



CALCULATING THE FULL PRICE TAG FOR YOUTH INCARCERATION

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Justice Policy Institute is a national nonprofit organization dedicated to reducing the use of incarceration and the justice system and promoting policies that improve the well-being of all people and communities

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PART I: INTRODUCTION

THE COSTS WE BEAR FOR OVERRELIANCE ON YOUTH CONFINEMENT

“How should a community hold juvenile offenders accountable for their offending behavior while ensuring the public safety? As a growing body of evidence underscores the detrimental effects that system involvement and confinement can have on healthy adolescent development, many jurisdictions are examining and developing ways to divert nonserious offenders from entering the system and to improve conditions of confinement for youth in the system.”

—Robert Listenbee, Administrator, Office of Juvenile Justice and Delinquency Prevention, U.S. Department of Justice (2014).¹

For nearly a decade and a half, the vast majority of states have made substantial progress in reducing reliance on incarceration to address behavior by the nation’s youth. Levels and rates of commitment of adjudicated youth have dropped: Between 2001 and 2011, there has been a 45 percent decline in the rate of youth committed and in residential placement.²

Temporary confinement of youth does play a role in the overall public safety system. Government uses incarceration both for adults and youth in incapacitation, deterrence, and retribution. That said, as highlighted by the National Research Council of the National Academies in their comprehensive review of juvenile justice policy, a “developmental model

of juvenile justice rejects many of the punitive law reforms of the late 20th century as often excessively harsh and therefore unfair to young offenders and as likely to increase rather than decrease the threat to public safety.... Indeed, the evidence suggests incarceration likely increased the risk of recidivism for many youth.”³

There are indicators that temporary confinement⁴ continues to be overused. For example, 62 percent of the committed youth population in 2011 was adjudicated for a nonviolent offense.⁵ At the same time, incarceration continues to have a concentrated impact on youth of color.

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The issue isn't whether some young people will be confined. Some will. The question raised by the National Research Council of the National Academies is whether current overuse of incarceration is inefficient and causes harm, and whether there are other more effective ways to hold young people accountable, treat them fairly, prevent reoffending, and help them transition to adulthood.

Policies that needlessly confine youth have an immediate cost for taxpayers and our communities: across the states, taxpayers foot the bill for youth confinement to the tune of hundreds of dollars per day and hundreds of thousands of dollars per year. In a survey of state expenditures on confinement in 46 states, the Justice Policy Institute (JPI) found that the average costs of the most expensive confinement option for a young person was \$407.58 per day, \$36,682 per three months, \$73,364 per six months, and \$148,767 per year.

The direct costs paid for confinement per day, or per year, are just the tip of the iceberg of what young people, their families, their communities, and all of us pay for these policy choices. Youth confinement imposes heavy burdens on family members, leaves confined youth vulnerable to assaults, exposes our communities to higher

Each year, the U.S. incurs an estimated \$8-\$21 billion in long-term costs for the confinement of young people.

	Low end of range	High end of range
	<i>Billions of 2011 Dollars</i>	
Cost of recidivism	\$0	\$7.03
Lost future earnings of confined youth	\$4.07	\$7.60
Lost future government tax revenue	\$2.07	\$3.87
Additional Medicare and Medicaid spending	\$0.86	\$1.50
Cost of sexual assault on confined youth	\$0.90	\$1.37
Total, all costs	\$7.90	\$21.47

We cannot afford the financial or the societal costs of unnecessary juvenile incarceration. By shifting our focus—and our investments—to the front end of the system, we will save not only money, but also lives.

—Governor Rick Scott, Florida (R)

Governor's OpEds, January 2012,
www.flgov.com/2012/01/03/reform-underway-at-florida%2099s-juvenile-justice-agency/

rates of recidivism, and impedes young people's transition to adulthood.

In addition to documenting the state-by-state costs to incarcerate youth, this report shows that the impact of confining youth is not limited just to the economic or fiscal costs of confinement. With this information, policymakers can make more responsible choices. Using new methodologies advanced by academics and researchers in the field, this report provides an estimate of the long-term costs of unnecessarily or inappropriately confining young people outside their homes.

The estimate includes the cost to people harmed by crime and to taxpayers because of the impact of confinement on continuing recidivism when it might have otherwise ceased, the cost of lost educational opportunities and its implications, and the cost of sexual assault of youth while confined.

In total, the long-term costs of young people's confinement may add up to an additional \$8 billion to \$21 billion each year, beyond the hundreds of thousands of dollars states and localities spend to

We could send [a juvenile justice youth] to Harvard for [what we pay for incarceration], and we don't get very good outcomes.

— Gladys Carrion, Director, New York State Office of Children and Family Services ,

Delen Goldberg, "Auburn Residential Center has 22 beds, 25 staff members, \$1.8 million budget, 2 residents (and the story is similar at juvenile detention centers across the state), *Syracuse Post-Standard*, March 9, 2008.

confine young people.⁶ The range in the estimates reflects the deep need for more scholarship in this area to help improve policymakers' ability to know more precisely the negative impact of confinement on young people's lives and on our communities.

Absent policy changes and other trends that have driven down confinement, these estimated long-term costs could have been even higher. In the past decade (2001 to 2011), there has been a 45 percent decrease in the number of committed youth confined nationwide. Had the decline in youth confinement in the past decade never occurred, rather than long-term costs in the range of \$8 billion to \$21 billion, the estimated costs for victims and taxpayers as a result of the confinement of young people might have been in the range of \$14 billion to \$39 billion.

These escalating costs have a more concentrated impact among communities of color: nationally, African Americans and Hispanics/Latinos make up approximately one-third of the population, but they represent two-thirds or more of the young people confined.⁷ Where exposure to confinement limits a young person's potential, these costs have a much bigger impact among communities of color.

This accounting of the high real-world and estimated costs is intended to foster critical conversations for policymakers, taxpayers, and others who care about the impact of the choice to incarcerate youth. As policymakers look at the use of confinement in their jurisdiction, they

should ask if there are ways to reduce the length-of-stay of young people in the system and whether there are appropriate alternatives to incarceration to hold youth accountable and protect public safety.

Key recommendations JPI offers to policymakers include:

- 1) *Reduce spending on confinement and shift funding to community-based options for youth.* There are circumstances when a young person may need to be placed out-of-the-home and confined. *That said, incarceration should be the last resort, not the first resort for every juvenile justice system in the country.* Policymakers should shift public dollars from the most restrictive, most expensive options to community-based options for treatment and supervision that keep young people at home or close to home.
- 2) *Invest appropriately in juvenile justice, particularly in the right parts of the youth-serving system.* Given the huge costs associated with the system incarcerates a youth, policymakers need to invest more in alternatives to incarceration, diversion, and primary prevention, and they should be investing earlier on in interventions that keep youth out of the justice system altogether. *The*

No convincing evidence exists that confinement of juvenile offenders beyond the time needed to deliver intensive services reduces the likelihood of re-offending.

—Reforming Juvenile Justice: A Developmental Approach. The National Research Council of the National Academies.

Richard J. Bonnie and others, eds. Reforming Juvenile Justice: A Developmental Approach (Washington, DC: The National Academies Press, 2013), 1-14, quoted in National Research Council, Implementing Juvenile Justice Reform: The Federal Role (Washington, DC: The National Academies Press, 2014), 17.

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adolescent development research suggests that young people engage in delinquency because it is normative, and we need to provide the right services to the right young people at the right time.

- 3) ***Address all the barriers that exist to reducing reliance on confinement in states and localities.*** There are barriers to reducing the confinement of young people. In every state, policymakers should identify barriers to reducing needless reliance on confinement, consistent with the evidence, best practices, and what can be learned from other jurisdictions.
- 4) ***Improve system capacity to measure recidivism and track positive outcomes.*** Drawing upon a series of emerging new practices, policymakers need to explore ways to develop a standard definition of recidivism that would allow for consistency from jurisdiction to jurisdiction.
- 5) ***Develop consistent standards for measuring per diem and confinement costs from place to place.*** Policymakers need to explore ways to develop a standard definition of per diem and annual costs that would allow for consistency from place to place.
- 6) ***Expand executive and legislative capacity to develop cost-benefit analysis.*** Policymakers should consider expanding the mandate of their legislative and executive research arms to include cost-benefit analysis in their review of juvenile justice policy. The expansion should seek to include the impact of choosing policies that increase the likelihood that young people will succeed in schooling and work opportunities.
- 7) ***Expand research opportunities to study the long-term costs of confinement and***

juvenile justice system contact. There have only been a few attempts to build a comprehensive picture of the long-term costs of needlessly and inappropriately relying on youth incarceration and out-of-home placement. More work needs to be done to advance the field and to provide resources for the kind of research that could transform the field.

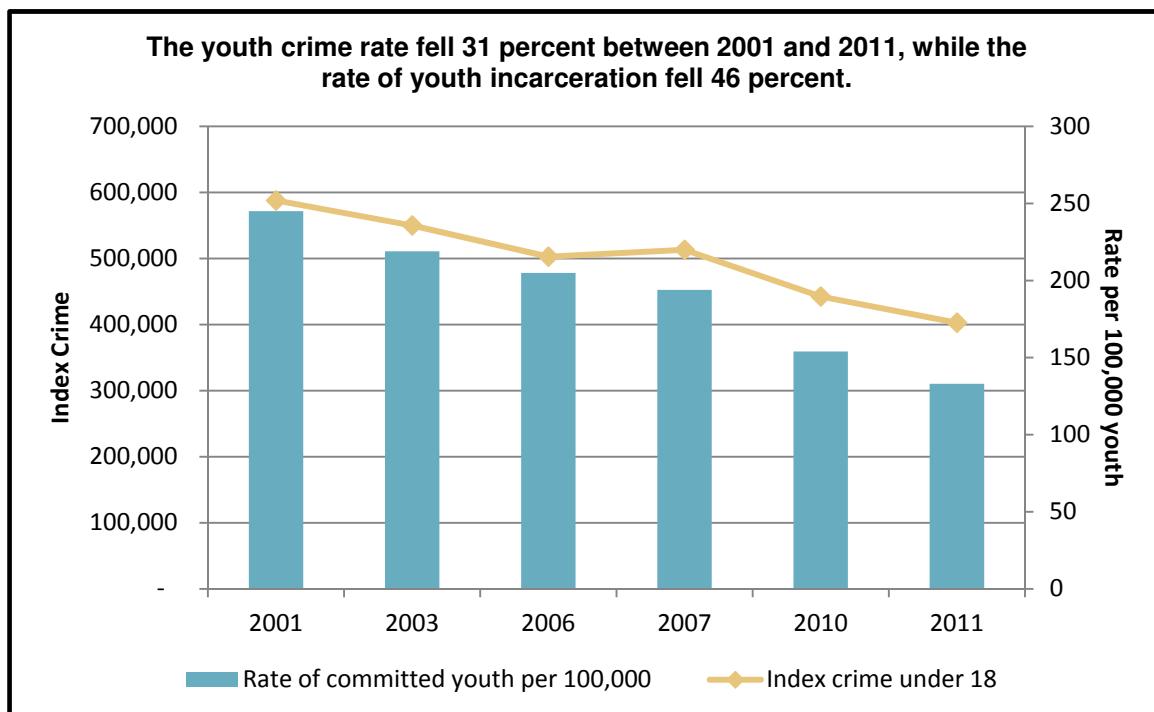
PROGRESS IN REDUCING CONFINEMENT, WITHOUT COMPROMISING PUBLIC SAFETY

The United States has the world's largest confined population of adults and youth and the highest incarceration rate in the world. Any success this country has had in reducing the use of incarceration and confinement is a notable trend.

Many states have made substantial progress in reducing reliance on youth incarceration in the past 15 years. Between 2001 and 2011, the *rate* of youth committed and in residential placement declined 46 percent. This decline in youth confinement occurred during a time when juvenile crime rates also fell.

This "juvenile deincarceration" trend has coincided with a decrease in crime and with policy changes in juvenile justice.

Some states have revamped their approach to juvenile justice by accounting for the unique characteristics of adolescents that both help to explain delinquency and influence life outcomes. Many policymakers now agree that confining youth does more harm than good and should be avoided except when absolutely necessary. Research also now shows that confining youth interrupts normal adolescent



Arrests source: Puzzanchera, C. and Kang, W. (2014). "Easy Access to FBI Arrest Statistics 1994-2011." Online. Available: www.ojjdp.gov/ojstatbb/ezaucr/. **Residential placement source:** Sickmund, M., Sladky, T.J., Kang, W., and Puzzanchera, C. (2013). "Easy Access to the Census of Juveniles in Residential Placement." Online. Available: <http://www.ojjdp.gov/ojstatbb/ezacjrp/>. Note: Index crimes include arrests of youth under 18. Youth in residential placement include youth under 21.

development and can contribute to recidivism when a young person might have naturally aged out of delinquency. The National Research Council of the National Academies, for example, made a strong case that incarcerating youth impedes youthful psychological and brain development, and the Council called on policymakers to adopt a developmental approach that relies on alternatives to incarceration.⁸

Options that keep youth at home and engaged in school and family life are documented to produce better outcomes both for youth and public safety.⁹ Researchers have identified numerous intervention and prevention strategies that reduce delinquent behavior, foster positive youth development skills, and keep costs down. Coming after an era when policymakers advanced a notion that "nothing works" to reduce young people's delinquency, the emergence of evidence-based programs—interventions with young people that have been

shown to work in multiple places and by scientific research methods—helped persuade elected officials that they could invest more in a variety of responses to delinquency.

Evidence-based programs have also been shown to have a higher rate of return on investments compared to incarceration. The Washington State Institute for Public Policy, a pioneer in the use of cost-benefit analyses to weigh the return of youth confinement compared to alternative treatments in community-based settings, recently conducted a meta-analysis of dozens of state-based studies.¹⁰ Net benefits to investing in alternative treatments were defined as cost savings to taxpayers and people harmed by increased levels of recidivism.¹¹ Today, only about 5 percent of eligible youth participate in evidence-based programs nationwide.¹²

Evidence-based practices alone aren't enough to reform the juvenile justice system. Along with evidence-based programs, a variety of

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community-based approaches to address delinquency exist that are based on research and evidence-based principles. Drawing upon a series of recent briefs by the John Jay College of Criminal Justice Research and Evaluation Center on the public safety and permanency outcomes of thousands of youth served by community-based programs, a report by Youth Advocate Programs found that more than eight out of 10 youth in an alternative-to-incarceration program remained arrest free, and nine out of 10 were at home after completing their community-based program, at a fraction of what it would cost to confine these youth.¹³

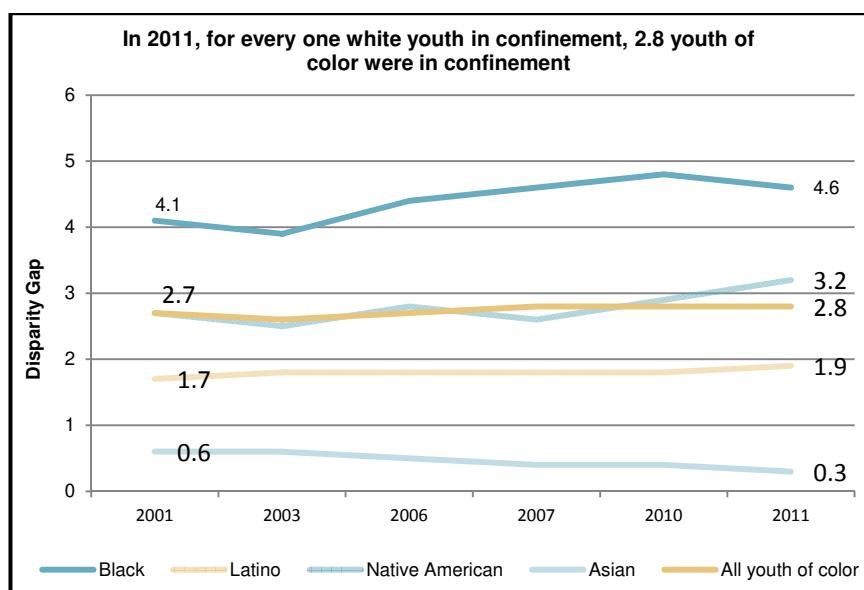
The findings about non-incarceration responses to juvenile delinquency, combined with fiscal pressures and mounting evidence of the developmental needs of youth, have encouraged policy reform that seeks to keep youth closer to their home communities. States as diverse as Alabama, California, Georgia, Illinois, Ohio, New York, and Texas have all used fiscal incentives—the provision of state funds to local government—to support less costly, more effective options to keep young people out of a state confined setting.

Every one of these states has seen significant reductions in the number of youth confined without a negative impact on public safety.¹⁴

In a country that leads the world in the use of incarceration, the gains made in reducing youth confinement are significant; they mean that we have the start of a road map—a concrete example of how we might reduce the country's reliance on incarceration for young people and adults.

But we have a long, long way to go before we reduce our reliance on out-of-home placement for youth. As of 2011, there were still 61,423 young people that on a single day were either detained pretrial, placed out of their home, or confined in a residential placement.

