key reasons why Governors and state legislators across the political spectrum have made bold commitments to highquality early education and care. Policymakers in our state have an opportunity to expand access for thousands of Pennsylvania's children.

Our nation currently spends \$75 billion every year on corrections nationwide to incarcerate more than two million criminals. Pennsylvania spends approximately \$3.2 billion a year on state and local corrections.

A sophisticated meta-analysis of nearly 20 high-quality pre-k programs for disadvantaged children demonstrated that quality pre-k returned an average "profit" (economic benefits minus costs) to society of more than \$34,000 for every child served. The analysis measured the



economic benefits of both cutting crime and the cost of incarceration, reducing other costs such as special education and grade retention, and increasing participants' future wages. Applying that estimate to the 4,400 additional lowincome Pennsylvanian children who would be served by Governor Wolf's proposed \$40 million funding increase for the Pre-K Counts and Head Start State Supplemental Assistance programs in 2018-2019 could realize Pennsylvania almost \$150 million in societal benefits over their lifetimes.

The choice for Pennsylvania is simple: Pay for high-quality early education programs now, or pay far more later for the costs of crime and lack of educational success.

The Cost of Crime in Pennsylvania

As law enforcement leaders, our number-one priority is protecting the safety of our communities. We do this by arresting, prosecuting and, when necessary, incarcerating people who commit crimes. But ultimately our best approach to improve public safety is to keep people from becoming involved in crime in the first place. To do so, we urge our elected leaders to invest in strategies and practices that have proven, positive and long-term impacts on crime reduction.

We already know where our current path is leading us:

Although crime rates have fallen over the past 20 years, including in Pennsylvania, there are still 1.2 million violent crimes and 8 million property crimes committed against people in our communities across America every year.¹ More than 40,400 violent crimes are committed annually in Pennsylvania, which is a rate of 316 per 100,000 people.

Pennsylvania had over 47,000 inmates in Department of Corrections jurisdiction as of January, 2018.²





Nationally, nearly \$75 billion a year is spent to incarcerate adults in federal and state prisons or local jails.³ Pennsylvania spends almost \$3.2 billion a year on incarcerating adults,⁴ and almost \$43,000 per state prison inmate,⁵ which is more than three times what the state spends on its public students annually (\$13,500),⁶ and more than five times what is spent on

preschool students (\$8,500).7

Six out of 10 prisoners nationwide do not have a high school diploma and finding employment after incarceration is very challenging.⁸ In Pennsylvania, 26.3 percent of current state prison inmates have less than a 12th grade education and the average reading level is upper 8th grade.⁹ Dropouts in Pennsylvania annually consume \$683 more than they contribute in taxes.¹⁰ Moreover, Pennsylvania could "see a combination of crime-related savings and additional revenue of about \$288 million annually if the male high school graduation rate increased by just five percent."11

While these facts are daunting, they do not even begin to reflect crime's other economic costs, or the impact on crime victims in Pennsylvania. The path we are on is both fiscally unsustainable and devastating in its impact on human lives.

Too Many Children Are Falling Behind Before They Start School

Fortunately, we can steer thousands of Pennsylvania's children toward more successful lives through high-quality early education that research has shown can lead to less child abuse and neglect, better performance in school, fewer high school dropouts and, ultimately, fewer crimes committed and a reduction in the number of prisoners.

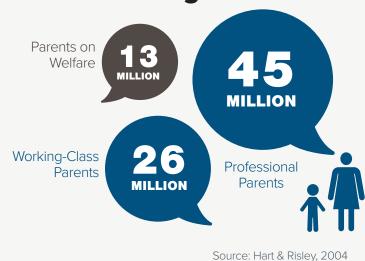
The research behind these outcomes shows that the early childhood period (birth to age 5) is a time of rapid brain development, with more than one million new brain connections forming every second.¹² **Early experiences play a large role in determining how brain connections are formed and in the "wiring" that becomes the foundation on which all later learning is built.**

