

The Value of Harms Avoided: Calculating the Cost of a Fragmented System of Social Services

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Introduction

Young people who experience disruptive, and sometimes traumatic, events such as homelessness, foster care placement, incarceration, unmet mental and physical health needs, or other drivers of chronic instability rely on our nation's child-serving agencies for the resources and support they need to navigate their circumstances, heal from trauma, and return to school, work, and life as healthy, productive participants in their communities. Unfortunately, too often that return to school, work, and life is not a stable or direct path. Rather, research suggests that many of the young people who experience these kinds of trauma have short- and long-term outcomes that lag their peers in terms of educational achievement, employment, income, and overall health and wellness.¹ In addition, many youths navigate several of these circumstances simultaneously or in quick succession, and the negative outcomes of these experiences tend to compound. For example, young people who age out of the foster care system are more likely to be homeless, experience unplanned or unwanted pregnancies, or end up in jail.² Youth who are incarcerated are more likely than non-incarcerated peers to be homeless after release.³

There are many reasons that existing service agencies struggle to provide young people with the supports needed to avoid negative outcomes in adulthood. Many child-serving agencies face high rates of staff turnover, large caseloads, and limited funding.⁴ Distrust between agencies and families can make it difficult to provide needed services.⁵ And the fragmented, siloed nature of child-serving agencies means that agencies aren't sharing information, which can result in wasted funds and resources, overlapping or duplicative services, and gaps in support for families.⁶ There's no easy solution to these challenges. But one lever politicians and policymakers consistently pull when seeking to fix the system is funding. Cutting funding, increasing funding, using existing funding differently . . . proposals and legislation are all over the map, with no clear solutions in sight.

While far from a solution, what could help move the conversation forward is a more nuanced understanding of what's actually being spent to "reactively" address the traumatic, disruptive events that young people face, in comparison to what would be spent if these events were addressed more proactively. Some research attempts to quantify the costs and long-term financial impact of a given disruption; a 2014 report published by the Justice Policy Institute, for example, calculates the "full price tag" of youth incarceration.⁷ A 2015 report by the National Council for Adoption looked at the human, social, and economic cost of youth who age out of the foster care system.⁸ These and other similar efforts go a long way to expanding our understanding of the true "cost" of disruptive events on both the young people themselves and society as a whole. But they don't go far enough. To our knowledge, no one has attempted to calculate the cost of the current system *and* weigh it against the cost savings of a more coherent system—one in which a young person's initial involvement with a child-serving agency fully addresses their needs and provides a supported path to return to school, work, and life.

That's where this brief comes in. We've attempted to calculate both the cost of the current system across multiple disruptions that young people might face and the cost of a hypothetical

system in which the first intervention works—allowing the individual to leverage support systems in the future at the rate and cost of a person who did not experience a disruptive event as a child. We don't assume the eradication of the foster care system, for example, but we imagine a scenario in which foster care placement is no longer a predictor of later poor life outcomes, such as homelessness,⁹ incarceration,¹⁰ or un- or under-employment¹¹ but instead serves to stabilize a child's life and enable them to continue on a streamlined educational pathway on par with their peers.

Based on our calculation, such a system could free up more than **\$1.5 trillion** over the lifetimes of the cohort of youth currently served by care agencies. That is roughly \$612,000 per person currently served by any one system. Those dollars could be reinvested in communities, providing additional funds to schools, healthcare services, the environment, or anything else.

The rest of this brief details the methodology we used to arrive at this estimation. The Appendix includes a list of our sources as well as notes on data limitations and any assumptions we had to make. However, it's worth noting up front that our analysis relies heavily on existing research on the short- and long-term financial and societal costs of traumatic events that young people experience and is therefore only as good as the underlying research. We were judicious in choosing the highest-quality research available, but these kinds of calculations are incredibly complex. Young peoples' lives take many trajectories, and calculating costs—especially abstract costs “to society”—remains difficult. We've also limited our analysis to a small number of potential disruptive events that young people may face, and we correlate those events to a small number of adult outcomes. This is by no means a perfect calculation; there's lots of room for improvement—and we wholeheartedly invite others to improve upon it—but we hope it can serve as a meaningful starting point about the costs of the current system and the dollars that could be saved and reinvested elsewhere if the system worked better.