The reductions of youth confined overall also mask how African American youth are confined at a rate nearly five times that of white youth, Hispanic/Latino young people are confined at nearly twice the rate of white young people, and American Indian young people are confined at more than three times the rate of white youth. Research from the Burns Institute and the National Council on Crime and Delinquency recently showed that at the local level, *while there are fewer youth of color and white youth being confined overall, the disparities between rates of confinement are growing.*¹⁵



Note: This graph shows the gap between white youth and youth of color. White youth are confined at a ratio of one to one and do not appear on this graph.

Source: The W. Haywood Burns Institute, "Unbalanced Juvenile Justice, Disparity Gap Incarceration Rate, Youth of Color vs. White," accessed September 5, 2014 <http://data.burnsinstitute.org/#comparison=3&placement=3&races=1,2,3,4,5,6&offenses=5,2,8,1,9,11,10&year=2011&view=graph>

While the juvenile justice field is certainly making progress in reducing confinement, for many young people—particularly young people of color—policy choices need to do more to promote the most effective ways to hold youth accountable and help young people successfully transition to adulthood.

PART II: THE TIP OF THE ICEBERG: WHAT TAXPAYERS PAY TO INCARCERATE YOUTH

“Longer stays in juvenile institutions do not reduce recidivism, and some youth who had the lowest offending levels reported committing more crimes after being incarcerated.”

—Edward P. Mulvey, Ph.D., Highlights From
*Pathways to Desistance: A Longitudinal Study of
Serious Adolescent Offenders.* U.S. Department
of Justice, Office of Justice Programs, Office of
Juvenile Justice and Delinquency Prevention
(2014).

Right now, taxpayers will spend hundreds of dollars a day—in some places, hundreds of thousands of dollars a year—to confine a young person. Because every state (and local) juvenile justice system is different, it is a challenge to come up with a consistent way to describe these direct costs from state to state. These costs also change over time.

To advance the understanding of the direct costs of confinement, JPI collected information from 46 states and jurisdictions in the summer and fall of 2014 on what they said they pay on a per-day or per-year basis to confine a young person in their most expensive confinement option. These 46 states or jurisdictions represent 93 percent of the population of the United States in 2013¹⁶ and 86 percent of committed youth in out-of-home placements in 2011.¹⁷

The information contained in the following table represents fiscal information provided directly from state juvenile corrections departments, agency annual reports, or legislative documents. When a state or juvenile correctional system provided more than one cost of confinement, the most expensive one is listed, reflecting the reality that it can cost hundreds of dollars a day, and hundreds of thousands of dollars a year, when systems fail to reduce the chances that a young person will end up confined. Costs of other types of placements, which range from large, secure facilities to smaller group homes are included in the endnotes, when available, along with details about each cost figure in the endnotes. To account for varying lengths of stay across different jurisdictions and recent research that indicates that longer stays in secure confinement do not reduce recidivism,¹⁸ JPI calculated the estimated cost of placing a young person out of his or her home for three months,

six months, and a full year.¹⁹ These time ranges —per day, 90 days (three months), 180 days (six months), and a year (365 days)— vary to reflect the growing consensus from research and operations of juvenile justice systems that acknowledges that in the rare instances where secure care is appropriate, confinement should be for the shortest period of time possible to reduce harm to the youth and save money.

It's outrageous how much this country spends to lock up a single child for a non-violent offense.... On average the state of Connecticut spends \$134,000 per year to incarcerate just one child. When we lock up a child, not only are we wasting millions of taxpayer dollars, we're setting him or her up for failure in the long run. The system as it exists now is unfair to everyone involved and needs to be changed.

—Senator Christopher Murphy (D), Connecticut.

Christopher Murphy, United States senator for Connecticut, "To Help Reduce Youth Incarceration, Murphy, Booker Introduce Bill to Encourage State Policies That Lead to Better Youth Outcomes," June 2014.
www.murphy.senate.gov/newsroom/press-releases/to-help-reduce-youth-incarceration-murphy-booker-introduce-bill-to-encourage-state-policies-that-lead-to-better-youth-outcomes

Costs of confinement: Forty-six states and jurisdictions reporting

State	Per day	Per 3 months	Per 6 months	Per year
Louisiana ²⁰	\$127.84	\$11,506	\$23,011	\$46,662
Florida ²¹	\$151.80	\$13,662	\$27,324	\$55,407
Alabama ²²	\$159.00	\$14,310	\$28,620	\$58,035
South Dakota ²³	\$207.43	\$18,669	\$37,337	\$75,712
Indiana ²⁴	\$212.13	\$19,092	\$38,183	\$77,427
Idaho ²⁵	\$213.57	\$19,221	\$38,443	\$77,953
Utah ²⁶	\$214.12	\$19,271	\$38,542	\$78,154
Missouri ²⁷	\$244.30	\$21,987	\$43,974	\$89,170
Georgia ²⁸	\$249.66	\$22,469	\$44,939	\$91,126
Kansas ²⁹	\$250.50	\$22,545	\$45,090	\$91,433
Wyoming ³⁰	\$261.00	\$23,490	\$46,980	\$95,265
Washington ³¹	\$262.48	\$23,623	\$47,246	\$95,805
Oregon ³²	\$263.00	\$23,670	\$47,340	\$95,995
Kentucky ³³	\$276.00	\$24,840	\$49,680	\$100,740
Minnesota ³⁴	\$287.23	\$25,851	\$51,701	\$104,839
Colorado ³⁵	\$287.63	\$25,887	\$51,773	\$104,985
Arizona ³⁶	\$290.68	\$26,161	\$52,322	\$106,098
Wisconsin ³⁷	\$291.00	\$26,190	\$52,380	\$106,215
Tennessee ³⁸	\$301.29	\$27,116	\$54,232	\$109,971
Illinois ³⁹	\$304.11	\$27,370	\$54,740	\$111,000
Arkansas ⁴⁰	\$317.08	\$28,537	\$57,074	\$115,734
North Dakota ⁴¹	\$342.58	\$30,832	\$61,664	\$125,042
Nebraska ⁴²	\$347.55	\$31,280	\$62,559	\$126,856
Texas ⁴³	\$366.88	\$33,019	\$66,038	\$133,911
West Virginia ⁴⁴	\$387.58	\$34,882	\$69,764	\$141,467
Mississippi ⁴⁵	\$420.00	\$37,800	\$75,600	\$153,300
South Carolina ⁴⁶	\$426.00	\$38,340	\$76,680	\$155,490
North Carolina ⁴⁷	\$437.67	\$39,390	\$78,781	\$159,750
Massachusetts ⁴⁸	\$473.49	\$42,614	\$85,228	\$172,824
Michigan ⁴⁹	\$475.22	\$42,770	\$85,540	\$173,455
Montana ⁵⁰	\$481.67	\$43,350	\$86,701	\$175,810
New Mexico ⁵¹	\$487.87	\$43,908	\$87,817	\$178,073
Rhode Island ⁵²	\$510.63	\$45,957	\$91,913	\$186,380
Nevada ⁵³	\$535.36	\$48,182	\$96,365	\$195,406
New Jersey ⁵⁴	\$537.35	\$48,362	\$96,723	\$196,133
Hawaii ⁵⁵	\$546.08	\$49,147	\$98,294	\$199,319
Ohio ⁵⁶	\$554.80	\$49,932	\$99,864	\$202,502
California ⁵⁷	\$570.79	\$51,371	\$102,742	\$208,338
New Hampshire ⁵⁸	\$588.00	\$52,920	\$105,840	\$214,620
Connecticut ⁵⁹	\$607.41	\$54,667	\$109,334	\$221,705
Vermont ⁶⁰	\$615.00	\$55,350	\$110,700	\$224,475
Maine ⁶¹	\$616.33	\$55,470	\$110,939	\$224,960
Virginia ⁶²	\$712.38	\$64,114	\$128,228	\$260,019
District of Columbia ⁶³	\$761.00	\$68,490	\$136,980	\$277,765
Maryland ⁶⁴	\$809.00	\$72,810	\$145,620	\$295,285
New York ⁶⁵	\$966.20	\$86,958	\$173,916	\$352,663
Average	\$407.58	\$36,682	\$73,364	\$148,767

Note: States reported per-day or annual costs. Three-month and six-month calculations are estimated by multiplying per-day costs by 90 and 180 days or dividing the annual costs by these units. The costs reflect the highest cost confinement option provided to the researchers by states in the summer and fall of 2014, and each endnote in the full report lists other cost options that were provided to researchers as part of the request. This chart will be updated to reflect new information and posted at www.justicepolicy.org.

The more [time] we gave them, it didn't make any difference, there was no effect, [on recidivism].

—Thomas Loughran, of the University of Maryland's Department of Criminology and Criminal Justice, contributing researcher to the Pathways to Distance study

Maggie Lee, "Study: Youth Offenses, Sentences, Predict Little about Recidivism (September 21, 2012). Juvenile Justice Information Exchange, <http://jjie.org/study-youth-offenses-sentences-predict-little-about-recidivism/>

For these 46 states or jurisdictions that reported to JPI, the average costs of the most expensive confinement option for a young person out of his or her home are \$407.58 per day, \$36,682 per three months, \$73,364 per six months, and \$148,767 per year. Forty-six states reported costs that were included to create the average. Thirty three of 46 states and jurisdictions reported spending \$100,000 or more on the most expensive confinement option for a young person.

The reasons states incur different per diem and annual costs are varied, and they reflect various opportunities, challenges, and choices in how juvenile justice systems are designed. The reasons for these varied costs include:

- **Treatment and rehabilitation services:** States and jurisdictions that provide diverse and intensive services may spend more per youth than states that do not. For example, Washington, D.C., is a place that has been recognized for delivering a variety of schooling, treatment, employment training, and life-building skills in its small-unit facilities.⁶⁶
- **Privatization or lack of unions:** States that choose to send youth to private facilities or prohibit unionization tend to have lower operating costs, especially related to staffing.

- **Economies of scale or capacity utilization:** States that utilize a few, full facilities tend to spend less per bed than states that are operating many sparsely populated facilities.

Depending on the state and the kind of facility or placement, a number of different funding streams may pay for these placements. Per-day or per-year expenditures can include a mixture of county dollars, state dollars, and federal dollars—something that is different from state to state.

Regardless of how the costs of confinement are shared, taxpayers pay these direct costs.

COST IN CONTEXT: IS THE PRICE TOO HIGH?

Whether or not taxpayers believe they are spending too much on the confinement of young people is a matter of perspective. Competing values inform policy choices meant to achieve juvenile justice and public safety goals, and the best outcomes for youth given their behavior and limited options.

In some states, the cost of confinement has risen because of a reduction in the number of young people confined or placed out of the home: There are simply fewer youth in the buildings that remain and, as a result, costs per day rose. As New York State saw escalating costs, there were public calls to change policy so that facilities that had a handful of young people in them (but staff and building infrastructure around them) were closed.

In states under consent decrees—where a legal agreement or settlement is used to resolve a lawsuit related to the conditions of confinement—juvenile corrections leaders have worked with advocates to develop educational, treatment, and employment services for the

youth who end up in the deepest end of these systems, and they have worked to make facilities safer than they were. For example, California made efforts to improve the services young people received in the deepest end of the system.

The emerging consensus is that when youth confinement or out-of-home placement occurs, it should involve:⁶⁷

- A treatment-rich environment;
- The shortest length of stay commensurate with the court order, the opinion of professionals, and, increasingly, the family's perspective;
- An aftercare and reentry plan that begins from the day the young person enters the system to ensure successful transition back to the community;
- Making sure the youth is placed as close to the home community as possible; and
- The ability for the young person's family, friends, and community to access them and see them as often as possible.

A juvenile justice system that has these characteristics also requires significant investment and is consistent with an approach that uses out-of-home placement sparingly and *as the last resort and for the least amount of time possible.*

From system to system, policymakers and taxpayers should determine what barriers must be eliminated to place more youth at home.

Key questions policymakers need to ask to help "right-size" the system include:

- 1) **What are the barriers to reducing length of stay?** For example, are there mandatory sentence structures that cause a young

The state's detention centers are a revolving door. It's clear that our current system is putting too many juveniles on a path to becoming career criminals. It's expensive, it's not working, and it's time to change.

—Skaneateles Police Chief Lloyd Perkins, president of the New York State Chiefs Association

William Kates, "Group Says NY Juvenile Justice System Broken, Costs Too Much," Newsday, November 1, 2007.

person to be confined beyond the point where any meaningful change can occur in their life and that does more harm than good? Oregon and Ohio have mandatory minimum sentences that juvenile justice experts have criticized for increasing the length of stay for certain offense categories. If a young person faces a mandatory minimum sentence, rather than a length of stay tailored to the youth's needs, taxpayers are spending hundreds of dollars a day (and potentially hundreds of thousands of dollars a year) and getting no real benefit in terms of helping youth transition to adulthood and promoting public safety. When length of stay can be adjusted, investments can be made in ramped-up aftercare services to help young people transition and in alternatives to incarceration that can hold youth accountable.

- 2) **Is incarceration being used as the first choice rather than the absolute last choice?** For example, do alternatives to incarceration and out-of-home placement exist that can be expanded to keep a young person at home? The funding streams established in Alabama, California, Ohio, New York State and Texas that built a continuum outside of state-run facilities are a starting point, but they only a beginning. How might these funds be expanded, and leveraged to

strengthen services for youth at-home? Community-based programming that can create wraparound services for youth, individualize services based on the unique needs of each youth, engage the family, and connect the youth to neighborhood resources can cost as little as \$75 per day.⁶⁸

- 3) **Are the right investments being made in the right parts of the youth-serving system to avoid bigger costs down the road?** Put another way, is the system making the right investments in diversion and earlier interventions that could help hold young people accountable long before confinement is considered? Researchers have demonstrated that diverting young people from the system early on and providing them with the services and supports that any youth needs to thrive is a more cost-effective investment than confinement. Jurisdictions must establish services that engage youth in positive activities and provide supports for families to ensure that youth will succeed in the community. This includes investing in services for all youth to ensure that they never become involved with the justice system at all and only engaging the justice system as the response of last resort.

While there may be times when confinement is necessary, overly relying on confinement or failing to make the appropriate investments in other parts of the youth-serving system that could help keep a young person at home results in an expensive price tag over the long term.

States are taking steps to answer these questions within their own juvenile justice and public safety systems:

- **Hawaii: Strengthen community supervision and reduce secure confinement.** Facing high costs and poor outcomes from its youth commitment policies, Hawaii enacted House Bill 2490

in 2014, based on the comprehensive recommendations of the Hawaii Juvenile Justice Working Group. The law will reduce secure confinement, strengthen community supervision, and focus resources on practices proven to reduce recidivism. The reforms are projected to cut the number of youth held in the state's secure facility by more than half over the next five years, allowing for reinvestment in proven interventions.

- **Georgia: Reducing out-of-home placements and investing in evidence-based programs.** Following a criminal justice overhaul in 2012, Georgia enacted House Bill 242 in 2013, which included wide-ranging reforms to its juvenile justice system based on recommendations from the Special Council on Criminal Justice Reform for Georgians. The council's provisions of the bill will save an estimated \$85 million over five years and reduce recidivism by focusing out-of-home facilities on serious offenders and investing in evidence-based programs. The bill also streamlines and revises the state code relating to juvenile justice and child welfare, including creating new processes for cases involving children in need of services.
- **Kentucky: Restricting the commitment of lower-level offenders and cutting the duration of out-of-home placements.** Kentucky passed comprehensive juvenile justice legislation in 2014 based on recommendations from a bipartisan, interbranch task force. The law strengthens evidence-based programs while restricting the commitment of lower-level offenders and duration of out-of-home placement. The reforms are expected to reduce the Department of Juvenile Justice's out-of-home population by more than one-third and save Kentucky taxpayers as much as \$24 million over five years—money that can

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be reinvested in needed community programs.⁶⁹

These states asked tough questions about how the juvenile justice system was working, studied their approach, and found that better ways existed to hold youth accountable, help young people transition, and improve efficiency in the public safety system.

Every state, jurisdiction, and stakeholder that plays a role in youth confinement needs to be asking the same questions that were asked in Hawaii, Georgia, and Kentucky, and that are increasingly being asked around the country. Given the research that shows that confinement and placing young people deeper into the system can have a negative impact on a young person's connection to school and work, compromises their safety, and increases the likelihood that they will commit another offense, what changes need to be made to the system?

As will be shown in the following sections, beyond the effect that confinement has on a young person's life, this new research shows that confinement can increase the significant costs all of us end up paying.

PART III:

ESTIMATING THE TOTAL LONG-TERM COSTS OF YOUTH CONFINEMENT

“These findings suggest that if these offenders can be identified early and correctly and provided with prevention and treatment resources early in the life course, their criminal activity may be curtailed. While researchers have studied these offenders in great detail, little attention has been paid to the costs they exert on society.We estimate the present value of saving a 14-year-old high risk juvenile from a life of crime to range from \$2.6 to \$5.3 million.”

—Mark A. Cohen, Professor of Management and Law, Vanderbilt University, and Alex R. Piquero, Ashbel Smith Professor of Criminology, University of Dallas (2009).⁷⁰

In recent years, a number of efforts have been made to quantify the costs associated with choosing certain youth development and youth corrections policies over others. These approaches tend to show that you can get the same outcome, if not a better outcome, by choosing policies that save money and do less harm. These estimates build on the notion that the impact of poor policy choices ratchets up long-term costs, including those associated with lack of economic opportunity, tax revenue, increased reliance on public assistance, and recidivism. For example, researchers Marc A. Cohen and Alex R. Piquero estimate that when you include recidivism and other costs relating to crime, it can cost taxpayers millions of dollars for each high-risk youth who commits another offense.⁷¹

While strong causal inferences can be drawn about the relationship between youth incarceration and negative life outcomes, this remains a topic of discussion, and further empirical research will help inform the conversation.