For example, by age six months, babies start to understand the link between words and their meanings. This sets the stage for language development and later reading, which are key to later school success. Yet children from different backgrounds have very different early experiences. Researchers observed children in their own homes monthly for over two years, until the age of 3, and recorded how many words their parents spoke to them. There were large differences in the average number of words spoken to the children by professional parents, working class parents, and parents receiving welfare:

- professional parents: 45 million words
- working-class parents: 26 million
- parents receiving public assistance: 13 million¹³

These differences affected the children's vocabulary development: by age 3, children with professional parents had average vocabularies of 1,116 words, compared with 749 words for working-class and 525 for children of parents receiving welfare. By the time children reach kindergarten, too many are not only far behind in vocabulary development, but also on pre-literacy and pre-math skills, such as knowing the alphabet or being able to count to 10.

Many also face challenges in learning to control impulses and behavior so they can get along with other students and teachers. High-quality early education and care can help these children get on track, both academically and behaviorally, so they will be ready for kindergarten, despite these early deficits. High-quality early childhood programs also engage with parents, to support them in their role as their children's first teachers.



Words Spoken by Parents to their Young Children

Three Pennsylvania State Corrections Department officials, each with decades of experience working directly with state prison inmates, were interviewed by Fight Crime: Invest in Kids. These conversations, which are summarized throughout this report and edited for length, are their personal viewpoints and were not offered as official Department statements.



Tammy Kriner ABE/GED Instructor State Correctional Institution Muncy

For 25 years, I have taught men and women incarcerated in Pennsylvania's state prisons. They come to my class if they don't have a GED or high school diploma, but frankly, many never even came close. Some can barely read or do simple addition. Most don't know their times tables. I ask each one why they left school. Sometimes, they had to work to support their families, but many others simply didn't care. Their home lives were filled with neglect, drugs and violence. One woman was making toasted cheese sandwiches for herself at 3 years old because her mother wasn't feeding her. They weren't engaged with anyone who cared enough to keep them on the right path. Just like the research shows, they came from homes where parents didn't read to them or use a lot of words. When they get to school, there's nothing but frustration in their future, because they can't read well enough to keep up with lessons, and suddenly, they're singled out and made fun of, until it all snowballs to that day when they drop out. It's not just their academics that suffer. They didn't learn social skills, like respecting authority and getting along with others, and that's what got them expelled from school. The difference maker is getting engaged with someone to guide them. Learning and social skills have to start early

because by the time we get them, it's too late. They don't believe in themselves. Their self-esteem is horrible, and that starts young. When my students are in my class, for an hour and a half I like to help them forget they're in jail. Wouldn't it be wonderful if they weren't here at all? Starting young with quality prekindergarten, helping them believe in themselves, could have made all the difference.

Learning and social skills have to start early because by the time we get them, it's too late. They don't believe in themselves.



Increasing graduation rates decreases serious crime:

Economists Enrico Moretti and Lance Lochner studied the relationship over time between changes in graduation rates and crime. They concluded that a 10 percentage point increase in graduation rates—going from 50 percent to 60 percent, for example—reduces murder and assault rates by about 20 percent.

Source: Lochner & Moretti (2004) The American Economic Review

James Heckman, the Nobel Prize-winning economist from the University of Chicago, has conducted groundbreaking work with economists, statisticians and neuroscientists and has demonstrated that the quality of early childhood development strongly influences health, social a nd economic outcomes. He argues that we should invest sufficiently in younger children—including pre-k—and in providing "coaching" for their parents because those early investments will pay off later on by establishing them on a path to be successful adults.¹⁴

The Pathway to Less Crime

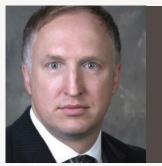
The path we set children upon in their earliest years can make a huge difference as they proceed through school and beyond. Research has shown that highquality early education and care from birth through pre-k will result in more successful outcomes:

Less child abuse and neglect:

The Chicago Child-Parent Centers (CPC) is a pre-k program that has served over 100,000 children and followed a sample of them up to age 28. This program also coaches parents to help them understand their children's health needs, create safer home environments and develop parenting skills. CPC cut child abuse and neglect in half for the children served, compared with similar children from families not being helped.¹⁵

Fewer behavior problems:

Pennsylvania's Pre-K Counts Public-Private Partnership program (the precursor to the current Pre-K Counts program) cut—from 22 percent to 4 percent—the portion of children at risk for problematic social and self-control behavior.¹⁶ This program was also found to help children learn self-control



Thomas McGinley Superintendent State Correctional Institution Coal Township

My father was Chief of Police in the small town of Centralia, PA. Every day, when my brothers and I left the house, he would say, "What you do out there is a direct reflection on me." We didn't have a lot of financial stability, but we had guidance, and that was priceless. It was never my intent to establish a career in Corrections, but after spending my first three years in Activities, I wanted to immerse myself in helping people achieve a positive course. In a Counselor role, I realized that the majority of inmates lacked the one thing I was blessed with—a nuclear family and someone to teach the basics of leading a good life. If you make bad decisions, you're going to have a bad life. Good decisions, good life. It's critical to capture people while they're young to encourage good decision-making. Voiding roadblocks—like teen pregnancies, having multiple children outside of marriage, choosing negative associates, and lack of focus on educational opportunitiesprove to be invaluable to success. It's also imperative to learn the value of hard work while understanding that instant gratification is only temporary. If we can help instill those values to a child through early childhood education and establish that foundation, that's huge. It's a powerful way to break the generational cycle of crime. I compare it to planting a tree. It's very difficult to move an oak once it's grown. I can try to dig around the roots in an attempt to change what the tree feeds off, but that can only do so much. It's a lot simpler and more effective to straighten the sapling while it's still a sapling. That's my

hope for the children of the inmates under my guidance. I love making a positive difference every day. I love working with families, and I believe that quality early childhood education can help give children the guidance they need to grow up into quality citizens, ready to make good decisions, contribute to society, and stay away from the trouble and bad decisions that bring them to my front door in the first place.

"It's also imperative to learn the value of hard work while understanding that instant gratification is only temporary." and self regulating behaviors, which leads to fewer of those children needing special education later on.

Better school outcomes:

Ready for school: Boston's pre-k program improved mathematics, literacy and language skills among participating children equivalent to seven months of additional learning, compared with children who did not attend.¹⁷ State pre-k programs are also reporting similar important improvements in academic skills among the children that matriculate from their programs.¹⁸

Not Held Back in School: Participants in Michigan's state pre-k, the Great Start Readiness Program, were held back in school 51 percent less often than nonparticipants.¹⁹ New Jersey's pre-k program found its children were held back 40 percent less often.²⁰

Increases in reading and math scores that

persist: North Carolina's Smart Start and More at Four initiatives to improve early education found that the children in counties that spent more per student were two months ahead in reading at fifth grade and 1.5 months ahead in math by fifth grade when compared with children in counties that spent less per student.²¹ New Jersey's pre-k program, which served disadvantaged school districts statewide, reported that participating children were three-fourths of a year ahead in math and two-thirds of a year ahead in literacy in fourth and fifth grades.²² These findings show that academic gains from high-quality pre-k continue to have a positive impact for students, and that investing in early education will lead to greater academic achievements later on. The New Jersey researchers report that their findings are on par with the earlier results achieved by Chicago's CPC program, which



Investing in early education will lead to more high school graduates later on.

later went on to achieve very strong graduation and crime reduction outcomes.

Fewer dropouts:

- The Chicago CPC pre-k program reported a 29 percent increase in high school graduation rates by age 20 among its participants;²³
- Michigan's Great Start Readiness program reported a 35 percent increase in graduates;²⁴ and
- Michigan's Perry Pre-K Program saw a 44 percent increase in graduation rates.²⁵

It's significant to note that in Pennsylvania, 14 percent of high school students still fail to graduate in four years.²⁶

Findings from a Survey of Pennsylvania State Prisoners

An optional background survey was administered by the Pennsylvania Department of Corrections to all incoming male inmates who were beginning to serve their sentences between January 8, 2018 and February 2, 2018. Of the 528 new inmates, 496 completed the survey, resulting in a 94 percent participation rate. The following summarizes some of the notable findings.