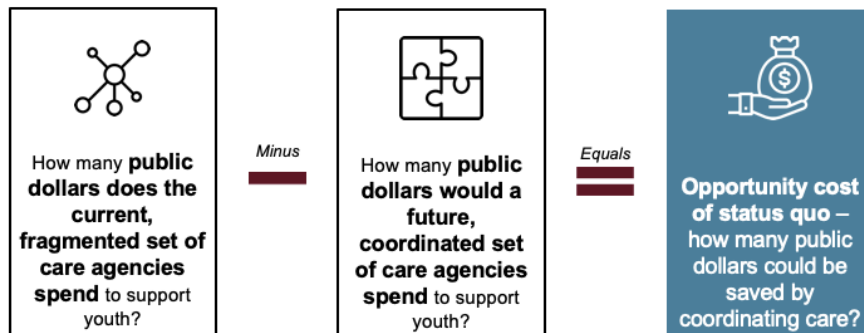
Overview of our approach

We set out to answer three key questions, summarized in Figure 1 below:

- (1) *What is the cost of the current system?* We know that any time a young person accesses services from a government agency, there are costs. Research also tells us that, on average, young people who experience disruption and trauma rely more heavily on the social service net as adults than those who did not experience disruption and trauma. As a result, we estimate the cost of the current system by calculating both immediate and future costs.
- (2) *What would costs look like if the first intervention worked?* We recognize that no system can ever fully eliminate disruptive and traumatic events. However, we believe that the system can get *better* at addressing those circumstances, ultimately allowing young people to receive the support and healing they need to achieve the same life outcomes as their peers. Here, again, we calculate immediate and future costs, estimating costs to the system if a disruptive or traumatic event in youth or young adulthood predicted neither additional traumatic events in youth nor greater-than-average reliance on social services in adulthood.

(3) *What is the “value of harms avoided”?* Here, we look at the difference between the current system and one in which the first intervention worked. How many dollars could be saved and repurposed elsewhere in the community?

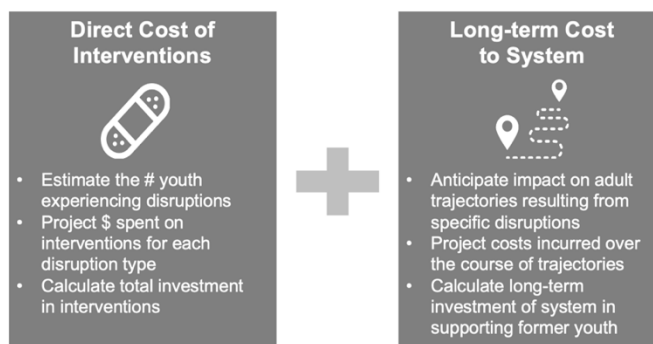
Figure 1. Calculating the “value of harms avoided”



What is the cost of the current system?

Our process for estimating the cost of the current system was straightforward (see Figure 2). We estimated the overall cost of a disruption as the sum of public dollars spent in two cost buckets: the immediate, direct cost of the intervention (e.g., the cost to incarcerate a young person for a specified period) plus the long-term, future cost to the system (e.g., the cost to the system for incarcerating an adult, given the greater-than-average likelihood that an individual incarcerated as a young person will also be incarcerated as an adult).¹²

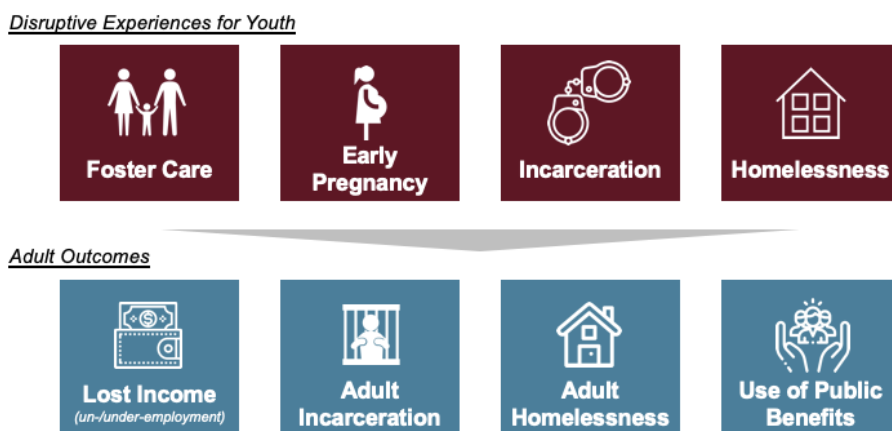
Figure 2. Calculating the cost of a disruption



As summarized in Figure 3, our calculation includes cost estimates for four disruptive, often traumatic experiences that young people might face: foster care placement; early, unplanned, and unwanted pregnancy; incarceration; and homelessness. It also includes cost estimates for the public impact of those disruptive experiences on adult outcomes in four categories: lost income (resulting from lower education outcomes and un-/under-employment), adult incarceration, adult homelessness, and use of public benefits.