A recent study by researchers from Columbia University and the City University of New York looking at the lost economic potential of “opportunity youth”—all the young people defined as aged 16-24 who are disconnected from education and work—estimated that the lost economic potential can be as much as \$4.7 trillion dollars for all 6.7 million disconnected youth. In the *Economic Value of Opportunity Youth*,⁷² an estimate of the long-term impact of the opportunity youth population

The economic consequences of opportunity youth are enormous....The full lifetime burden amounts to \$4.7 trillion across the cohort of opportunity youth in 2011. These numbers show how much is being squandered by failing to adequately invest in future generations.

— Clive Belfield, Professor of Economics, Queens College, City University of New York; Henry M. Levin, William H Kilpatrick Professor of Economics & Education , Teachers College, Columbia University; Rachel Rosen, Teachers College, Columbia University—research commissioned by the White House Council for Community Solutions

Clive R. Belfield, Henry M. Levin, and Rachel Rosen, *The Economic Value of Opportunity Youth* (Washington, DC: Corporation for National and Community Service and the White House Council for Community Solutions, 2012). <http://files.eric.ed.gov/fulltext/ED528650.pdf>.

commissioned by the White House Counsel for Community Solutions, the researchers found:

- **Less employment and less tax revenue:** Opportunity youth tend to work sporadically at low-paying jobs, annually earning \$4,100 and paying \$750 in taxes. By contrast, their peers earn \$13,900 and pay \$2,430 in taxes yearly;
- **Increased public assistance:** Annually, an opportunity youth receives at least \$360 more in housing assistance, food stamps, and Women, Infants and Children Program (WIC) support than a peer. He or she also disproportionately accesses federal programs such as job assistance and funding for homeless shelters. Such young people are more likely to be without health insurance and to face chronic health challenges. Medicaid covers an estimated 28 percent of these youth; the cost of their coverage is approximately \$16 billion.

- **Increased crime costs:** Although they make up only 17.3 percent of 16- to 24-year-olds, opportunity youth account for 63 percent of all crimes committed by this age group. Researchers estimate that such crime costs taxpayers \$188 billion annually.

We know that the negative consequences that come from unnecessarily or inappropriately confining youth go far beyond immediate, short-term financial costs to include:

- ***The young person:*** Inappropriate or unnecessary confinement can have lifelong consequences for a young person's mental health, ability to complete school, get a job and earn income, and lead a productive life. Confinement can also make a young person's mental health challenges worse, and increases the chances that a young person may be harmed by staff or others while confined.
- ***The young person's family:*** Families of confined youth bear a unique burden when their children are away from home. They experience the emotional pain of the separation from their children. The cost of long-distance travel and lodging are financial burdens on families and prevents families from being fully involved in their child's life—all of which can be a barrier to a young person's successful transition back to the community.⁷³
- ***The young person's community:*** Most young people will age out of delinquency, either with the help of an intervention from the system early on or because the youth will simply mature and age out on his or her own (absent the negative consequences of formal system involvement).⁷⁴ Needlessly confining youth may increase the chances that a young person engages in delinquent behavior and perhaps more serious behavior. Higher recidivism means that

more people are likely to experience crime, which results in tangible, out-of-pocket expenses, such as medical bills, lost earnings due to lost work time during convalescence, and property losses.

- **The taxpayer:** Taxpayers spend hundreds of dollars a day, and in some places hundreds of thousands of dollars a year, on the confinement of young people. In addition, taxpayers incur substantial expenses associated with processing young people through the juvenile justice system, lost tax revenues, and additional

public assistance spending associated with lost earning capacity of young people who do not successfully transition to adulthood.

In an effort to contribute to the growing body of work showing the exorbitant financial costs of confining young people, and following the lead of researchers such as Marc A. Cohen and Alex R. Piquero, what follows is an estimate of the larger costs of confinement, applying several frameworks to demonstrate the scale of the larger costs.

“YOUTH INCARCERATION” AND THE ESTIMATE: INCARCERATION, COMMITMENT, AND “THE FLOW”

Incarcerated youth (61,423 in 2011): Youth who were reported to be in pretrial detention or committed to a confined space in 2011. This figure is a one-day snapshot of the number of youth detained or committed to a confined space in 2011.

Committed and confined youth (41,934 in 2011): Youth who are placed in a facility as part of a court-ordered disposition. This figure is a one-day snapshot of the number of youth committed to a confined space in 2011. The research shows that pretrial detention can have a negative impact on a young person’s transition to adulthood. But because the studies that look to control for the negative impact of confinement used in the report looked at confined, committed youth, we used the one-day snapshot of confined youth (41,934) to generate an estimate of the number of youth that flow through a residential setting, and we elected not to include pretrial detention in this analysis.

“The flow” (146,979 in 2011): Residential facilities house many more youth over the course of a year than are counted in a single, one-day snapshot. We estimated that 3.5 times the 41,934 committed and confined youth counted in the 2011 *Census of Juveniles in Residential Placement* were admitted to and released from facilities. That flow is an estimate of the number of committed young people who were confined at some time during 2011. The estimate was generated from data in the 2011 *Census* and *Juvenile Court Statistics*.

All the cost estimates in this document are generated from “the flow” (or a specific subset of flow estimates). For more information, see the Appendix.

Notes: Research done in Florida on pretrial, detained youth—for example – showed that when controlling for other key variables such as age, race, gender and offense severity found that detained youth faced a greater probability of having a petition filed at intake, a greater probability for having a petition filed by the States Attorney, and a greater probability of receiving formal judicial interventions. Other Florida research by the Office of State Court Administrators found that when controlling for other factors—including the severity of offense—youth who are detained are three times more likely to end up being committed to a juvenile facility than youth who are not detained Frazier, C.E. and Cochran, J.C. (1986), “Detention of Juveniles: Its Effects on Subsequent Juvenile Court Processing Decisions,” *Youth and Society* Vol. 17 No. 3 286-305. Office of State Courts Administrator, Florida Juvenile Delinquency Court Assessment. (2003) Tallahassee, FL: Office of Court Improvements. This study shows that the odds of a previously detained youth receiving commitment are 3.22 times greater than that of a youth who has never been detained.
 The estimates of the number of youth who experienced confinement during the year 2011 were derived from the *Census of Juveniles in Residential Placement* and the annual publication, *Juvenile Court Statistics*. While the *Census* provides a one-day snapshot of the number of youth in confinement, our estimates capture the flow of youth through the nation’s residential facilities, which is much larger than the one-day *Census* outcome because the juvenile population “flows” through residential placement over a year-long period. This estimate is similar to other methods used. Dr. Barry Krisberg, then President of the National Council on Crime and Delinquency used the then most recent data available from surveys administered by the National Council on Juvenile Justice (NCJJ) estimate that 350,000 youth were detained in 1999. See Barry Holman and Jason Ziedenberg, *The Dangers of Detention: The Impact of Incarcerating Youth in Detention and Other Secure Facilities* (Washington, DC: Justice Policy Institute, 2006).
www.justicepolicy.org/images/upload/06-11_rep_dangersofdetention_jj.pdf

- **Increased recidivism:** What is the cost of increased recidivism on the community when a youth who would otherwise desist from delinquency is confined and recidivates?
- **Fewer earnings:** If confinement means a young person has less success in school, and as a result of that, has reduced lifetime wages, what are the estimated lost earnings?
- **Fewer tax revenues:** What is the lost tax revenue associated with foregone future earnings by confined youth?
- **Increased reliance on public assistance:** What is the cost to taxpayers when a young person, negatively impacted by confinement, comes to rely on public assistance programs such as Medicaid and Medicare disability insurance?
- **Increased victimization:** What is cost of victimization of a young person in a facility?

PART IV: REOFFENDING AND RECIDIVISM

“It’s not uncommon for rearrest rates for youth returning from confinement to be as high as 75 percent within three years of release, and arrest rates for higher-risk youth placed on probation in the community are often not much better. While there have been promising advances in the field, few juvenile justice systems can point to significant and sustained progress in reducing these recidivism rates. Recidivism rates for youth involved in the juvenile justice system have been persistently high for many reasons, but not because nothing works. In fact, a wide-ranging body of research exists on how to reduce recidivism and improve other youth outcomes. However, juvenile justice systems have historically struggled to fully understand this research, apply it in a cohesive way, implement it with fidelity, and hold agencies and service providers accountable for results.”

—Elizabeth Seigle, Nastassia Walsh, and Josh Weber, Council of State Governments (2014).⁷⁵

Some of the challenges of determining the net impact of confining youth outside the home, and how that might affect their behavior and their ability to transition to adulthood, are highlighted in recent research by the Council of State Governments (CSG)—research that was funded by the John D. and Catherine T. MacArthur Foundation, the U.S. Department of Justice’s (DOJ) Bureau of Justice Assistance, and supported by the DOJ’s Office of Juvenile Justice and Delinquency Prevention.

The researchers for the Council of State Governments found that *20 percent of state juvenile correctional agencies do not track recidivism for youth at all*, and most states do not consider the multiple ways a youth may have subsequent contact with the justice system, which range from rearrest, readjudication, or reincarceration

within the juvenile justice system to offenses that involve them with the adult corrections system.

CSG’s findings underscore the principal challenge of applying the research on recidivism to cost-benefit analysis: *There is no uniform, national standard for tracking recidivism in juvenile justice, nor is there a standardized data program for the country to study to generate the kind of cost-benefit analysis that would help drive national policy in an effective way.*

Along with big gaps in measuring recidivism across different components of the juvenile justice system, little scholarship exists that seeks to control for all challenges justice-involved young people faced prior to their confinement. This lack of scholarship may be caused by 1)

"I think most people would agree that it's unacceptable that we have a 65 percent recidivism rate for those youths released from YDCs when a YDC bed costs \$91,000 a year."

— Georgia Court of Appeals Judge Mike Boggs, co-chairman of the state's Special Council on Criminal Justice Reform

Bill Rankin and Carrie Teegardin, "State turns attention to juvenile justice reforms," Atlanta Journal-Constitution, December 13, 2012. www.ajc.com/news/news/state-turns-attention-to-juvenile-justice-reforms/nTTxx/.

data limitations, 2) lack of resources to support this kind of research, and 3) *perhaps, lack of will*. If it could be shown that taxpayers were spending hundreds of thousands of dollars a year on a system that is not generating meaningful change in young people's behavior, and is instead creating longer term costs, one might expect that elected officials and policymakers would change policy or the public might respond at the ballot box.

Generating research about the impact of confinement on young people is also difficult because it is hard to separate the effects of the juvenile justice system from those related to the larger challenges that justice-involved young people may face: concentrated poverty, challenged schools, gaps in the public health system, and intergenerational violence, which are all factors at play in the communities from which most confined youth come.

STUDIES USED TO ESTIMATE THE IMPACT OF YOUTH CONFINEMENT ON RECIDIVISM

This report uses academic studies that compare subsamples of previously incarcerated youth and justice-involved youth who have not been incarcerated to produce an estimate of the number of youth who might commit another

offense in the future. These studies share a number of important characteristics:

- The information they draw upon is either nationwide or in a local jurisdiction that is not unique, thereby producing results that would not be considered outliers relative to the rest of the nation;
- They use innovative statistical techniques designed to address the methodological challenge of isolating the impact of confinement on recidivism from other factors that could affect young people's behavior; and
- They vary with respect to methodology, geographical coverage, the time period covered after youth incarceration, definitions of recidivism, and their findings.

The findings from these reports on recidivism are used to determine a range of estimates of the likelihood that a youth will commit another offense because he or she was incarcerated:

- Sweeten and Apel (2007), Journal of Qualitative Criminology:⁷⁶ Sweeten and Apel applied two methodological approaches to the National Longitudinal Survey of Youth, a nationally representative sample of 8,984 individuals. The researchers used their models to estimate the effect of youth incarceration for 16- and 17-year-olds on future crimes and future arrests for each of the five years following incarceration. The two statistical approaches found a strong statistical relationship between incarceration and recidivism when comparing samples of arrested-but-not-incarcerated youth with incarcerated youth. *Youth who were incarcerated as juveniles had a roughly 20–percentage-points-higher likelihood of recidivating.* On the other hand, the analyses found that no statistically significant relationship existed

between youth incarceration and re-offending when comparing samples of incarcerated and convicted-but-not-incarcerated youth.

- [Lin \(2007\), funded by the Bureau of Justice Assistance](#): In his study, Lin analyzed a sample of 736 youth who had been adjudicated by the New York City Family Courts between June 2000 and June 2003. Incarcerated youth were tracked for a maximum of 18 months to determine re-offending.⁷⁷ Lin found at that time that the placement decision had little to do with criminogenic risk — something that had significant implications for the risk at which a young person would be placed. Lin found that “*placement,⁷⁸ at least in the short term, does not appear to affect the risk of recidivism.* Because of that, the outcomes are placed at the low end of the range of results generated by Sweeten and Apel.
- [Aizer and Doyle \(2013\), National Bureau of Economic Research](#): In their study, Aizer and Doyle analyzed a sample of nearly 37,000 Chicago youth processed by the Juvenile Court of Cook County to determine the extent to which youth incarceration affects future recidivism and educational outcomes. Unlike the other studies reviewed here, their study defines recidivism as incarceration (rather than arrest or criminal activity) as an adult by age 25.⁷⁹ *Aizer and Doyle concluded that the findings of their modeling showed that*

“incarceration as a juvenile increases the probability of recidivism as an adult by 22-26 percentage points.”

A peer-reviewed study by Loughran et al, also found no significant statistical relationship between youth incarceration and recidivism. The study was not used for the cost estimate in this report because it covers only youth incarcerated for serious offenses, rather than the entire youth offender population.⁸⁰

The findings of the studies reviewed for this report are summarized in the next Table (“**Select recidivism studies used in the estimate**”).

As the table indicates, increased recidivism rates vary from 0 percent, which indicates that youth incarceration has no impact on re-offending, to between 22 percent and 26 percent, which indicates a strong positive relationship between youth incarceration and recidivism.

Based on these findings and for the cost estimation in the subsequent section, we define the range of impacts of youth incarceration on re-offending as follows: 1) at the low end of the range, youth incarceration has zero impact on the extent of re-offending by previously confined youth (and therefore generates zero costs); and 2) at the high end of the range, youth incarceration increases the likelihood of re-offending by 26 percent (and increases costs to taxpayers and people harmed by crime). The rate of recidivism determined by Aizer and

Doyle informs the cost calculation of recidivism.

Sweeten/Apel and Lin’s scholarship does not mean that there are zero recidivism effects from confinement. Rather, using the methodology they

Select recidivism studies used in the estimate

Authors	Time Period after Release from Incarceration for Tracking Recidivism	Range of Percentage Change in Recidivism Due to Youth Incarceration
Sweeten/Apel	5 years for 16- to 17-year-olds	0%
Lin	18 months	0%
Aizer/Doyle	Until age 25	+22% to +26%

selected to precisely isolate the impact of confinement from other factors, they did not find a clear relationship between recidivism and confinement that could be separated from other factors in the study.

Many judges, district attorneys, public defenders, state and county elected officials, parents of young people, and community leaders have attempted to reform juvenile justice systems and reduce the use of confinement based on what they see every day: young people returning from facilities to the community come out worse. More scholarship in this area would strengthen an already strong case that the kind of juvenile justice system that is needed is one in which confinement is the last choice, not the first choice.

ESTIMATING THE COSTS OF YOUTH CONFINEMENT ON RECIDIVISM

To the extent that confinement is associated with committing new offenses after exit from residential facilities, confinement imposes costs 1) on those individuals directly harmed when a young person engages in behavior as a result of their previous confinement and 2) to taxpayers who pay to process a young person through the justice system again.

Costs to those harmed

The costs to those harmed can be placed in two categories:

- **Tangible costs:** Tangible victim costs include medical expenses and mental health costs, cash losses, property loss or damages, and lost earnings due to injury.
- **Intangible costs:** Intangible victim costs include the costs associated with the pain and suffering resulting from the offense.⁸¹

Scholarly attempts have tried to quantify the costs of crime over the years that include both the costs to society as well as the costs to those harmed.

The two methodologies within the academic literature in recent years for estimating the tangible and intangible costs to victims from specific crimes are the following:

- **The “jury award” approach:** The “ex-post” approach uses actual jury awards for actual crimes that have been adjudicated in court, for previously committed specific behaviors, as the basis for estimates of the intangible cost of those crimes to victims.⁸²
- **The “willingness to pay” approach:** The (WTP) “ex-ante” approach generates estimates of what the public is willing to pay for a decrease in the risk of being a crime victim in the future.⁸³

For most offenses, the intangible cost estimates produced by the WTP approach exceed those of the jury-award approach. In this report, we capture those differences by generating a range of costs for each offense to ultimately produce a range of total costs associated with re-offending.