School Suspension: 58 percent of respondents who were suspended in elementary school dropped out of high school, compared to a lower dropout rate of 47 percent among those that were not suspended. Suspension also appears to be linked to teenage arrest rates. Among those who were suspended in middle school, 58 percent were arrested as a juvenile and 48 percent were arrested and found guilty as a juvenile, compared with only 40 and 33 percent, respectively, of the prisoners who were not suspended. Moreover, among prisoners who were suspended in high school, 61 percent were arrested as a juvenile and 50 percent were arrested and found guilty, with both proportions being close to double the rates of participants that were not suspended, at 37 and 31 percent, respectively. Lastly, 53 percent of prisoners who were suspended in elementary school were placed in a residential juvenile justice program compared to 30 percent that were not suspended.

School Expulsion: Among prisoners that were expelled from school, 64 percent ultimately did not complete high school compared to a 45 percent high school incompletion rate among participants that were not expelled. Moreover, 59 percent of expellees were arrested as a juvenile, 53 percent were arrested and found guilty, and 49 percent were placed in a residential juvenile justice program, compared to 42 percent, 34 percent, and 29 percent among prisoners who were not expelled.

Academics: Having difficulty reading in school is associated with trouble later in life, given that among prisoners that experienced this difficulty, 50 percent were arrested as a juvenile, 42 percent were arrested and found guilty, and 38 percent were placed in a residential juvenile justice program, compared to 44, 36, and 30

percent, respectively, among those that did not have difficulty reading. Moreover, among those that had difficulty reading, 65 percent were suspended and 33 percent were expelled, compared to a 51 percent suspension rate and 15 percent expulsion rate among those that did not have difficulty reading. Having difficulty reading also is associated with participants' academic experience, as 76 percent of those with difficulty reading skipped school, and 34 percent got in trouble in elementary school, compared to 59 and 24 percent, respectively. Family involvement may have had an impact on prisoners' academic success, as those who had someone involved in their learning had lower rates of dropping out of school (47 percent) and having difficulty reading in school (20 percent), compared to those that did not have anyone involved in their learning (55 and 29 percent, respectively).

Family Substance Abuse: Having a family member who had a substance abuse problem is associated with myriad negative later-in-life outcomes. Among prisoners in this category, 56 percent were arrested as a juvenile, 47 percent were arrested and found guilty, compared to 40 and 33 percent, respectively, among those who did not have any substance abuse in their family. Moreover, 69 percent of participants with family substance usage were suspended in school, with 41 percent being suspended in middle school and 46 percent being suspended in high school, compared to 49, 27, and 31 percent, respectively, among prisoners that did not have any substance abuse issues in the family. Additionally, 34 percent got in trouble in elementary school and 26 percent were expelled from school, compared to 23 percent and 17 percent, respectively, among prisoners who did not have any substance usage in the family.

Less crime:

- Children not served by the Chicago CPC program were **70 percent more** likely to be arrested for a violent crime by age 18.²⁷
- A recent study of Oklahoma's universal Pre-K program found the program decreases the likelihood that black children are later charged with a crime at age 18 or 19 for both misdemeanors and felonies.²⁸
- By age 27, children *not* served by the Perry Pre-K Program were five times more likely to be chronic offenders, with five or more arrests.²⁹

Fewer prisoners:

- By age 24, the people served by the Chicago CPC were 20 percent less likely to have served time in a jail or prison.³⁰
- By age 40, the children served by the Perry Pre-K program were 46 percent less likely to have been sentenced to prison or jail.³¹

It All Adds Up

No baby is destined, at birth, to become a criminal. The road to criminal behavior is paved with such challenges as poverty, childhood abuse and neglect, inadequate preparation for school, unaddressed behavior problems, poor academic performance and dropping out of high school. The path to success in life is driven by school readiness, the ability to get along with others, academic achievement and high school graduation. Pennsylvania needs to continue building on its investments in high-quality pre-k to ensure that more children have the opportunity for quality early education and care to help them become productive and law-abiding citizens.



It's significant to note that in Pennsylvania, 14 percent of high school students still fail to graduate in four years.