We recognize that these are by no means the only disruptive events young people face. From caring for sick family members to working full time to struggling with unmet mental health needs, many things can disrupt young peoples' short- and long-term education and life trajectories. We chose to focus on four disruptive events that are known, counted, and have research documenting their correlational and causal relationships with negative adult outcomes. (Research tells us, for example, that young people who are incarcerated face worse mental and physical health outcomes,¹³ are less likely to graduate from high school,¹⁴ are less likely to be stably employed,¹⁵ and are more likely to be incarcerated as adults.¹⁶ Youth who are homeless face similarly poor long-term outcomes. They are more likely to abuse substances, suffer from mental health problems, and face barriers to education and employment.¹⁷)

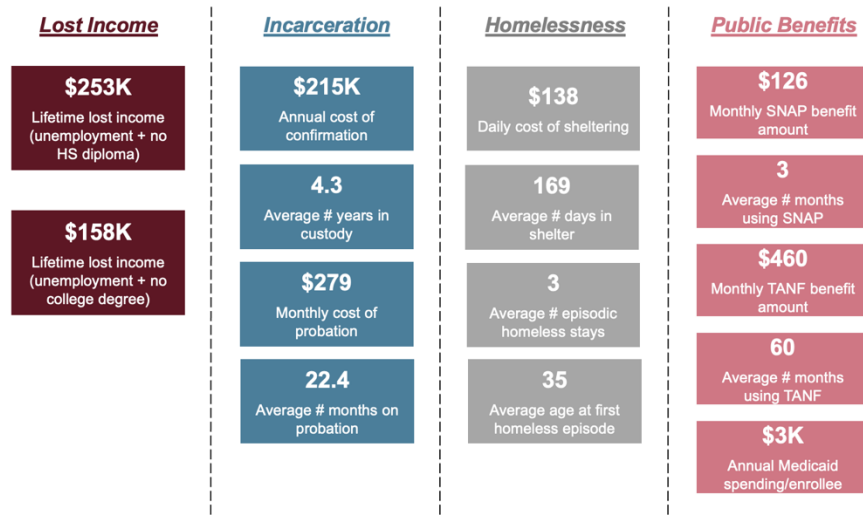
Figure 3. Disruptive youth experiences and corresponding adult outcomes



Despite the breadth of experiences and outcomes, we selected four youth experiences and four adult outcomes that are known and countable to make our estimation as concrete and reliable as possible. We conducted a three-step calculation to estimate the cost of the current system, including both direct costs and long-term costs. We began by calculating the direct costs associated with each of the four disruptive events that youth face. For example, we know that 672,594 young people nationwide were served by the foster care system in 2019,¹⁸ the median number of months a young person spends in the foster care system is 14.7,¹⁹ and the average monthly cost of foster care is about \$38 (in 2021 inflation-adjusted dollars).²⁰ By multiplying these numbers together, we estimate that the direct cost of the foster care system is approximately \$376 million. We repeated this calculation for each of the four disruptive events identified in Figure 3 (see the Appendix for a detailed list of inputs and sources for each).