The next table (**Estimates of the cost of certain adjudications to the harmed party can range from \$4,340 to \$314,650 in 2011 dollars**) provides estimates, in 2011 dollars, of the costs to those harmed by various offenses. The WTP (willingness to pay) approach generates substantially higher cost estimates, presumably because it captures the fears associated with the crimes and the preventive measures potential victims would be willing to take to avoid being victimized.

Estimates of the cost of certain adjudications to the harmed party can range from \$4,340 to \$314,650 in 2011 dollars

Offense	Tangible + Intangible Cost per Harmed Party, per Behavior	
	Ex-Post (Jury Award) Approach	Ex-Ante (Willingness to Pay) Approach
Aggravated assault	\$23,116	\$92,225
Arson	\$11,960	\$124,775
Burglary	\$1,422	\$37,975
Larceny/theft	\$501	\$4,340
Motor vehicle theft	\$6,385	\$18,445
Rape/sexual assault	\$212,799	\$314,650
Robbery	\$8,642	\$42,315
Simple assault	N/A	\$20,615

Sources: Ex post approach - McCollister, K. E., French, M. T., & Fang, H. (2010). The Cost of Crime to Society: New Crime Specific Estimates for Policy and Program Evaluation. *Drug Alcohol Dependence* 108(1-2): 98-109; Ex-ante approach - Cohen, Mark and Alex Piquero. "New Evidence on the Monetary Value of Saving a High Risk Youth," *Journal of Quantitative Criminology*. Volume 2: 2009.

A general equation for estimating the nationwide costs to the harmed party when a young person's delinquent behavior continues when it would have otherwise ceased was made by multiplying:

- **Number of youth experiencing residential confinement** during the year (that is, "the flow" of young people experiencing confinement through a commitment throughout the year);
- **Estimated number of youth committing a new offense:** Drawn from the research on the increase in the likelihood of re-offending due to prior youth confinement;
- **Estimated number of offenses committed by each re-offending youth:** Cohen and Piquero account for the potential that a single young person is likely to engage in more behaviors than just those reported and processed by law enforcement (for example, one youth might have engaged

in several delinquent acts even though only one came to the attention of law enforcement)⁸⁴; and

- **Estimated cost of each offense to a single victim in 2011 dollars**,⁸⁵ as derived from the willingness to pay and jury award methodologies.

The information includes an estimate of the number of re-offenses, the costs per offense, and the total costs for all re-offenses for each of the two methodologies used.⁸⁶ All monetary estimates have been converted to 2011 dollars, which is the last year for which nationwide confinement data are available, using the Bureau of Labor Statistics' Consumer Price Index.

Costs to the taxpayer

In addition to imposing costs on individual people who are harmed, recidivism by individuals who were confined as youth generates costs to taxpayers, who must foot the bill for arrests, prosecution, court proceedings, and confinement of youth (including their confinement as adults).

Five types of costs are included in this analysis, following previous studies, such as those conducted by the Washington State Institute for Public Policy (WSIPP) and the University of Wisconsin's La Follette School of Public Affairs. These include the costs associated with the use of police; prosecutors and the courts; detention centers; state residential facilities; and state supervisory programs for young people placed on probation. In addition, the costs are also likely to vary depending on the outcome of the re-arrest.

Following the lead of other researchers, marginal cost estimates from a recent WSIPP analysis of the costs of crime in Washington State are converted into nationwide estimates for the year 2011.⁸⁷

The key features of estimating the crime costs to taxpayers include:

- **Number of youth experiencing residential confinement** during the year (that is, "the flow" of young people experiencing confinement through a commitment throughout the year);
- **Estimated number of youth committing a new offense:** Drawn from the research on the increase in the likelihood of re-offending due to prior youth confinement;
- **Estimated number of youth rearrested and the final outcome of the case:** The estimated number of youth that will experience different outcomes within the system, such as re-release, supervision, or re-confinement; and
- **Estimated taxpayer costs:** The total taxpayer costs associated with each of these dispositions as a direct result of the initial exposure to confinement.

Pulling all these estimates together generates a total cost of confining youth in terms of their potential recidivism, the costs of that recidivism to a single harmed party, and the collective costs for taxpayers. All costs are expressed in terms of 2011 dollars, and all costs are presented as a range from the low estimate to the high estimate.

Victim and taxpayer costs from recidivism due to youth incarceration can reach \$7.034 billion in 2011 dollars.

	Low End of Range	High End of Range
Change in re-offending due to youth incarceration	0%	+26%
Jury Award Methodology		
Costs to harmed party	\$0	\$3.155 billion
Taxpayer Juvenile Justice System Costs	\$0	\$0.374 billion
Total, costs of incarceration-related recidivism	\$0	\$3.529 billion
Willingness to Pay Methodology		
Costs to harmed party	\$0	\$6.660 billion
Taxpayer Juvenile Justice System Costs	\$0	\$0.374 billion
Total, costs of incarceration-related recidivism	\$0	\$7.034 billion

Based on the data included here, at the lowest end of the range of the three recidivism studies used that fit the very narrow criteria of controlling for the impact of confinement, there may be *no cost* whatsoever, because the studies on recidivism did not show a relationship between confinement and recidivism that could be isolated from other factors (e.g., challenges in the community young people were from, higher rates of poverty, more challenged schools).

The estimated costs associated with recidivism include the following:

- Taxpayer costs on the high end reached \$374 million dollars;
- Costs to victims of re-offenses on the high end reached \$6 billion dollars. Combined costs to taxpayers and victims on the high end reached \$7 billion;
- The use of the willingness to pay technique produced an estimate of victim costs that was twice the estimate generated by the jury award method (\$6 billion compared to \$3 billion)

Given that the findings of the research by the Corporation for National and Community Service showed that trillions of dollars are lost to the economy by the 6.7 million opportunity youth, these estimates seem reasonable. At a minimum, these estimates speak to the real-life experience of the communities most affected by high rates of youth confinement and that have festering crime problems, and where inappropriately and unnecessarily confining youth has costs and consequences that extend broadly.

WHAT DO VICTIMS OF CRIME REALLY WANT? EFFECTIVE RESPONSES TO CRIME AND HARM IN CONTEXT

These estimated costs need to be put in perspective around the policy choices that communities will make about how to handle crime and delinquency, and they raise important questions for those seeking to help harmed parties move past the trauma of crime.

In 46 states and jurisdictions that represent more than 8 out of the 10 young people confined in the United States, the average costs of the most expensive confinement option for a young person is \$407.58 per day and \$148,767 per year. *Given scarce resources, if incarceration were the first choice, not the last choice, government could end up significantly exceeding its budget if the only response to address harm was confinement.*

Policymakers need to put the question directly to crime victims: *Given scarce resources, would you choose to spend hundreds of thousands of dollars a year to confine a youth when the best data show continued confinement is not likely change a young person's behavior, or based on this data, is likely to make them worse off and more likely to reoffend?*

In the first-ever survey of California crime victims by the research firm David Binder Research, the survey identified 500 individuals who had been a victim of crime in the last five years.¹ These crime victims shared the following perspectives on California's adult criminal justice issues:

- When asked about California's rates of incarceration, more victims say that we send "too many" people to prison than "too few";
- Victims want a focus on supervised probation and rehabilitation by a two-to-one margin over prisons and jails;
- Victims prefer investments in mental health and drug treatments by a three-to-one margin over incarceration; and
- Three in four victims believe that prisons either make inmates better at committing crimes or have no impact at all. Only a small minority believes that prisons rehabilitate people.

While it might be tempting for some to view the estimates of the tangible and intangible costs of harm and say it is worth the cost to incarcerate youth, crime victims and those harmed by delinquency have a much more nuanced approach to the policy choices faced around the use of confinement.

Source: Californians for Safety and Justice , *California Crime Victims' Voices: Findings from the first-ever survey of California Crime Victims and Survivors* (Oakland, California: Californians for Safety and Justice, 2012).
http://libcloud.s3.amazonaws.com/211/72/d/228/2/VictimsReport_07_16_13.pdf.

PART V: EDUCATION, EMPLOYMENT, AND WAGES

“The evidence to date seems to suggest that involvement with the criminal justice system adversely influences educational attainment. In particular, youth who come into contact with the justice system are less likely to finish high school.”

—Robert Apel, Professor of Criminal Justice, Rutgers University, and Gary Sweeten, Professor of Criminology and Criminal Justice, Arizona State University (2009).⁸⁸

Young people who are removed from their communities and confined can experience a break in their schooling and also miss other opportunities to develop their human capital and contribute to our communities. Studies have shown that involvement in the juvenile justice system has a negative impact on high school completion.⁸⁹ Together with an increased likelihood of reoffending after being confined, lack of educational success can drive up costs as individuals lose the potential to earn a living, pay taxes, and contribute to the economy.

One summary of research on lost educational opportunities for at-risk youth found that fewer than 20 percent of confined youth go on to finish high school or receive a GED.⁹⁰ A Florida-based study found that fewer than half (44 percent) of 4,066 youth exiting confinement during the 2000-2001 school year returned to school within the subsequent three years.⁹¹ Two statistical analyses, using representative national samples of youth, found that contact with the juvenile justice system had negative impacts on

educational achievement. One 2006 report found that *“first-time arrest during high school nearly doubles the odds of high school dropout while a court appearance nearly quadruples the odds of dropout.”*⁹² A 2008 analysis of a national sample of 9,000 youth found that while 67 percent of the total youth surveyed finished high school, only 32 percent of convicted youth and 18 percent of confined youth eventually graduated.⁹³

The costs of lost educational opportunities to incarcerated youth and taxpayers are likely to be significant.

According to the U.S. Department of Labor, for example, the difference between the median annual incomes of adults with and without a high school degree is \$18,000, which is equivalent to a \$630,000 loss in lifetime earnings per individual.⁹⁴ Failure to complete high school has an enormous impact on employment prospects and wages earned in the future even without considering the contributing factors of criminal delinquency and incarceration.



Employment data in 2008 for 16- to 24-year-olds shows that fewer than half (45.7 percent) of high school dropouts were employed compared with more than two-thirds (68.1 percent) of high school graduates who were employed.⁹⁵

Some studies have directly analyzed the relationship between the incarceration of youth and their employment prospects and earnings. Survey data on individuals less than 20 years old who were confined in institutions show higher unemployment rates and lower wages up to a decade or more after their confinement.⁹⁶ Incarceration is a turning point in one's wage trajectory. An analysis of a national sample of young males, controlling for all other factors, shows that the incarceration experience reduces the wages of formerly incarcerated individuals by 10 to 20 percent and diminishes their wage growth by approximately 30 percent. This was found to be due principally to lower education among incarcerated young adults.⁹⁷

Another recent analysis of the impact of youth arrest on education failure suggests that the so-called turning point occurs much earlier in a young person's life and that collateral consequences, such as education failure and employment instability, accumulate from the point of an initial youth arrest.⁹⁸

These findings have deep policy implications for young people—primarily young people of color—who are affected by the juvenile justice system.

That said, similar to isolating the impact of confinement on recidivism, some of these studies do not control for all possible factors affecting youth other than confinement, such as the challenged schools that exist in the

communities most affected by high levels of incarceration and crime.

STUDIES USED TO ESTIMATE THE IMPACT OF YOUTH CONFINEMENT ON EDUCATIONAL ATTAINMENT

The studies profiled in this section meet the same types of criteria applied to the analyses selected for the estimation of the impacts of youth confinement on recidivism: All three studies are statistical analyses that attempt to isolate the impact of confinement.⁹⁹

These three studies found:

- [Sweeten and Apel \(2010\), unpublished manuscript, funded by the Department of Justice](#). In a study that built upon the educational attainment analysis in their 2007 paper, Sweeten and Apel applied a method to isolate the causal impacts of youth incarceration on high school completion, income generation, and other measures of “status attainment.” *Their analyses found that incarceration increased the likelihood that a youth would drop out of high school by between 11.1 and 18.3 percentage points.* These results indicate that youth incarceration, in isolation from other causal factors, has a strong negative impact on educational attainment.¹⁰⁰

- Hjalmarsson (2008), Journal of Urban Economics.

Hjalmarsson found that convictions alone reduced the likelihood of completing high school by 16.1 percentage points while incarcerations alone reduced that likelihood by 25.9 percentage points. *Combining those findings yields a 9.8-percentage-point net impact of youth confinement on high school graduation.* In other words, youth confinement, when other factors have been controlled, reduced the likelihood that a youth would finish high school by nearly 10 percentage points.¹⁰¹

- Aizer and Doyle (2013), National Bureau of Economic Research. Aizer and Doyle's 2013 study also examined the impact of youth incarceration on high school graduation using their large sample of Chicago youth. Using their method to eliminate bias in the estimates and control for other causal factors, they generated results that were similar to those of the Sweeten-Apel and Hjalmarsson studies. *Their analysis found that youth incarceration reduced the likelihood of high school graduation by 13.3 percentage points.*¹⁰²

Combining the results of the three studies in the summary table leads to estimated impacts of youth confinement on the attainment of a high school diploma ranging from a 9.8-to-18.3-percentage-point reduction.

An estimate of the range of nationwide education-related costs attributable to youth confinement was developed using the following:

- **Number of youth experiencing residential confinement during the year** (that is, “the flow” of young people

Select studies used to estimate the impact of youth confinement on educational attainment

Authors of reports estimating impact of youth confinement on high school graduation	Range of percentage reduction in likelihood of high school graduation due to youth confinement
Sweeten/Apel	11.1 to 18.3
Aizer/Doyle	13.3
Hjalmarsson	9.8

experiencing confinement through a commitment throughout the year);

- **Estimated reduction in reduced educational attainment:** The range in the estimated reduction of educational attainment summarized from the three studies (above); and
- **Estimated costs per person associated with failure to complete high school,** which are derived from the 2007 work of Henry Levin and academic colleagues from the City University of New York, the Teachers College of Columbia University, and Princeton University,¹⁰³ who are leaders in estimating the costs and benefits of education in the U.S. and have been commissioned by the White House Counsel for Community Solutions.

Three costs associated with failure to complete a high school education are included in this estimate:

- **Lost lifetime earnings:** Even though lost lifetime earnings have a specific impact on a person’s life, earnings also contribute to the general economy;
- **Lost federal, state, and local tax revenue:** Tax revenue is critical to funding public institutions, including those that serve youth and their families; and

- Higher Medicaid and Medicare¹⁰⁴ expenditures by federal and state governments: High school graduates are expected to be healthier and live longer, be less reliant on Medicaid and social security disability, and have health insurance coverage.

The cost estimate generated is similar to findings by Levin et al. but were converted to 2011 dollars to bring them in line with the rest of the findings of the report.¹⁰⁵

“Broad policy decisions in education can be framed around a simple question: Do the benefits to society of investing in an educational strategy outweigh the costs?We find that each new high school graduate would yield a public benefit of \$209,000 in higher government revenues and lower government spending for an overall investment of \$82,000, divided between the costs of powerful educational interventions and additional years of school attendance leading to graduation.[T]he quest for greater equity for all young adults would also produce greater efficiency in the use of public resources.”

— Clive Belfield, Professor of Economics, Queens College, City University of New York; Henry M. Levin, William H. Kilpatrick Professor of Economics & Education , Teachers College, Columbia University; Peter Muennig, Associate Professor of Health Policy and Management, Columbia University; and Cecilia Rouse, Professor of Economics and Public Affairs, Princeton University

Henry Levin, Clive Belfield, Peter Muennig, and Cecilia Rouse, *The Costs and Benefits of an Excellent Education for All of America's Children* (New York, NY: Teacher's College Columbia University, 2007). www.literacycooperative.org/documents/Thecostsandbenefitsofanexcellente

Estimated lost economic benefit from confinement can range from \$7 billion to \$13 billion in 2011 dollars.

	Low End of Range	High End of Range
<i>Billions of 2011 Dollars</i>		
Lost income	\$4.07	\$7.60
Lost tax revenue	\$2.07	\$3.87
Higher Medicare and Medicaid costs	0.86	\$1.50
Total costs	\$7.00	\$13.07

The three studies reviewed above generate a range of impacts of youth confinement on the likelihood of high school graduation of 9.8 to 18.3 percentage points. As part of this estimate, the authors broke out estimates for different categories of youth.¹⁰⁶ We estimated the range of present values of the impact of confinement on lifetime earnings of confined youth for 2011, an estimated range of the present values of the impact on lifetime tax payments of confined youth, and an estimated maximum of the impact of youth confinement on Medicaid and Medicare spending for confined male and female youth for 2011.

The tables contain the estimates of confinement on young people’s wages, their reliance on public services, and tax revenue generated from their earnings to create a much larger picture of the costs all of us face. Using this range of costs, the authors estimate what it costs young adults, taxpayers, and the community at large when young people’s educational attainment and success is affected by the confinement experience. These costs include:

- **Lost income:** between \$4 billion and nearly \$8 billion in income is lost when young person are confined by the courts;
- **Lost tax revenue:** taxpayers and the public lose between \$2 billion and nearly \$4 billion in future tax revenue as a result of

the impact of confinement on a young person's ability to earn a living; and

- **Higher public assistance costs:** taxpayers pay anywhere from just under a billion to more than \$1.5 billion dollars in increased Medicare and Medicaid costs when the previous confinement of a young person is accounted for among those individuals who rely on public assistance. These young people might have relied on private insurance had they successfully

connected with the workforce and not been on public insurance.