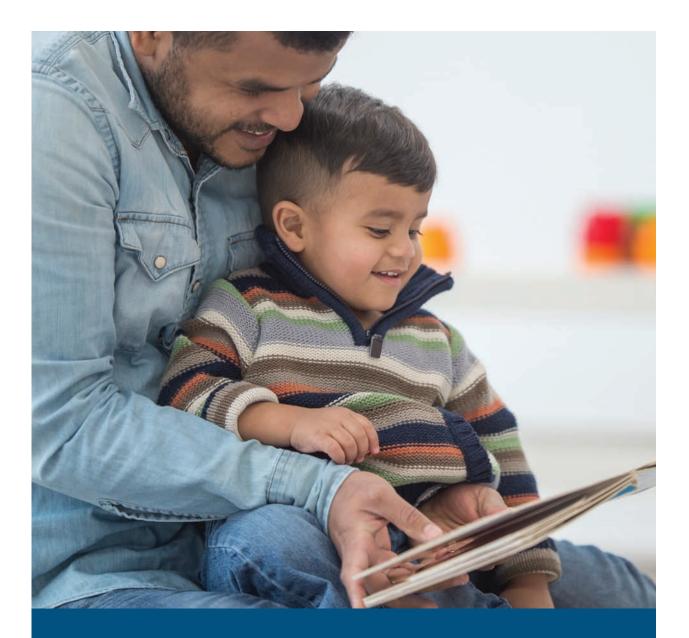


John R. Booth Chief Psychologist State Correctional Institution Chester

Children learn to trust their environment through a process that happens at a very young age. Their mothers, fathers, and caretakers put energy into them, making sure they have a safe place to be and get affection and attention. They shape things so children can grow up trusting the environment and the people around them. For many people who land in jail, trust is a very big issue. They grew up in environments that were unpredictable, chaotic, and perhaps abusive. They can still learn to develop trust, but when the home life is unstable or filled with drugs and violence, all those bad things distract their attention and take up their energy. By the time they get to school, they're on survival mode at home, and school just isn't a big motivator. For a child to do well at school, things have to go well at home. When things are out of whack at home, the result is not so good. They don't get along with others, and in their minds, school isn't the pathway to a better life, which leads to suspension and expulsion. The process just feeds people into our system later on. Quality pre-k can give children the limits and stability they need but that can be lacking at home. If they have other people around them to pick up the slack and provide direction, that is their lifeline to learning how to trust and to concentrating on

learning instead of just surviving. That foundation early on helps them as they move along. If they don't have that foundation, it's harder to build later in life, or it's being built in a prison situation. If that can be prevented, it's much better for them, and much better for society. It's a good investment if you can provide that foundation. I'm working on the other end of things, and believe me, I don't need more customers.

When the home life is unstable or filled with drugs and violence, all those bad things distract their attention and take up their energy.



Stronger parents

The most successful early childhood programs with long-term results—such as the Perry Preschool, CPC and New Jersey's state pre-k—work with parents to teach them how to reinforce positive behaviors and encourage them to routinely read and speak to their children so they are better prepared for success in the years to come.

Parents are their children's first and most important teachers. However, some parents do not have the knowledge or experience necessary to fully support their children's development. High-quality early childhood programs partner with parents to help them improve their children's academic and behavioral outcomes. Pennsylvania's Pre-K Counts and Head Start State Supplemental Assistance programs promote family engagement by developing strategies to support parents' involvement in children's early learning.³²

Quality is Key

Results from New Jersey, North Carolina and Michigan should effectively end the debate on whether high-quality state pre-k efforts can be brought to scale and deliver strong and lasting results. To attain lasting results, programs must be high quality. The Bill and Melinda Gates Foundation describes 15 research-based "essential elements of high-quality pre-k" that move beyond program inputs to examine what actually happens in the classroom, particularly the quality of teacher-child interactions and teacher instruction.³³ The heart of any program is the interaction between the teacher and the child. To be able to deliver an evidence-based curriculum that supports all aspects of children's development: cognitive, physical, social and emotional, teachers must be well-trained and receive quality, ongoing professional development training.