Given the finding of research commissioned by the Corporation for National and Community Service that estimated the lost economic potential to be as much as \$4.7 trillion dollars for all 6.7 million disconnected youth, these multi-billion dollar estimates seem reasonable for those youth whose "opportunity" was suspended due to their experience of confinement.¹⁰⁷

PART VI: VICTIMIZATION OF YOUTH

"No youth should ever be subjected to such abuse by an adult entrusted with their care and well-being."

—Statement from the Florida Department of Juvenile Justice, aired by a Florida television network in August 2014 in regards to a case in which a young person was sexually battered by an employee of a juvenile detention center (2014).¹⁰⁸

It costs all of us when young people are more likely to reoffend and less likely to have educational success because of their confinement. We also know that young people who have been confined can experience harm from physical and sexual violence in institutions.

Some confined youth are exposed to physical, sexual, and emotional trauma as a result of attacks by other confined youth and staff of residential facilities within the juvenile system.¹⁰⁹ Along with juvenile institutions, young people face even higher risk of abuse when they are tried as adults and confined in adult institutions¹¹⁰ – something that has led to efforts in a number of states to move young people out of the adult system and into the juvenile justice system. This increased risk of harm was acknowledged by the federal government a decade ago. Passed unanimously in 2003, the Prison Rape Elimination Act (PREA) is the first federal civil statute focused specifically on addressing sexual violence in juvenile facilities, jails, prisons, lockups, and other facilities. PREA established the National Prison Rape Elimination Commission, which held hearings about sexual misconduct in custody, issued reports on the problem of sexual victimization in secure facilities,

and proposed standards for the prevention, detection, and response to sexual misconduct in criminal and juvenile justice settings. In 2012, DOJ issued standards for juvenile facilities, adult jails and prisons, lock ups, and community confinement facilities to appropriately address sexual assault. While PREA did not create a personal right of action for prisoners, it did set up a national standard of care for prisoners, thus opening the door for possible legal recourse.

Both adult and juvenile institutions have faced lawsuits for failing to keep young people safe from abuse while they are confined.

ESTIMATING THE IMPACT OF YOUTH CONFINEMENT ON FACILITY-BASED SEXUAL ASSAULT

A 2012 report by the DOJ on sexual victimization in state-funded or -operated facilities indicates that serious problems persist. The DOJ survey of a representative sample of

Four percent of youth in custody say they were forced to engage in sexual activity while living in their current facility.

—Office of Juvenile Justice and Delinquency Prevention, U.S. Department of Justice

Andrea J. Sedlak, Karla S. McPherson, and Monica Basena, "Nature of Risk of Victimization: Findings from the Survey of Youth in Residential Placement" U.S. Department of Justice, Office of Justice Programs, Office of Delinquency Prevention, 2013 (Washington, DC). Accessed on Aug. 31, 2014. www.ojjdp.gov/pubs/240703.pdf.

8,707 adjudicated youth in confinement in 326 youth correctional facilities found that 4.8 percent had been subjected to "nonconsensual sexual acts" by other youth (1.7 percent) and facility staff (3.1 percent).¹¹¹ While these findings represent an improvement over the 6.2 percent revealed by the Department of Justice's 2008-09 sexual victimization survey, they are similar to the finding in the 2003 *Survey of Youth in Residential Placement* (SYRP) that 4 percent of youth were forced to engage in sexual activity.¹¹²

The prevalence of sexual assault in state-controlled facilities, as reported in the victimization survey, represents just a small but traumatic portion¹¹³ of the violence to which committed youth are subjected..

In an effort to give some financial accounting of taxpayers' costs related to the sexual assault of confined youth, the same methodologies are used as in the "Reoffending and Recidivism" section of this report: jury award approach and the willingness to pay approach. These approaches quantify the costs of sexual assault to be in the range of \$200,000 to \$300,000 per incident.

The incidence of sexual assaults is given directly by the 2012 DOJ survey. When that incidence is combined with the estimate of the total number of youth confined in a

year, it is possible to generate an estimated dollar figure to the increased likelihood of victimization as a result of confinement.

ESTIMATING THE COST OF THE IMPACT OF SEXUAL ASSAULTS ON CONFINED YOUTH

The 2012 sexual victimization survey can be used to monetize the impact of sexual assaults on youth confined in state-controlled juvenile facilities. It is assumed that in 2011, the latest year of data from the *Census of Juveniles in Residential Placement*, 4.8 percent of confined youth were subjected to non-consensual sexual activities, the same percentage determined in the 2012 sexual victimization survey.¹¹⁴

Since this incidence rate is taken directly from the U.S. Department of Justice and can be considered to be a reflection of the real incidence of sexual assault, a range of estimates is not necessary. The estimation of the cost of sexual assault on youth in facilities is calculated in the following way:

- **Number of youth experiencing confinement** during the year (that is, "the flow" of young people experiencing confinement through a commitment throughout the year);

[J]uveniles are five times more likely to be sexually assaulted in adult rather than juvenile facilities, often in the first forty-eight hours of incarceration. Victims of prison rape suffer severe physical and psychological effects that hinder their ability to integrate into their communities and maintain stable employment upon release from prison.

— Federal Judge Reginald Walton, Chairman, National Prison Rape Elimination Commission

Federal Judge Reginald B. Walton, "The Chairman's Remarks," the National Prison Rape Elimination Commission, 2008, Accessed on Aug. 31, 2014, http://web.archive.org/web/20080602090814/http://nprec.us/chairmans_remarks.html

- **Number of young people who were victims of sexual assault** while confined or committed to the system;
- **Percentage of males and females sexually assaulted** according to the 2012 victimization survey; and
- **Range of costs per victim** was given by the present values of the costs of sexual assaults derived by McCollister et al. and by Cohen and Piquero in jury award and willingness to pay estimates, respectively.¹¹⁵

In 2011, based on DOJ survey results, it was estimated that more than 4,354 young people confined (4.8 percent) were victims of sexual assault.

Based on what the DOJ and others have estimated to be the quantifiable costs of sexual assault, we estimate the costs to those young people affected by this behavior to range between \$901 million and \$1.37 billion in the year 2011.

These estimates aside, no economic model can quantify the full impact that sexual violence can have on an individual.

Estimated present value impact of a higher rate of sexual assault on confined youth can range from \$.9 billion to \$1.37 for all youth assaulted in 2011.

		Jury Award (McCollister, et al.), 2011 dollars	Willingness to Pay (Cohen and Piquero)		
	Estimated number of young people affected by sexual assault in state-controlled facilities, 2011	Present value of the cost per youth assaulted	Present value of cost per youth assaulted	Present value of cost to one young person assaulted	Present value of cost to all youth assaulted
Male	4,051	\$206,933	\$0.84 billion	\$314,650	\$1.27 billion
Female	303	\$206,933	\$0.06 billion	\$314,650	\$0.10 billion
Total	4,354	\$206,933	\$0.90 billion	\$314,650	\$1.37 billion

PART VII:

THE FINAL TALLY AND WHAT WE POTENTIALLY SAVE WHEN WE MAKE BETTER CHOICES

We pay significant direct costs—from hundreds of dollars a day and hundreds of thousands of dollars a year—for the incarceration of young people. Whether it is \$300,000 a year in New York, \$200,000 a year in California, \$111,000 a year in Illinois, or anything in between, any policy decisions that could have averted those costs is one that taxpayers need to scrutinize.

Along with those direct costs of confinement, we estimate that confining young people when another option might have been appropriate costs us *billions* more when including the long-term impact of confinement on a young person's

schooling, connection to work, recidivism, ability to earn a living, pay taxes, and reliance on public assistance.

We also know that the biggest costs are borne by the young people, their families, and the communities most affected by confinement—communities of color.

Each year, the U.S. incurs an estimated \$8-\$21 billion in long-term costs for the confinement of young people.

	Low end of range	High end of range
<i>Billions of 2011 Dollars</i>		
Cost of recidivism	\$0	\$7.03
Lost future earnings of confined youth	\$4.07	\$7.60
Lost future government tax revenue	\$2.07	\$3.87
Additional Medicare and Medicaid spending	\$0.86	\$1.50
Cost of sexual assault on confined youth	\$0.90	\$1.37
Total, all costs	\$7.90	\$21.47

A MODEST SILVER LINING: WHAT DOES THE YOUTH DEINCARCERATION TREND MEAN FOR THE COLLATERAL COSTS?

If confining youth has a long-term cost, *what happens if policymakers choose to reduce confinement?*

Between 2001 and 2011, the number of youth committed to confinement—those who “flowed” through confined places—declined from 267,000 to 147,000, a 45 percent decrease during that ten-year period. *Had that decline never occurred and confinement levels in 2011 equaled those in 2001, about 120,000 more youth would have been confined in 2011.*

If we applied the average collateral costs per confined committed youth to the range of costs to those hypothetical additional 120,000 youth, *we find that the collateral costs of confinement in*

2011 would have been between \$6.45 billion and \$17.54 billion higher in the absence of those reductions. Without the drop in confinement experienced between 2001 and 2011, the total collateral costs of confinement for the nation would have been nearly doubled in 2011: The estimated collateral costs in 2011 would have been between \$14.35 billion and \$39.01 billion, rather than between \$7.9 billion and \$21.47 billion.

Debate in the field has continued as to reasons why we saw the reductions in confinement over the past decade. We know the field made active policy changes in states that sought to reduce the use of confinement, and we also know that juvenile crime declined during this period, thereby reducing the available pool of young people that were likely to be confined. Regardless of why America has experienced a “youth deincarceration” trend, a small silver lining here is that the estimated reductions in youth confinement have turned into an estimated billions of dollars in annual collateral cost savings for the country.

RECOMMENDATIONS

“It’s just always that problem that people don’t understand. You have to spend money to save money. Soft-cost issues are tough to prove economically, but the reality is, by keeping a child out of prison, we save this county \$170,000 a year.”

—Montgomery County, Ohio, Juvenile Court Judge Anthony Capizzi (2014).¹¹⁶

We believe that there are ways to reduce the price we all pay for our poor policy choices, and instead find more effective ways to help young people successfully transition to adulthood, hold young people accountable for delinquency, and keep our communities safe. To achieve those goals, and reduce our short-term and long-term costs, we need to expand the definition of costs and benefits in our justice system and broaden the picture of how we account for success in juvenile justice.

To help the field move forward towards cost-conscious, more effective, and fairer juvenile justice policies, JPI recommends the following:

- 1) ***Reduce spending on confinement and shift funding to community-based options for youth.*** There are circumstances when a young person may need to be placed out of the home and confined. *That said, incarceration should be the last resort, not the first resort, for every juvenile justice system in the country.* To help support creating a system that is right-sized—where youth are placed appropriately depending on their risk of reoffending and their needs—policymakers should take a page from the recent lessons learned in places that have seen reductions in youth incarceration, and they should shift public dollars from

the most restrictive, most expensive options to community-based options for treatment and supervision that keep young people at home, or close to home.

- 2) ***Invest appropriately in juvenile justice, particularly in the right parts of the youth-serving system.*** The 2008 recession helped accelerate juvenile justice reform by pushing policymakers to justify the hundreds of thousands of dollars they spent on youth confinement against the poor outcomes (or lack thereof) being generated. But as state, county, and city governments saw budgetary pressures, key parts of the juvenile justice continuum that help reduce delinquency early on have been strained: *when alternatives to incarceration, diversion, and primary prevention are cut to make up the difference in a budget shortfall, it can increase long-term costs on the system by leading more young people to end up in the most expensive places.* Given the huge costs associated with incarceration, policymakers need to invest more in alternatives to incarceration, diversion, and primary prevention, and they should be investing earlier on—*upstream.* The lesson from the states and jurisdictions that can spend \$100,000 per youth incarcerated on an annual basis is

“Some will argue that programs and agencies should be measuring positive outcomes such as educational attainment, improved family functioning, attachment to positive adults or employment. CJCA fully supports the application of positive outcome measures....”

—Council of Juvenile Corrections Administrators

Phil Harris, Brian Lockwood, and Liz Menders, White Paper: Defining and Measuring Recidivism (Braintree, MA: Council of Juvenile Corrections Administrators, 2009). <http://cjca.net/attachments/article/55/CJCA-Recidivism-White-Paper.pdf>.

that policymakers should be investing earlier on—*upstream*. Because the adolescent development research suggests that young people engage in delinquency because it is normative, we need to provide the right services to the right young people at the right time. And there is research that demonstrates that the public has shown “willingness to pay” more tax dollars for approaches that concretely solve youth development and public safety challenges that relate to delinquency.¹¹⁷

- 3) ***Address all the barriers that exist to reducing reliance on confinement in states and localities.*** From state to state and locality to locality, there are barriers to reducing the confinement of young people. Barriers include mandatory sentencing where there is no evidence that a longer term of confinement will produce any benefit, lack of alternatives to incarceration, reentry practices that do not plan for a young person’s return home effectively, laws that see low-level youth unnecessarily confined, and lack of consistent funding streams to support less expensive, more effective community services.¹¹⁸ In every state, policymakers should identify barriers to reducing needless reliance on confinement, consistent with the evidence, best

practices, and what can be learned from other jurisdictions.

4) *Improve system capacity to measure recidivism and track positive outcomes.*

Recidivism is one measure of the juvenile justice systems performance, and an important one. But any young person—whether court-involved, confined, or not—needs more than to just “not reoffend” to successfully transition to adulthood. Along with improving the system’s ability to measure recidivism, systems should measure positive outcomes for youth that reflect their successful transition to adulthood. The Positive Youth Justice¹¹⁹ model advanced by John Jay College of Criminal Justice Research and Evaluation Center and the Sierra Health Foundation represents an important step in broadening the approach to serving youth, and it is being applied by the Washington, D.C., Department of Youth Rehabilitation Services, among others.

- 5) *Develop consistent standards for measuring per diem and confinement costs from place to place.*** Every state has different standards for calculating the costs of confinement. California’s Board of Corrections includes the “percentage of administration used for youth facility administration.” Alongside a per diem cost of confinement, the Department of Youth Service in Ohio publishes a “marginal cost” that includes food, clothing, medical care, and treatment costs per youth, but excludes “all payroll and equipment costs,” something that make the single reduction of a young person’s confinement less expensive than it might be. Maryland excludes educational costs in its per diem rates.¹²⁰ JPI recommends that corrections administrators, their associations, the professional associations that represent state budget offices, and legislative professionals explore ways to

develop a standard definition of per diem and annual costs that would help jurisdictions determine how to calculate costs, allowing for consistency from jurisdiction to jurisdiction, and providing the foundation for research and cost-benefit analyses. The recent Council of Juvenile Corrections Administrators *White Paper: Defining and Measuring Recidivism* and attendant recommendations on recidivism might provide a roadmap for a process the field might undertake.¹²¹

- 6) ***Expand executive and legislative capacity to develop cost-benefit analysis.*** The Washington State Institute for Public Policy has advanced policy development in Washington and the entire country by working with its legislature to develop long-term cost-benefit analysis on criminal justice policy. Rather than simply relying on a definition of costs that focuses on annual budgets, WSIPP provides policymakers with an analysis of criminal and juvenile justice policy that accounts for long-term costs of policy choices, including recidivism, and the long-term benefit to taxpayers when policy choices reduce criminal justice costs in the long term.¹²² There have been sporadic initiatives and efforts in states to incorporate a cost-benefit analysis in juvenile justice: these broadly include the work of the Cost Benefit Analysis Unit at the Vera Institute of Justice (including their work around efforts to analyze the benefit of moving 16- and 17-year-olds into the juvenile justice system), the Pew Charitable Trust's Results First initiative and Oregon's Criminal Justice Commission¹²³ and system reform initiatives, such as the Standard Program Evaluation Protocol.¹²⁴ Other states should

consider expanding the mandate of their legislative and executive research arms to include cost-benefit analysis in their review of juvenile justice policy. The expansion should seek to include the impact of choosing policies that increase the likelihood that young people will complete and succeed in school and work opportunities. Given what we already know about the immediate and long-term costs of poor policy choices, policymakers should resource public capacity in government to analyze policy to reduce reliance on the most expensive, least effective ways to change individual behaviors.

- 7) ***Expand research opportunities to study the long-term costs of confinement and juvenile justice system contact.*** The estimate contained in this brief is one of a few attempts to build a comprehensive picture of the long-term costs of needlessly and inappropriately relying on youth incarceration and out-of-home placement. The reason that only a handful of studies were used to advance these estimates has to do with the fact that limited scholarship has been funded and supported to isolate the impact of confinement on youth, their families, and our communities. More work needs to be done to advance the field. Building on the work from the National Research Council of the National Academies' studies of juvenile justice, the Office of Juvenile Justice and Delinquency Prevention should work with other federal and state agencies to expand scholarship opportunities on cost-benefit in juvenile justice and youth service policy.

ENDNOTES

¹Sarah Hockenberry, *Juveniles in Residential Placement* (Washington, D.C.: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention, 2014).