The National Institute for Early Education Research (NIEER) maintains a standards checklist for program features that support quality focusing on teacher credentials and training, class size, teacher-child ratios, learning standards, screening and other services, and program oversight.³⁴ Pennsylvania Pre-K Counts meets 7 of 10 newly-revised, more stringent NIEER key benchmarks for quality, while the Pennsylvania Head Start Supplemental Assistance Program meets 6 of 10.

States Know Early Learning Works

Across the nation, pre-k has received support from both sides of the political aisle. In the 2016-2017 budget year, 30 states—17 with Republican leadership and



Pennsylvania must expand access to pre-k

There are approximately 175,200 children ages 3 and 4 who are eligible for Pennsylvania's publiclyfunded pre-k programs. Of those, approximately 106,200 (61 percent) do not have access to high quality, publicly-funded pre-k.³⁵ They are missing out on the once-in-alifetime opportunity that will provide a solid foundation for future learning as well as the aforementioned benefits that high-quality pre-k is shown to provide. 13 with Democratic leadership—increased funding for pre-k.³⁶

Demonstrated Economic Benefits

A well-respected, independent cost-benefit analysis of nearly 20 different studies of high-quality pre-k programs showed that pre-k can return, on average, a "profit" (economic benefits minus costs) to society of more than \$34,000 for every child served.³⁷ Applying these benefits to the 4.400 children who would be served by **Pre-K Counts and the Head Start State Supplemental Program as Governor Wolf** has proposed for the 2018-2019 state budget, Pennsylvania could realize a return of approximately \$150 million over the lifetime of these children. These economic benefits accrue due largely to reductions in the cost of future crime and increases in participants' future wages, as

Pre-k can return, on average, a "profit" (economic benefits minus costs) to society of more than \$34,000 for every child served.

well as decreases in other costs to society, such as children being held back in school or receiving special education. Other estimates of benefits are much higher. These benefits would accrue for each new cohort of children served by high-quality pre-k. Clearly, pre-k works and more than pays for itself.

Conclusion

As law enforcement leaders, our job is to arrest and put those who commit serious crimes behind bars in Pennsylvania. But we all agree that a better and less expensive way to stop crime going forward is to prevent as many young children as possible from growing up to become involved in crime in the first place.

Pennsylvania's law enforcement officers urge policymakers to invest further in improving the access of our state's pre-k program. If Pennsylvania continues to invest wisely in quality pre-k opportunities for its disadvantaged children, thousands of children can become successful, productive adults, instead of individuals with wasted potential. When we support what works for our disadvantaged children, we put them—and our state—on an improved and safer path. We must continue to invest in what works.

We urge the General Assembly to adopt a final budget for the 2018-2019 fiscal year that includes an additional \$30 million for Pre-K Counts and \$10 million for the Head Start State Supplemental Assistance Program to provide high-quality, publicly funded pre-k to an additional 4,400 at-risk children.

For additional information contact Fight Crime: Invest in Kids Pennsylvania State Director, Bruce Clash, bclash@fightcrime.org, (717) 303-5200.

Endnotes

1 Federal Bureau of Investigation. (2016, September). Crime in the United States 2016. DoJ. https://ucr.fbi.gov/crime-in-the-u.s/2016/crime-in-the-u.s.-2016/topic-pages/property-crime

2 Pennsylvania Department of Correction. (2018). Monthly Population Report. http://www.cor.pa.gov/About%20Us/ Statistics/Documents/Monthly%20Population%20Reports/Mtpop1801.pdf

3 Kyckelhahn, T. (2015, February 26). Justice expenditure and employment extracts, 2015- preliminary. NCJ 248628. Table 4. U. S. Department of Justice, Bureau of Justice Statistics. http://www.bjs.gov/index.cfm?ty=pbdetail&iid=5239

4 Department of Education. (2016, July). State and Local Expenditures on Corrections and Education. https://www2.ed. gov/rschstat/eval/other/expenditures-corrections-education/brief.pdf

5 The Vera Institute. (2017, May). The Price of Prisons: Examining State Spending Trends 2010-2015. https://www.vera.org/publications/price-of-prisons-2015-state-spending-trends

6 Start Class and National Center for Education Statistics. (2016, January). Pennsylvania Public Schools Expenditure per Pupil. http://public-schools.startclass.com/stories/13047/k-12-spending-per-student-state#45-Pennsylvania

7 Pennsylvania Department of Education. (2018). Pennsylvania Pre-K Counts Statute, Guidelines and Regulations. http://www.pakeys.org/wp-content/uploads/2018/02/ADA_2018PKC-Regulations-and-Guidance.pdf

8 Ewert, S. and Wildhagen, T. (2011, April). Educational Characteristics of Prisoners: Data from the ACES Working Paper. U.S. Census Bureau. https://www.census.gov/content/dam/Census/library/working-papers/2011/demo/ewert-wildhagenprisoner-education-4-6-11.pdf

9 Pennsylvania Department of Corrections. (2017, December 31). Inmate Statistics http://www.cor.pa.gov/About%20Us/ Statistics/Documents/Budget%20Documents/2017%20Inmate%20Profile.pdf

10 Operation Restart. (n. d.) Re-engaging high school dropouts as a growth strategy for Pennsylvania. http://www.papartnerships.org/reports/re-engaging/re-engaging_hs_dropouts.pdf

11 See #9.

12 Harvard Center on the Developing Child (n.d.) Five numbers to remember about early childhood development. http:// developingchild.harvard.edu/resources/five-numbers-to-remember-about-early-childhood-development/

13 Hart, B., & Risley, T. R. (2004). The early catastrophe. Education Review, 17 (1), 110-118. http://www.aft.org/pdfs/americaneducator/spring2003/TheEarlyCatastrophe.pdf

14 Heckman, J. (2013). Heckman: The economics of human potential. http://www.heckmanequation.org/

15 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), 730-739.

16 Bagnato, S., Salaway, J., & Suen, H. (2009). Pre-K Counts in Pennsylvania for Youngsters' Early School Success: Authentic Outcomes for an Innovative Prevention and Promotion Initiative. http://www.heinz.org/UserFiles/Library/ SPECS%20for%20PKC%202009%20Final%20Research%20Report%20113009.pdf

17 Weiland, C., & Yoshikawa, H. (2013). Impacts of a prekindergarten program on children's mathematics, language, literacy, executive function and emotional skills. Child Development. DOI: 10.1111/cdev.12099

18 The results are 23% more questions answered correctly on a literacy test for Arkansas and West Virginia, and 24% more for New Mexico. Hustedt, J.T., Barnett, W.S., Jung, K., & Thomas, J. (January 2007). The effects of the Arkansas Better Chance Program on young children's school readiness. National Institute for Early Education Research; Lamy, C., Barnett, W.S., & Jung, K. (December 2005). The effects of West Virginia's Early Education Program on young children's school readiness. National Institute for Early Education Program on young children's school readiness. National Institute for Early Education Research; Hustedt, J.T., Barnett, W.S., Jung, K., & Goetze, L. (November 2009). The New Mexico PreK Evaluation: Results from the initial four years of a new state pre-k initiative. National Institute for Early Education Research.

19 Michigan Great Start Readiness Program evaluation 2012: High school graduation and grade retention findings. http://bridgemi.com/wp-content/uploads/2012/06/GSRP-evaluation-may-21-12.pdf

20 Barnett, W. S., Jung, K., Youn, M., & Frede, E. C. (2013, March 20). Abbott Pre-K Program longitudinal effects study: Fifth grade follow-up. New Brunswick, NJ: National Institute for Early Education Research, Rutgers-The State University of New Jersey. http://nieer.org/sites/nieer/files/APPLES%205th%20Grade.pdf

21 Dodge, K. A., Bai, Y., Ladd, H. F. and Muschkin, C. G. (2016), Impact of North Carolina's Early Childhood Programs and Policies on Educational Outcomes in Elementary School. Child Dev. doi:10.1111/cdev.12645

22 Barnett, W. S., Jung, K., Youn, M., & Frede, E. C. (2013, March 20). Abbott Pre-K Program longitudinal effects study: Fifth grade follow-up. New Brunswick, NJ: National Institute for Early Education Research, Rutgers-The State University of New Jersey. http://nieer.org/sites/nieer/files/APPLES%205th%20Grade.pdf

23 Reynolds, A. J., Temple, J. A., Robertson, D. L., & Mann, E. A. (2001, May 9). 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, 2339-2346.