² Between 2001 and 2011, there has been a 41 percent decline in the rate of youth detained *and* youth committed in residential placement (104,219 to 61,423). During the same time period, the number of youth committed in a residential placement declined 45 percent, from 76,190 to 41,934. A residential placement is any out-of-home placement in a residential facility for a young person who has come into contact with the juvenile justice system. The Census of Juveniles in Residential Placement is developed and maintained by the National Center for Juvenile Justice, with funding from the Office of Juvenile Justice and Delinquency Prevention (OJJDP), Office of Justice Programs, U.S. Department of Justice. There are limitations in using the Census: states' definitions of a secure facility vary (e.g., publicly run, large secure facility, nonprofit, staff secure group home) and the Census does not offer information on the quality of the placement (e.g., treatment-rich, family-focused)). That said, the Census of Residential Placement is the best national data set available—a one-day snapshot of the number of youth removed from their homes. The authors use the data from the Census of Residential Placement to estimate how many young people flow through out-of-home placement and residential settings during the course of a year, a figure that is three times as large as the one-day snapshot. For more information on residential placement and the national data sources that cover it, see Melissa Sickmund, T.J. Sladky, W. Kang, and C. Puzzanchera, *Easy Access to the Census of Juveniles in Residential Placement* (Office of Juvenile Justice and Delinquency Prevention , 2011). www.ojjdp.gov/ojstatbb/ezacjrp/.

³ National Research Council, *Reforming Juvenile Justice: A Developmental Approach* (Washington, DC: The National Academies Press, 2013).. Richard J. Bonnie, Robert L. Johnson, Betty M. Chemers, and Julie A. Schuck., eds. Committee on Assessing Juvenile Justice Reform; Committee on Law and Justice; Division of Behavioral and Social Sciences and Education; National Research Council..

⁴For the purposes of this paper, the authors use the definition of youth confinement that was recently developed by the National Juvenile Justice Network (NJJN) for their "Reducing Youth Confinement Policy Platform," "*We use the term confinement to refer to any out-of-home placement of youth stemming from a delinquency or criminal charge, or an order of a delinquency or criminal court judge.*" NJJN enhances the capacity of juvenile justice coalitions and organizations in 36 states to press for state and federal laws, policies and practices that are fair, equitable, and developmentally appropriate for all children, youth, and families involved in, or at risk of becoming involved in, the justice system. The platform in which this definition was developed was vetted by the following experts: Mishi Faruqee, ACLU; Shaena Fazal, Youth Advocate Programs, Inc.; Angela Irvine, National Council on Crime and Delinquency; Danielle Lipow, Annie E. Casey Foundation; Laura John Ridolfi, W. Haywood Burns Institute; Vincent Schiraldi, New York City Mayor's Office of Criminal Justice; and Jason Ziedenberg, Justice Policy Institute. www.njjn.org/our-work/reducing-youth-confinement.

⁵Melissa Sickmund, T.J. Sladky, W. Kang, and C. Puzzanchera, *Easy Access to the Census of Juveniles in Residential Placement* (Office of Juvenile Justice and Delinquency Prevention , 2011).

⁶The estimates were generated based on data for 2010 and estimated for the year 2011. Research shows that the impact of confinement on a detained juvenile awaiting court proceedings can be as harmful to the young person's trajectory as a placement out of their home. See Barry Holman and Jason Ziedenberg, *The Dangers of Detention: The Impact of Incarcerating Youth in Detention and Other Secure Facilities* (Washington, D.C.: Justice Policy Institute, 2006).

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- ⁷ The W. Haywood Burns Institute, "Unbalanced Juvenile Justice, Disparity Gap Incarceration Rate, Youth of Color vs. White," accessed Sep. 5, 2014.
<http://data.burnsinstiute.org/#comparison=3&placement=3&races=1,2,3,4,5,6&offenses=5,2,8,1,9,11,10&year=2011&view=graph>.
- ⁸National Research Council, *Reforming Juvenile Justice: A Developmental Approach* (Washington, DC: The National Academies Press, 2013). www.nap.edu/catalog.php?record_id=14685
- ⁹ Peter W. Greenwood, "Prevention and Intervention Programs for Juvenile Offenders," *The Future of Children: Juvenile Justice* 18, no.3 (2008): 185-210.
www.princeton.edu/futureofchildren/publications/docs/18_02_09.pdf
- ¹⁰ Elizabeth K. Drake, Steve Aos, and Marna G. Miller, "Evidence-Based Public Policy Options to Reduce Crime and Criminal Justice Costs: Implications in Washington State," *Victims and Offenders*, no. 2 (2009): 170-196
- ¹¹ Some findings around evidence-based programs that have been used in Washington and nationwide include: *Functional Family Therapy*, a structured family-based intervention that uses a multi-step approach to enhance protective factors and reduce risk factors in the family, produced a net benefit of \$49,776; *Aggression Replacement Training*, which uses repetitive learning techniques to help offenders develop skills to control anger and use more appropriate behaviors, generated net benefits of \$23,015 per youth; *Multi-Systemic Therapy*, which improves families' capacities to overcome the causes of delinquency by promoting parents' ability to replace deviant peer relationships with pro-social friendships, produced net benefits of \$17,694 per youth.
- ¹² Peter W. Greenwood, "Prevention and Intervention Programs for Juvenile Offenders," *The Future of Children: Juvenile Justice* 18, no.3 (2008): 185-210.
www.princeton.edu/futureofchildren/publications/docs/18_02_09.pdf
- ¹³ Shaena M. Fazal, *Safely Home: Reducing Youth Incarceration and Achieving Positive Outcomes for High and Complex Need Youth Through Effective Community-Based Programs* (Washington, DC: Youth Advocate Programs Policy and Advocacy Center, 2014).
www.yapinc.org/Portals/0/Documents/Safely%20Home%20Preview/safelyhome.pdf?ver=2.0.
- ¹⁴National Juvenile Justice Network, *Bringing Youth Home: A National Movement to Increase Public Safety, Rehabilitate Youth and Save Money*, (Washington, DC: National Juvenile Justice Network, July 2011).
<http://njjn.org/uploads/digital-library/Bringing%20Youth%20Home%20FINAL,%208.9.11.pdf> and
Antoinette Davis, Angela Irvine, and Jason Ziedenberg, *Using Bills and Budgets to Further Reduce Youth Incarceration* (Oakland, California: National Council on Crime and Delinquency, 2014).
http://ncccdglobal.org/sites/default/files/publication_pdf/bills-and-budgets.pdf
- ¹⁵ Angela Irvine, "Reducing Youth Incarceration: Perspectives of System Stakeholders"(JDAI Inter-Site Conference, Philadelphia, PA, June 3, 2014)
[www.jdaihelpdesk.org/intersiteconf2014/Ensuring%20Equity%20in%20Reducing%20Confinement%20\(2014%20Conference\).pdf](http://www.jdaihelpdesk.org/intersiteconf2014/Ensuring%20Equity%20in%20Reducing%20Confinement%20(2014%20Conference).pdf)
- ¹⁶ American Community Survey, "Total Population, 2013 ACS 1-year estimates," accessed October 8, 2014. http://factfinder2.census.gov/faces/nav/jsf/pages/download_center.xhtml#none
- ¹⁷ Melissa Sickmund, T.J. Sladky, W. Kang, and C. Puzzanchera, *Easy Access to the Census of Juveniles in Residential Placement* (Office of Juvenile Justice and Delinquency Prevention , 2011).
www.ojjdp.gov/ojstatbb/ezacjrp/.
- ¹⁸Thomas Loughran, Edward P. Mulvey, Carol A. Schubert, Jeffrey Fagan, Sandra H. Losoya, and Alex R. Piquero, "Estimating a Dose-Response Relationship between Length of Stay and Future Recidivism in Serious Juvenile Offenders," *Criminology* 47, no. 3 (2009): 699-740.
www.ncbi.nlm.nih.gov/pmc/articles/PMC2801446/. Opining about the research, Thomas Loughrin said,

"The more [time] we gave them, it didn't make any difference, there was no effect" on recidivism, he reported, though cautioning that the bulk of the kids in the study served between three and 13 months. "There's a lot of competing theories [about] why that is," he said, and thinks no answer is definitive. It could have to do with youth psychological development, he ventured, or low-risk kids mixing with high recidivism-risk kids in the same detention center. See <http://jjie.org/study-youth-offenses-sentences-predict-little-about-recidivism/>.

¹⁹ In some cases, the annual cost was calculated with the per diem or the per diem was calculated with the annual cost.

²⁰In fiscal year July 1, 2013 to June 30, 2014, the Office of Juvenile Justice spent \$127.84 per day per youth. Elizabeth Touchet-Morgan, Deputy Assistant Secretary, Office of Juvenile Justice, email message to author, August 22, 2014.

²¹ The average cost per day in 2013-2014 for detention is \$328.94. Florida's Department of Juvenile Justice also provided the costs for non-secure residential, which was \$130.66 per day or \$47,691 per year and secure residential was \$151.80 per day or \$55,407 per year. Heather DiGiacomo, Communications Director, Florida Department of Juvenile Justice, email message to author, August 14, 2014.

²² In FY2013, the average cost per day per youth for state-operated residential facilities is \$159. Contract programs are \$146 per day per youth, group homes are \$93 per day, and a self-contained program for youth with special needs is \$220 per day. Allen L. Peaton, Special Assistant to the Executive Director, Alabama Department of Youth Services, email message to the author, October 10, 2014.

²³ \$207.43 is the average cost calculated from FY 2012 per diem rates of the juvenile facilities: Brady Academy was \$196.32, Youth Challenge Center was \$199.94, and QUEST/EXCEL was \$226.04.

South Dakota Department of Corrections, *SD SOC Annual Report Fiscal Year 2012* (Pierre, SD: South Dakota Department of Corrections, April 2014).

<http://doc.sd.gov/documents/about/publications/FY2012AnnualReport.pdf>.

²⁴ The reported cost is the total per diem cost for 2012-2013 calculated by IDOC by dividing the average daily cost by the average daily population. Indiana Department of Correction, *Department of Correction Per Diem Report: Fiscal Year 2012-2013 Juvenile Facilities* (Indianapolis, IN: Indiana Department of Correction), accessed August 12, 2014. www.in.gov/idoc/files/PerDiem12_13_Juv.pdf.

²⁵ Total average cost per day for Level 4 (high risk) placement, FY2013, *Idaho Department of Juvenile Corrections, Legislative Update 2014 Edition* (Boise, ID: Idaho Department of Juvenile Corrections: 2014). www.idjc.idaho.gov/wp-content/uploads/2014/01/Legislative-Update-FY14.pdf.

²⁶ For secure facilities in 2013, the daily cost per bed was \$214.12. Genesis Youth Center cost \$193.43 per bed. Locked detention cost \$165.94 per bed. Observation and assessment cost \$203.32. Non-residential services range from \$5 to \$150 per hour and residential services from \$35 to \$230 per day.

Division of Juvenile Justice Services, *2013 Annual Report* (Salt Lake City, UT: Department of Human Services), accessed August 18, 2014.

<http://jjs.utah.gov/pdf/JJS%20FY%202013%20JJS%20Annual%20Report.pdf>.

²⁷The FY 2013 per diem cost for secure care was \$244.30 and the annual cost per bed (per diem cost x 365 days) was \$89,170 (rounded). For the community residential program, the per diem cost was \$177.79 and the annual cost was \$64,893. Moderate care was \$184.76 and \$67,437, respectively.

Division of Youth Services, *Annual Report Fiscal Year 2013* (Jefferson City, MO: Missouri Department of Social Services), accessed August 18, 2014. <http://dss.mo.gov/re/pdf/dys/youth-services-annual-report-fy13.pdf>.

²⁸ Regional Youth Detention Centers cost \$88,125 a year, or \$241.44 per day.

Joe Vignati, Assistant Deputy Commissioner, Georgia Department of Juvenile Justice, email message, July 28, 2014. Also see The Pew Charitable Trusts, *Georgia's 2013 Juvenile Justice Reform: New Policies to Reduce*

Secure Confinement, Costs, and Recidivism (Washington, DC: The Pew Charitable Trusts, 2013).

www.pewtrusts.org/~media/legacy/uploadedfiles/pcs/content-level_pages/reports/Georgia20201320Juvenile20Justice20Reform20Summary20BriefJuly2013pdf.pdf.

²⁹There are two facilities: the daily cost per inmate of the Kansas Juvenile Correctional Complex is \$250.50 and Larned Juvenile Correctional Facility costs \$228.78. Out-of-home placement is \$133.34 and probation costs \$16.04. \$242.55 is the average daily cost for FY 2013 for Juvenile Correctional Facility.

Annual Report Fiscal Year 2013 (Topeka, KS: Kansas Department of Corrections), accessed August 19, 2014. www.doc.ks.gov/publications/kdoc-annual-reports/2013/view.

³⁰ Wyoming operates two secure post-adjudication placements. The Wyoming Girls' School costs \$261 per day based on an operating capacity of 64 girls and the Wyoming Boys' School costs \$222 per day based on an operating capacity of 100 boys. Rachel Campbell, Social Services Program Supervisor, State of Wyoming Department of Family Services, email message to author, September 30, 2014.

³¹At the date of the correspondence, Washington institutions cost \$262.48 per day, and the annual cost was reported to be \$95,805. For group homes, the daily cost was reported to be \$230.98, and the annual costs were reported to be \$84,307. John Clayton, Assistant Secretary, Juvenile Justice and Rehabilitation Administration, email to author, August 5, 2014; Ken Moses, Budget Director, email to author, August 11, 2014.

³²At the date of the correspondence, the Oregon Youth Authority average cost per day is \$263 for a close custody bed and \$172 for a community residential program. Ann Snyder, Oregon Youth Authority, Communications Manager, email to the author, August 23, 2014.

³³ Costs are as of the date of the correspondence. The reported costs are the average per diem and the annual cost for the Youth Development Center. The group home costs \$267 per day and \$97,455 annually and the detention center costs \$264 and \$96,360, respectively.

Stacy Floden, Director of Program Services, KY Department of Juvenile Justice, email message to author, August 20, 2014.

³⁴ Minnesota operates two secure facilities. The cost per day per youth for Red Wing is \$287.23 as of September 2014. Minnesota Department of Corrections, *Per Diem Cost Report, MCF-Red Wing, Final Report – September 2014* (St. Paul, Minnesota, Minnesota Department of Corrections, September 2014).

³⁵ The reported number accounts for the FY 2012-13 state-operated commitment facility cost per day per youth. CP Department of Human Services also reported the state-operated detention cost (\$204.50); the cost for private residential (\$190.49); private residential state-owned facilities cost (\$163.38); and the case management/parole supervision cost (\$27.90); Jeanine Martinez, Director of Financial Services, Memorandum, "Daily Rates for Fiscal Year" (Colorado Department of Human Services, January 24, 2014).

³⁶ Daily cost per youth in secure care, FY2014 actual costs, Arizona Department of Juvenile Corrections, *Five-Year Strategic Plan, FY2016 – FY2020* (Phoenix, AZ: Arizona Department of Juvenile Corrections, September 1, 2014). www.azdjc.gov/FactsNews/ADJCPublications/SP%202016-2020.pdf.

³⁷ \$291 is the statutory rate calculated for July 1, 2014 to June 30, 2015. The rate is the per-person daily cost assessment to counties for care in a Type 1 juvenile correctional facility. The care for juveniles transferred from a juvenile correctional institution is also \$291, \$128 is the cost of departmental corrective sanctions services, and \$41 is for departmental aftercare services. Department of Corrections, *Agency Budget Request: 2013-2015 Biennium* (Madison, WI: Department of Corrections, 2012).

<http://doc.wi.gov/Documents/Web/About/DataResearch/Budget/Agency%20Request%20-Final%20Document%20-%2009%2017%202012.pdf>.

³⁸ In FY2013-14, the cost per day per youth for the most expensive residential placement, Mountain View is \$301.29. Wilder YDC costs \$281.67 and Woodland Hills costs \$281.98. State of Tennessee, *The Budget:*

Fiscal Year 2014-2015 (Nashville, TN: State of Tennessee, 2014), accessed August 18, 2014.

www.tn.gov/stateofthestate/files/2014/2015BudgetDocumentVol1.pdf.

³⁹ As of the date of the correspondence, \$111,000 is the cost per year to house one youth in Illinois Youth Centers operated by DJJ. Alka Nayyar, Communications Manager, State of Illinois, email message to author, August 15, 2014.

⁴⁰ Arkansas reported spending \$317.08 as the average cost per day per youth in 2013/14 to place a young person in a residential setting. Other costs reported per day include \$173.67 residential/Juvenile Treatment Center, \$143.33 for a residential/Juvenile Correctional Facility, \$77.92 for Juvenile Detention Centers, and \$74.67 for a specialty placement. Sheila Foster, Administrative Assistant to the Director of the Arkansas Division of Youth Service, email message to author, September 23, 2014.

⁴¹ Lisa J. Bjergaard, Director for the Division of Juvenile Services, North Dakota, email message to the author, September 25, 2014.

⁴² Nebraska operates two Youth Rehabilitation and Treatment Centers. In FY2013/14, YRTC-Geneva costs \$347.55 per girl per day and YRTC-Kearney costs \$271.90 per boy per day.

Division of Children and Family Services Office of Juvenile Services, *Youth Rehabilitation and Treatment Center-Kearney 2012-13 Annual Report* (Lincoln, NE: Nebraska Department of Health and Human Services), accessed August 18, 2014.

http://dhhs.ne.gov/children_family_services/Documents/YRTCKAnnualReport.pdf. Division of Children and Family Services Office of Juvenile Services, *Youth Rehabilitation and Treatment Center-Geneva 2012-13 Annual Report* (Lincoln, NE: Nebraska Department of Health and Human Services), accessed October 14, 2014. http://dhhs.ne.gov/children_family_services/Documents/YRTC-GAnnualReport.pdf.

⁴³ \$366.88 is the cost per day per juvenile for FY12 of the state-operated facilities. Other placement options include contract facilities (\$161.42), halfway houses (\$265.84), and assessment and orientation centers (\$100.17).

Criminal Justice Uniform Cost Report: Fiscal Years 2012 to 2012 (Austin, TX: Texas Legislative Budget Board, 2013).

www.lbb.state.tx.us/Public_Safety_Criminal_Justice/Uniform_Cost/Criminal%20Justice%20Uniform%20Cost%20Report%20Fiscal%20Years%202010%20to%202012.pdf.

⁴⁴ West Virginia operates 10 out-of-home placements ranging in cost from \$233.48 per day (Robert Shell) to \$387.58 per day (Sam Perdue) in FY2014. West Virginia Public Safety Task Force, *Requested Follow-up Data Analyses* (Charleston, WV: West Virginia Division of Juvenile Services, 2014).

⁴⁵ As of the date of the correspondence, cost per day for Mississippi's only state-operated James V. Maccarone, Director, Division of Youth Services, email message to author, September 23, 2014.

⁴⁶ As of the date of the correspondence, costs per youth per day for a long-term residential facility were \$426, evaluation center is \$154, detention is \$242, the wilderness program is \$111, foster care is up to \$142, group homes are \$83.23, intensive placements are an average of \$180.46, and shelter homes are \$50. Brett M. Macgargle, Associate Deputy for Planning and Programs South Carolina Department of Juvenile Justice, email message to author, September 24, 2014.

⁴⁷ In FY2012-13, the most expensive facility, Chatham, cost \$159,751 per average daily population. Other facilities operating in FY2012-13 include C.A. Dillion (\$125,452), Dobbs (\$133,927), and Stonewall Jackson (\$157,851).

Frank L. Perry and W. David Guice, Memorandum, *Youth Development Annual Report* (North Carolina Department of Public Safety Adult Correction and Juvenile Justice, October 1, 2013).

www.ncleg.net/documentsites/committees/JLOCJPS/Reports/FY%202013-14/DPS_Annual_Report_on_YDCs_2013_10_1.pdf.

⁴⁸ As of the date of correspondence, provider commitment was the most expensive post-adjudication placement per day per youth at \$473.49. State commitment costs \$460.09, while provider detention is

\$489.63 and state detention is \$458.66. Gerry Wright, Director of Finance, Massachusetts Department of Youth Services, email message to author, November 7, 2014.

⁴⁹ The per diem costs from January 1, 2013 through September 30, 2013 for public facilities per day (FY13) range from \$266.16-\$475.22. The cost of \$475.22 accounts for the expenditures for the W.J. Maxey Boys Training School that serves 49 youth. DHS' *FY14 Out-of-State Placement Rates Quarter 3 Report* (2014) reports the per diem cost for private facilities on average (as of July 1, 2014) to be \$236.33. Susan Kangas, Chief Financial Officer, Michigan Department of Human Services, *FY13 Public Placement Rates Report*, Report to the Michigan State Senate and Michigan House of Representatives, February 13, 2014 and Susan Kangas, Chief Financial Officer, Michigan Department of Human Services, *2014 DHS FY14 Out-of-State Placement Rates Quarter 3 Report*, Report to the Michigan State Senate and Michigan House of Representatives, July 8, 2014.

⁵⁰ In FY2012, the most expensive placement option, Riverside Youth Correctional Facility was \$481.67 per youth per day, including administrative costs. Pine Hills cost \$335.25 and the Youth Transition Centers cost \$369.48. Juvenile Parole was \$151.38 per day in FY2012. Montana Department of Corrections, *2013 Biennial Report* (Helena, MT: Montana Department of Corrections, 2012), accessed August 19, 2014. www.cor.mt.gov/content/Resources/Reports/2013BiennialReport.pdf.

⁵¹ The Albuquerque Boys' Center, the most expensive of the eight facilities operated by New Mexico in FY2013 is \$487.87 per youth per day. Other facility costs per youth per day: Youth Diagnostic & Development Center (\$451.36), John Paul Taylor Center (\$416.55), Camino Nuevo Youth Center (\$424.76), Eagle Nest Reintegration Center (\$394.08), Carlsbad Community Reintegration Center (\$344.58), Albuquerque Reintegration Center (\$320.45), and the San Juan County Detention Center (\$231.01). Children, Youth, and Families Department – Juvenile Justice Services, *FY 2013 Cost Per Client – Facilities* (Santa Fe, NM: Children, Youth, and Families Department, October 11, 2012).

⁵²The FY 2013 average annual cost per youth for Rhode Island's only training school was \$186,381 and it assumes an average daily placement of 110. The cost per youth increased from the FY 2012 average cost of \$174,129 because of fixed teacher costs.

Department of Children, Youth and Families, Staff Presentation, "FY 2013 Revised & FY 2014 Operating Budgets; FY 2014 - FY 2018 Capital Budget," March 28, 2013, accessed August 20, 2014.

<http://webserver.rilin.state.ri.us/housefinance/bnp/2013/DCYF%20FY%202014.pdf>.

⁵³The Nevada Youth Training Center (NYTC) is a 60-bed male youth facility located in Elko, Nevada, whose price per bed is \$323.21 per day in FY14. Caliente Youth Center (CYC) consists of a 100-bed male facility and a 40-bed female facility located in Caliente, Nevada, whose price per bed per day is \$189.25 in FY 14, and Red Rock Academy at Summit View (SV) is Nevada's only maximum secure facility with a 96-bed capacity total with 50 of those beds contracted with the State of Nevada Juvenile Services, which has a price per bed of \$535.36 in FY 2014. Steve McBride, Deputy Administrator of Juvenile Services, Nevada State Juvenile Justice Programs Office, email message to author, August 14, 2014.

⁵⁴ Budget estimates for FY2015 for institutional operations is \$537.35 and juvenile community programs is \$302.97. The average cost of detention in New Jersey counties is \$230 per day. Dawn M. Richardson, Administrative Assistant to the Executive Director, Juvenile Justice Commission, email correspondence October 9, 2014.

⁵⁵ For 2013, \$199,320 was the average cost of a bed for one year at the Hawaii Youth Correctional Facility (HYCF). Hawaii Juvenile Justice Working Group, *Final Report* (Honolulu: HI, Governor of the State of Hawaii, December 13, 2013). <http://governor.hawaii.gov/wp-content/uploads/2013/12/JJRI-Working-Group-Final-Report-Final.pdf>.

⁵⁶ The FY13 average per diem cost is \$554.80. Ohio Department of Youth Services, "Ohio Department of Youth Services: Factsheet," July 2014.

www.dys.ohio.gov/DNN/LinkClick.aspx?fileticket=v1BXaq1KVEM%3d&tabid=117&mid=885.

⁵⁷ The actual per capita cost for juvenile justice facilities in 2012-13 was \$208,338 (\$570.79 per day). The estimated cost for 2013-14 is \$260,653 (\$714.12) and the proposed budget for 2014-15 is \$274,102 (\$750.96). Department of Finance, *Governor's Budget. (Enacted). Section. 5225 Department of Corrections and Rehabilitation*, 2014. www.ebudget.ca.gov/2014-15/pdf/GovernorsBudget/5210/5225.pdf.

⁵⁸ New Hampshire's most expensive facility is the Sununu Youth Services Center's. The daily rate is \$588 as of the date of correspondence. The per diem includes maintenance costs for 156 acres of the property for 12 buildings, some of which are preserved at the request of the local Historical Society. The cost of preservation is included in the per diem. Anastasiya Vanyukevych, Senior Data Manager, New Hampshire Department of Youth and Families, email to author, October 10, 2014.

⁵⁹ The Connecticut Juvenile Training School's cost per day is \$607.41 as of September 30, 2014. Other out-of-home placement options include Residential Treatment Centers (weighted average of \$481.17), group home (\$451.07), substance abuse treatment facility (\$123.33), and multidimensional treatment foster care (\$99.60). Gary Kleeblatt, Communications Director, Connecticut Department of Children and Families, email to author, November 4, 2014.

⁶⁰ As of the date of the correspondence, Vermont operates one secure facility, Woodside, that is funded with Medicaid funds, includes both adjudicated and pre-adjudicated youth and costs \$615 per day to operate. Jay Simons, Woodside Director, Department for Children and Families, email message to author, September 30, 2014.

⁶¹ In FY2013, the average daily per capita cost for the most expensive placement option, Mountain View Youth Development Center is \$616.33. The other placement option, Long Creek Youth Development Center is \$416.62. Average daily per capita cost, 2013, is \$488.77; Maine Department of Corrections, *Per Capita Costs – General Fund – Normalized, Fiscal Year Ended June 30, 2013* (Augusta, ME: Maine Department of Corrections, 2013).

⁶²The Fairfax Detention Facility is \$712.38 per youth per day. The other 22 facilities range in cost from \$247.18 (Virginia Beach) to \$500.81 (Shenandoah Valley). The average per diem cost for 2013 was \$326 and was calculated from the per diem information for all detention facilities (excluding the Richmond Detention Home due to the closure) for 2013 as taken from Marc Booker, *2013 Annual Expenditure Report* (Richmond, VA: Department of Juvenile Justice), accessed August 14, 2014.

⁶³ \$761 is the FY2011 average daily cost per youth for the New Beginnings Youth Development Center. The average daily cost per youth for residential treatment centers is \$294, \$289 for therapeutic family homes, \$274 for group homes, \$232 for independent living programs, and \$228 for extended family homes. The City's detention center is \$522 per youth per day and shelter homes are \$253. D.C. Department of Youth Rehabilitation Services, *Annual Performance Report Fiscal Year 2011* (Washington, DC: Department of Youth Rehabilitation Services, 2012).

<http://dyrs.dc.gov/sites/default/files/dc/sites/dyrs/publication/attachments/2011%20DYRS%20Annual%20Performance%20Report.pdf>.

⁶⁴ In FY 2013, Hickey has the highest per diem cost at \$809 and \$295,178 for the average annual cost. The other 11 facilities range in cost from \$257 (Green Ridge) to \$705 (Carter). The average annual cost for all state-operated facilities in FY13 is \$341 or \$124,443. Baltimore City costs \$568 or annually, \$207,726.

Data Resource Guide: Fiscal Year 2013 (Baltimore, MD: Maryland Department of Juvenile Services, 2013). http://djs.maryland.gov/drg/Full_DRG_With_Pullouts_2013.pdf.

⁶⁵ \$966.20 is the Section 529 per diem rate for non-community based residential services for the interim calendar year 2011. Under Section 529 in 2011, the per diem rate for secure residential services was

\$659.76, limited secure residential services cost \$835.60, family foster care had a per diem cost of \$232.40, and evening reporting centers cost \$407.50. Administration, Administrative Directive: "Per Diem Chargeback Rates for OCFS-Operated Facilities and Programs –Interim Calendar Year (CY) 2011 Rates for January 1, 2011, through December 31, 2011" (Rensselaer, NY: New York State Office of Children and Family Services, February 3, 2012. [http://ocfs.ny.gov/main/policies/external/OCFS_2012/ADMs/12-OCFS-ADM-02%20Per%20Diem%20Chargeback%20Rates%20for%20OCFS-Operated%20Facilities%20and%20Programs%20%20Interim%20Calendar%20Year%20\(CY\)%202011%20Rates%20for%201-1-11%20through%2012-31-11.doc](http://ocfs.ny.gov/main/policies/external/OCFS_2012/ADMs/12-OCFS-ADM-02%20Per%20Diem%20Chargeback%20Rates%20for%20OCFS-Operated%20Facilities%20and%20Programs%20%20Interim%20Calendar%20Year%20(CY)%202011%20Rates%20for%201-1-11%20through%2012-31-11.doc).

⁶⁶*Annual Performance Report Fiscal Year 2011*, D.C. Department of Youth Rehabilitation Services, 2012; Richard Mendel, *Small is Beautiful* (Baltimore, MD: Annie E. Casey Foundation, 2004).

⁶⁷These key points were communicated as part of the findings of a survey of 140 juvenile justice stakeholders surveyed by the National Council on Crime and Delinquency. See Antoinette David, Angela Irvine, and Jason Ziedenberg, *Close to Home: Strategies to Place Young People in their Communities* (Oakland, CA: National Council on Crime and Delinquency, 2014). <http://nccglobal.org/what-we-do/our-focus-areas/juvenile-justice/youth-deincarceration>.

⁶⁸Shaena M. Fazal, *Safely Home: Reducing Youth Incarceration and Achieving Positive Outcomes for High and Complex Need Youth Through Effective Community-Based Programs* (Washington, DC: Youth Advocate Programs Policy and Advocacy Center, 2014); According a tip sheet released by the National Juvenile Justice Network, states could have saved \$333 million dollars by placing half of the young people committed to their custody in community-based programs in 2011. National Juvenile Justice Network, *Community-Based Supervision: Increased Public Safety, Decreased Expenditures* (Washington, DC: National Juvenile Justice Network, November 2014). www.njjn.org/uploads/digital-library/NJJN-YAP_CBA-costs_Nov2014_FINAL2.pdf.

⁶⁹Hawaii, Georgia, and Kentucky overviews were derived from the Pew Charitable Trusts Public Safety Performance Project summaries of their juvenile justice reform work. For more information on the reforms made in Hawaii, Georgia, and Kentucky, see www.pewtrusts.org/en/projects/public-safety-performance-project. More can be read about the Georgia reforms in information derived from the Annie E. Casey Foundation, see, Comprehensive Juvenile Justice Reform in Georgia, June 13, 2013, <http://www.aecf.org/blog/comprehensive-juvenile-justice-reform-in-georgia/>

⁷⁰ Ex-ante approach: Mark Cohen and Alex Piquero, "New Evidence on the Monetary Value of Saving a High Risk Youth," *Journal of Quantitative Criminology*, Vol. 2 (2009).

⁷¹ Mark Cohen and Alex Piquero, "New Evidence on the Monetary Value of Saving a High Risk Youth," *Journal of Quantitative Criminology*, Vol. 2 (2009).

⁷² Clive R. Belfield, Henry M. Levin, and Rachel Rosen, *The Economic Value of Opportunity Youth* (Washington, DC: Corporation for National and Community Service and the White House Council for Community Solutions, 2012). <http://files.eric.ed.gov/fulltext/ED528650.pdf>.

⁷³ For a multi-faceted discussion of costs borne by families of confined youth, see the recent report: Justice for Families, *Families Unlocking Futures: Solutions to the Crisis in Juvenile Justice* (Oakland, CA: Justice for Families, 2012). www.justice4families.org/media/Families_Unlocking_FuturesFULLNOEMBARGO.pdf. The report was based on a nine-state survey of 1,039 families.

⁷⁴ Edward P. Mulvey, *Pathways to Desistance: A Longitudinal Study of Serious Adolescent Offenders* (Washington, DC: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention, 2011).

http://www.pathwaysstudy.pitt.edu/documents/OJJDP%20Fact%20Sheet_Pathways.pdf.

⁷⁵ Elizabeth Seigle, Nastassia Walsh, and Josh Weber, *Core Principles for Reducing Recidivism and Improving Other Outcomes for Youth in the Juvenile Justice System* (Lexington, KY: Council of State Governments,

White Paper, 2014). www.oijj.org/sites/default/files/core-principles-for-reducing-recidivism-and-improving-other-outcomes-for-youth-in-the-juvenile-justice-system.pdf.

⁷⁶Gary Sweeten and Robert Apel, "Incapacitation: Revisiting an old question with a new method and new data," *Journal of Quantitative Criminology* 23, no. 4 (2007): 303-326.

<http://link.springer.com/article/10.1007%2Fs10940-007-9032-4>. Sweeten and Apel applied two methodological approaches—propensity score matching and fixed effects models—to the National Longitudinal Survey of Youth, a nationally representative sample of 8,984 individuals. The researchers used their models to estimate the effect of youth incarceration for 16- and 17-year-olds on future crimes and future arrests for each of the five years following incarceration. The approaches found a strong statistical relationship between incarceration and recidivism when comparing samples of arrested-but-not-incarcerated youth with incarcerated youth. Fixed-effects models used employ within-individual variation to obtain treatment effect estimates free of selection bias from unobservables that are immutable. Propensity score matching identifies untreated individuals who most closely resemble treated individuals on the basis of a large number of observed characteristics. A supplemental table provided by coauthor, Gary Sweeten, to the authors on May 28, 2014, to assist us with the analysis.

⁷⁷Jeffrey Lin, *Exploring the Impact of Institutional Placement on the Recidivism of Delinquent Youth* (New York, NY: New York University, Technical Report Submitted to the National Institute of Justice, 2007).

www.ncjrs.gov/pdffiles1/nij/grants/217590.pdf. In recognition of the challenges posed by selection bias, Lin also used propensity scoring methods to control for inter-group differences. The 18-month tracking period used by Lin is an extremely short post-incarceration tracking time frame for data generation used to determine the effect of incarceration on recidivism. Despite this shortcoming, we included Lin's study in this review given the paucity of studies that met our criteria for inclusion. Lin recognized the problem in his report: "Studies of recidivism must find a balance between allowing sufficient follow-up time and selecting a representative sample. Coding baseline measures at a point in the distant past allows for long follow-up periods, but at the expense of sample representativeness; the further back in time one goes for baseline evaluation, the less that the study's subjects look like their modern-day counterparts.