24 Michigan Great Start Readiness Program evaluation 2012: High school graduation and grade retention findings. http://bridgemi.com/wp-content/uploads/2012/06/GSRP-evaluation-may-21-12.pdf

25 Schweinhart, L.J., Montie, J., Xiang, Z., Barnett, W.S., Belfield, C.R., & Nores, M. (2005). Lifetime effects: The High/ Scope Perry Pre-K study through age 40. Ypsilanti, MI: High/Scope Press

26 U. S. Department of Education, National Center for Education Statistics (2017). Public high school 4-year adjusted cohort graduation rate (ACGR), by race/ethnicity and selected demographic characteristics for the United States, the 50 states, and the District of Columbia: School year 2015-16. https://nces.ed.gov/ccd/tables/ACGR_RE_and_ characteristics_2015-16.asp

27 Reynolds, A. J., Temple, J., 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, 2339-2380.

28 Smith, A. (September 2015). The Long-Run Effects of Universal Pre-K on Criminal Activity. U.S. Military Academy, West Point.

29 Schweinhart, L. J., Barnes, H. V., & Weikart, D. P. (1993). Significant benefits: The High/Scope Perry Pre-K study through age 27. Ypsilanti, MI: High/Scope Press.

30 Reynolds, A. (2007). Paths of influence from pre-k intervention to adult well-being: Age 24 findings from the Chicago Longitudinal Study. Society for Research in Child Development, March 31, 2007, Boston, MA.

31 Schweinhart, L.J., Montie, J., Xiang, Z., Barnett, W.S., Belfield, C.R., & Nores, M. (2005). Lifetime effects: The High/ Scope Perry Pre-K study through age 40. Ypsilanti, MI: High/Scope Press.

32 Pennsylvania Department of Education. (2016, September). Pennsylvania Pre-K Counts/Head Start Report on Program Operations. https://www.pakeys.org/uploadedContent/Docs/Early%20Learning%20Programs/Pre-K%20Counts/Pre%20 K%20Counts%20Report%202015-16.pdf

33 Minervino, J. (2014, September). Lessons from research and the classroom: Implementing high-quality pre-k that makes a difference for young children. Seattle, WA: Bill & Melinda Gates Foundation. https://docs.gatesfoundation.org/ documents/Lessons%20from%20Research%20and%20the%20Classroom_September%202014.pdf

34 Barnett, W. S., Freidman-Krauss, A.H., Weisenfeld, G.G., Horowitz, M., Kasmin, R., & Squires, J.H. (2017). The state of preschool 2016 state preschool yearbook. New Brunswick, NJ: Rutgers Graduate School of Education, National Institute for Early Education Research. http://nieer.org/wp-content/uploads/2017/05/Pennsylvania_YB16.pdf

35 Pennsylvania Partnerships for Children (2017). Pre-K works, so why not PA? http://www.papartnerships.org/publication_ files/why-not-pa-report.pdf

36 Education Commission of the States (2017, January). State Pre-K Funding for 2016-17 Fiscal Year: Trends and opportunities. http://www.ecs.org/state-pre-k-funding-2016-17-fiscal-year-trends-and-opportunities/

37 Washington State Institute for Public Policy (2017, December). Benefit-cost summary State and district early education programs. Olympia, WA: Author. http://www.wsipp.wa.gov/BenefitCost/Program/270

Fight Crime: Invest in Kids

Thousands of police chiefs, sheriffs, prosecutors and violence survivors protecting public safety by promoting solutions that steer kids away from crime.

Council for a Strong America is a national, bipartisan nonprofit that unites five organizations comprised of law enforcement leaders, retired admirals and generals, business executives, pastors, and prominent coaches and athletes who promote solutions that ensure our next generation of Americans will be citizen-ready.

105 N. Front Street • Suite 305 • Harrisburg, PA 17101 • 717-233-1520

Fight Crime: Invest in Kids is a partner in





StrongNation.org/fightcrime