Conversely, a shorter follow-up period promotes greater similarity between sampled subjects and their contemporaries, but these short follow-up periods prevent analyses that explain any long-term impacts on recidivism." By modeling the propensity of each subject to be assigned by the Family Courts to the incarceration or probation sub-samples, Lin hoped "that this calculated propensity can "soak up" unobserved differences between the samples....and isolate the pure effect of incarceration." Both of Lin's statistical models produced estimated coefficients for incarceration that were positive in sign, small and statistically insignificant.

⁷⁸ Since the publication of Lin's work, New York City has implemented a Structured Decision-Making tool that helps the courts make more informed decisions around whether or not to confine youth, and the state has seen fewer youth placed from the city in upstate juvenile facilities. Lin's findings that there was no observed effect either way from confinement can mean that the impact of a placement is an "empty expense"—a cost of hundreds of dollars a day, or hundreds of thousands of dollars a year, having no impact of recidivism means the system has less money available to support more positive connections for youth. Implementing a Structured Decision-Making tool helps the system make better choices, consistent with scarce public resources.

⁷⁹Anna Aizer and Joseph Doyle. "Juvenile Confinement, Human Capital, and Future Crime: Evidence from Randomly Assigned Judges," *National Bureau of Economic Research Working Paper No. 19102*. (June 2013), currently undergoing revision for resubmission to *Quarterly Journal of Economics*. The paper has been conditionally accepted for publication at the *Quarterly Journal of Economics*.

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- ⁸⁰ Thomas Loughran et al., "Estimating a Dose-response Relationship between Length of Stay and Future Recidivism in Serious Juvenile Offenders," *Criminology* 47, no. 3 (2009).
- ⁸¹ T.R. Miller, M.A. Cohen, and B. Wiersema, *Victim Costs and Consequences: A New Look* (Washington, DC: National Institute of Justice, 1996).
- ⁸² Ex post approach: Kathryn McCollister, Michael French, and Hai Fang, "The Cost of Crime to Society: New Crime-Specific Estimates for Policy and Program Evaluation," *Drug and Alcohol Dependency* no. 108 (2010). www.ncbi.nlm.nih.gov/pmc/articles/PMC2835847/pdf/nihms170575.pdf.
- ⁸³ Mark Cohen and Alex Piquero, "New Evidence on the Monetary Value of Saving a High Risk Youth," *Journal of Quantitative Criminology*, Vol. 2 (2009).
- ⁸⁴ Multiplying by this term accounts for the fact that only a percentage of crimes are actually reported and lead to arrests. We use the "offense multiples" for juveniles utilized by Cohen and Piquero.
- ⁸⁵ All monetary estimates have been converted to 2011 dollars, which is the last year for which nationwide confinement data are available, using the Bureau of Labor Statistics' Consumer Price Index.
- ⁸⁶This is the jury award approach and the willingness to pay approach utilized by McCollister et al. and Cohen-Piquero, respectively.
- ⁸⁷ Costs in Washington State were converted to nationwide costs using a regional cost of living adjuster. Elizabeth K. Drake, Steve Aos, and Marna G. Miller, "Evidence-Based Public Policy Options to Reduce Crime and Criminal Justice Costs: Implications in Washington State," *Victims and Offenders*, no. 2 (2009): 170-196. Sylvia et al. "Efficiently Reducing Corrections Costs in Wisconsin: Applying the Washington State Model," *La Follette School Working Paper No. 2011-001*, December 2010. See also: Stephanie Klietz, Charles Borduin, and Cindy Schaeffer, "Cost Benefit Analysis of Multisystemic Therapy with Serious and Violent Juvenile Offenders," *Journal of Family Psychology* 24, no. 5 (2010).
- ⁸⁸ Robert Apel and Gary Sweeten, *The Effect of Criminal Justice Involvement in the Transition to Adulthood* (Washington, DC: United States Department of Justice and the National Institute of Justice, 2009). www.ncjrs.gov/App/publications/abstract.aspx?ID=250399.
- ⁸⁹ James H. Keeley, "Will Adjudicated Youth Return to School After Residential Placement? Results of a Predictive Variable Study," *The Journal of Correctional Education* 57, no. 1 (2006): 65-85.
- ⁹⁰ D. Wayne Osgood, E. Michael Foster, and Mark E. Courtney, "Vulnerable Populations and the Transition to Adulthood," *Transition to Adulthood* 20, no. 1 (2010). <http://futureofchildren.org/publications/journals/article/index.xml?journalid=72&articleid=527>.
- ⁹¹ Wendy Cavendish, "Academic Achievement During Commitment and Post Release Education Related Outcomes of Juvenile Justice Involved Youth With and Without Disabilities," *Journal of Emotional and Behavioral Disorders* 22, no. 1 (2013): 41-52.
- ⁹²Gary Sweeten, "Who Will Graduate? Disruption of High School Education by Arrest and Court Involvement," *Justice Quarterly* 23, no. 4 (2006).
- ⁹³ Randi Hjalmarsson, "Criminal Justice Involvement and High School Completion," *Journal of Urban Economics* 63, (2008): 613-630.
- ⁹⁴ Chris Chapman, Jennifer Laird, and Angelina Kewal Ramani, "Trends in High School Dropout and Completion Rates in the United States," *NCES 2012 006* (2011).
- ⁹⁵ Andrew Sum, Ishwar Khatiwada, and Joseph McLaughlin, "The Consequences of Dropping Out of High School: Joblessness and Jailing for High School Dropouts and the High Costs for Taxpayers," *Center for Labor Market Studies Publications* 23 (2009).
- ⁹⁶ Bruce Western, and Katherine Beckett, "How Unregulated is the U.S. Labor Market? The Penal System as a Labor Market Institution," *American Journal of Sociology* 104 (1999): 1030-1060.
- ⁹⁷ Bruce Western, "The Impact of Incarceration on Wage Mobility and Inequality," *American Sociological Review* 64, no. 4 (2002): 526-546.

⁹⁸ David S. Kirk, and Robert J. Sampson, "Juvenile Arrest and Collateral Educational Damage in the Transition to Adulthood," *Sociology of Education* 86, no. 1 (2013): 36-62.

⁹⁹ Each of the three studies considered GED recipients to be high school dropouts, who typically spend significantly fewer years in high school and who earn considerably less than high school graduates.

¹⁰⁰ The authors analyzed a nationwide sample of youth from the National Longitudinal Surveys in 1997. The propensity-matching and fixed-effects methods utilized by the authors produced a fairly narrow range of estimates of the impact of youth incarceration on the failure to complete high school. See Robert Apel and Gary Sweeten, *The Effect of Criminal Justice Involvement in the Transition to Adulthood* (Unpublished report to the U.S. Department of Justice, 2009).

¹⁰¹ Hjalmarsson's analysis applied a fixed-effects approach to a nationwide sample of about 9,000 youth in order to isolate the impact of juvenile arrests, court appearances, convictions, and confinement on whether youth went on to graduate from high school. Randi Hjalmarsson, "Criminal Justice Involvement and High School Completion," *Journal of Urban Economics* 63 (2008): 613-630.

¹⁰² Anna Aizer and Joseph Doyle. "Juvenile Confinement, Human Capital, and Future Crime: Evidence from Randomly Assigned Judges," *National Bureau of Economic Research Working Paper* No. 19102 (June 2013), currently undergoing revision for resubmission to *Quarterly Journal of Economics*. [The paper has been conditionally accepted for publication at the Quarterly Journal of Economics..](#)

¹⁰³ Broad policy decisions in education can be framed around a simple question: Do the benefits to society of investing in an educational strategy outweigh the costs? We provide an answer for those individuals who currently fail to graduate from high school. The present cohort of 20-year-olds in the U.S. today includes over 700,000 high school dropouts, many from disadvantaged backgrounds. We investigate the economic consequences of improving their education. First, we identify five leading interventions that have been shown to raise high school graduation rates, and we calculate their costs and their effectiveness. Second, we add up the lifetime public benefits of high school graduation. These include higher tax revenues as well as lower government spending on health, crime, and welfare. (We do not include private benefits such as higher earnings.) Next, we compare the costs of the interventions to the public benefits. We find that each new high school graduate would yield a public benefit of \$209,000 in higher government revenues and lower government spending for an overall investment of \$82,000, divided between the costs of powerful educational interventions and additional years of school attendance leading to graduation. The net economic benefit to the public purse is therefore \$127,000 per student and the benefits are 2.5 times greater than the costs. If the number of high school dropouts in each age cohort was cut in half, the government would reap \$45 billion via extra tax revenues and reduced costs of public health, of crime and justice, and in welfare payments. If there is any bias to our calculations, it has been to keep estimates of the benefits conservative. Sensitivity tests indicate that our main conclusions are robust: the costs to the nation of failing to ensure high school graduation for all America's children are substantial. Educational investments to raise the high school graduation rate appear to be doubly beneficial: the quest for greater equity for all young adults would also produce greater efficiency in the use of public resources. See Henry Levin, Clive Belfield, Peter Muennig, and Cecilia Rouse, *The Costs and Benefits of an Excellent Education for All of America's Children* (New York, NY: Teacher's College Columbia University, 2007).

www.literacycooperative.org/documents/Thecostsandbenefitsofanexcellenteducationforamerchildren.pdf.

¹⁰⁴ JPI supports the opportunity for individuals to take part in Medicaid- and Medicare-related services, if they are deemed eligible due to their income or other qualifying status. That said, if a young person can successfully transition to adulthood and gain health care through their employer, we would see this as a more successful outcome, consistent with the goals of the *Affordable Care Act*.

¹⁰⁵Levin et al. in *The Costs and Benefits of an Excellent Education for All of America's Children* applied economic models, such as TAXSIM, to the 2004 Current Population Survey, the Medical Expenditure Panel Survey, and National Health Accounts data to estimate the present values of average lifetime earnings, tax payments, and Medicaid and Medicare costs for individual male and female high school graduates and non-graduates among racial and ethnic subpopulations. Earnings and tax data for each subpopulation were adjusted using the U.S. Census Bureau's "Historical Income Tables," Table P-1: "Total CPS Population and Per Capita Income." Medicaid and Medicare spending data were adjusted using a weighted average of increases in per-enrollee costs for Medicaid and Medicare from data provided by the Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group (www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/tables.pdf) and Christopher Truffer et al., *2012 Actuarial Report on the Financial Outlook for Medicaid* (Washington, DC: U.S. Department of Health and Human Services, 2012). <http://medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Financing-and-Reimbursement/Downloads/medicaid-actuarial-report-2012.pdf>.

¹⁰⁶ The authors calculated the difference in projected lifetime earnings for high school graduates compared to high school dropouts across racial and ethnic groups and by gender (female and male). Using the same three studies, the authors also estimated the range of lost earnings and increased reliance on Medicaid and Medicare spending due to youth confinement across different racial and ethnic categories of youth, by gender (female and male).

¹⁰⁷ The findings of the White House Council and this report are similar. The average cost per opportunity youth in the White House Council study was roughly \$700,000 while the average cost in this study per youth due to lost educational opportunities resulting from youth confinement was about \$560,000.

¹⁰⁸ Elizabeth Harrington, "Ex-employee at state juvenile detention center charged with sexual battery of a minor housed there," *WPTV* (West Palm Beach, FL), August 28, 2014. www.wptv.com/news/region-okeechobee-county/employee-at-state-juvenile-detention-center-charged-with-sexual-battery-of-a-minor-housed-there.

¹⁰⁹Richard Mendel, *No Place for Kids* (Washington, DC: Annie E. Casey Foundation, 2011).

¹¹⁰Centers for Disease Control and Prevention, *Effects on Violence of Laws and Policies Facilitating the Transfer of Youth from the Juvenile to the Adult Justice System: A Report on Recommendations of the Task Force on Community Preventive Services*, MMWR, November 30, 2007, vol. 56, no. RR-9.

¹¹¹ Allen Beck and David Cantor, *Sexual Victimization in Juvenile Facilities Reported by Youth* (Washington, DC: National Survey of Youth in Custody, U.S. Department of Justice, Bureau of Justice Statistics, 2013).

¹¹²Andrea J. Sedlak, Karla S. McPherson, and Monica Basena, *Nature of Risk of Victimization: Findings from the Survey of Youth in Residential Placement* (Washington, DC: U.S. Department of Justice, Office of Justice Programs, Office of Delinquency Prevention, 2013), accessed August 31, 2014. www.ojjdp.gov/pubs/240703.pdf.

¹¹³ For example, the 2003 *Survey of Youth in Residential Placement*, which surveyed a wide range of types of confinement facilities, found that 29 percent of youth in custody said they were beaten or threatened with being beaten, 16 percent of those assault victims (5 percent of youth in custody) said that a weapon was involved in their attack or threatened attack, 29 percent of assault victims claimed they were injured. Victims reported an average of nine or more assaults or threatened assaults while in their current facilities: only 18 percent said they were victimized only once, and 10 percent of surveyed youth said that someone used force or threat of force to steal their personal property, with 28 percent of the victims saying that a weapon was used and 34 percent saying that they were injured as a result of the incident.

¹¹⁴ This is likely to be a conservative estimate given that the 2008-09 survey found that 6.2 percent of youth were sexually assaulted.

¹¹⁵ Present values of the costs of the offenses in the two tables were derived from the respected and much-utilized 2010 cost-of-crime study by McCollister et al. (2010) and Cohen and Piquero (2009).

¹¹⁶ Andrew Smith, "Montgomery County Court Youth Program Seen as Saving Lives," *Dayton Daily News*, August 8, 2014. www.daytondailynews.com/news/news/crime-law/montgomery-county-court-youth-program-seen-as-savi/ngxgD/.

¹¹⁷ Piquero, Alex et al. "Public Preferences for Rehabilitation Versus Incarceration of Juvenile Offenders: Evidence From A Contingent Valuation Survey," *Criminology & Public Policy* 5, no. 4 (2006).

¹¹⁸ Richard Mendel, *No Place for Kids* (Washington, DC: Annie E. Casey Foundation, 2011).

¹¹⁹ Jeffrey A. Butts, Gordon Bazemore, and Aundra Saa Meroe, *Positive Youth Justice- Framing Justice Interventions Using the Concepts of Positive Youth Development* (Washington, DC: Coalition for Juvenile Justice, 2010).

¹²⁰ Correspondence, September 14, 2012. Chief Probation Officers Juvenile Hall Superintendents, Camp Superintendents. Maryland Department of Juvenile Services, *Data Resource Guide Fiscal Year 2013* (Baltimore, Maryland: Department of Juvenile Services, 2014). Ohio Department of Youth Services Data Summary, accessed July 2014.

¹²¹ Phil Harris, Brian Lockwood, and Liz Menges, *White Paper: Defining and Measuring Recidivism* (Braintree, MA: Council of Juvenile Corrections Administrators, 2009).

<http://cjca.net/attachments/article/55/CJCA-Recidivism-White-Paper.pdf>.

¹²² For more information on the Washington State Institute for Public Policy, visit their website at www.wsipp.wa.gov/BenefitCost.

¹²³ See the work of the Oregon Criminal Justice Commission, www.oregon.gov/cjc/docs/cost_benefit_methodology_090106.pdf, accessed August 31, 2014, and the Vera Institute of Justice Cost Benefit Analysis Unit's work in North Carolina and other states, www.vera.org/project/cost-benefit-analysis-raising-age-juvenile-jurisdiction-north-carolina, accessed August 31, 2014.

¹²⁴ The Standardized Program Evaluation Protocol (SPEP), developed by Dr. Mark Lipsey and his colleagues, is a validated, data-driven rating scheme for determining how well an existing program matches research about the effectiveness of that particular type of intervention for reducing recidivism. The SPEP is based on a meta-analysis of over 500 programs from the last 20 years. These analyses have investigated the general program characteristics that are most strongly associated with reductions in the reoffense rates of the youth served. The SPEP is the operationalization of this information. It allows both brand-name programs (e.g., Functional Family Therapy, Aggression Replacement Training) and non-brand name programs or services (e.g., group therapy, social skills training, etc.) to be linked to a large body of experimental and quasi-experimental research on program effectiveness. The SPEP can be used to compare the characteristics and outcomes of specific programs as implemented to the main characteristics and outcomes the research shows to be associated with the effectiveness of such programs for reducing recidivism. Lipsey has found that the effects of juvenile delinquency intervention programs are mainly related to four key features: the primary service provided, the quantity of service, the quality of service delivery, and the risk level of the youth served. These four predictors of recidivism effects serve as the foundation of the SPEP. Simply put, SPEP serves as a practical way for the juvenile justice system and program providers to evaluate their programs in a standardized, evidence-based, and sustainable manner. The diagnostic information provided by that evaluation, in turn, can guide program improvement and determine cost-effectiveness. For more information, see <https://my.vanderbilt.edu/spep/>.

ABOUT THE ORGANIZATION

Justice Policy Institute is a national nonprofit organization that changes the conversation around justice reform and advances policies that promote well-being and justice for all people and communities. Our research and analyses identify effective programs and policies, and we disseminate our findings to the media, policymakers, and advocates, and provide training and technical assistance support to people working for justice reform.

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