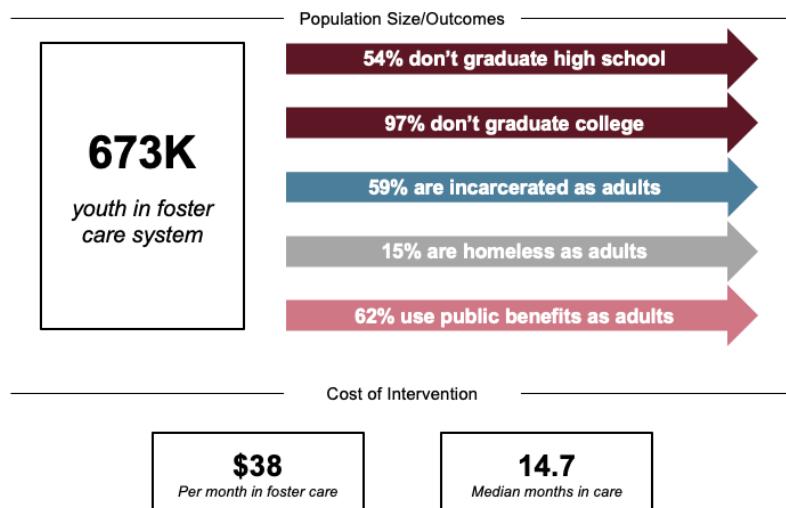
The second step was to estimate the costs of the four adult outcomes identified in Figure 3 (see Figure 4 for a list of inputs and the Appendix for a detailed list of sources). We used a similar calculation to the one we used to estimate direct costs for youth services, determining, for example, the daily cost of sheltering a homeless adult (\$38),²¹ the average number of days an adult is homeless (169),²² and the average number of homeless episodes an adult has in their lifetime (3).²³ This tells us that the cost to the system for each homeless adult is approximately \$19,000 over that individual's lifetime.

Figure 4. Calculating the costs of adult outcomes



We then used existing research to help us understand the relationship between each youth event and each adult event (see Figure 5). For example, research tells us that only about 46% of young people in foster care graduate from high school (54% do not),²⁴ just 3% earn a bachelor’s degree (97% do not),²⁵ 59% will be incarcerated as adults,²⁶ 15% will experience homelessness as adults,²⁷ and 62% will use public benefits at some point during adulthood.²⁸

Figure 5. Calculating adult outcomes and costs associated with foster care placement



Using the research-based percentages of individuals who experience each disruptive event as youth who go on to experience each adult outcome, we estimated both the direct costs and the future costs of the current system. For example, slightly less than 15% of youth in foster care (97,526 youth) go on to experience homelessness as adults (see the gray line in Figure 5). At

an average of \$138 per day for an average of 169 days (see the gray Homelessness column in Figure 4), the total cost to shelter the 97,526 homeless adults who were previously in foster care is more than \$6.8 billion.

We repeated this calculation for each of the disruptive events youth may face and correlated adult outcomes. Based on these calculations, we estimated that the total cost of these four disruptions (including both the immediate, direct costs and the long-term, future costs) over the lifetime of the youth currently receiving services from care agencies is **\$1.7 trillion, the vast majority of which is unnecessary cost.**

What would costs look like if the first intervention worked?

We used a similar approach to calculate the costs of a hypothetical system where individuals who experience a disruptive event as a young person *do not* go on to face adverse additional disruptive events in youth or adult outcomes at rates consistent with the current system. To make this calculation, we made two key assumptions. The calculations for each of these assumptions are detailed below:

1. Youth who come into contact with care agencies as a result of foster care placement; early, unwanted, and unplanned pregnancy; homelessness; or incarceration will receive the support they need to avoid subsequent disruptions in youth.
2. Youth who are effectively supported will experience adult trajectories and outcomes similar to those of the average population.

Assumption 1: Youth who come into contact with care agencies avoid subsequent disruptions in youth. While we do not assume that the future system will eliminate all causes of disruption and trauma, we do assume that the system will be effective enough that a young person's first contact with that system will provide them with the support, resources, and healing necessary to return to a trajectory similar to that of their peers. In other words, the system would continue to bear the immediate costs for each young person who enters the foster care system or who has a baby. But the supports that system provides to that young person would be effective enough to eliminate subsequent disruptions in youth that are correlated through research with a placement in foster care or an early pregnancy. For example, research suggests that 20% of youth experiencing homelessness subsequently experience early, unwanted, and unplanned pregnancies.²⁹ Currently the system would bear the immediate costs associated with homelessness and, for 20% of youth experiencing homelessness, the costs of early, unplanned, and unwanted pregnancies. But in a future system where we assume that contact with homeless services will put that young person back on the same trajectory as their peers and eliminate subsequent pregnancy, we reduce the total population of pregnant young people by the 20% of youth who were homeless and subsequently pregnant.

Assumption 2: Youth who come into contact with care agencies will experience adult outcomes and trajectories similar to the population average. Similar to the previous assumption, we do not assume that the future system will eliminate all adverse outcomes in adulthood. However, we do assume that interaction with the system in youth will ensure that young people have adult outcomes similar to the population average. For example, in the current state, research tells us that high school graduation rates are much lower for young people who experience disruption: While 88% of all Americans graduate high school,³⁰ just 46% of youth in foster care,³¹ 50% of youth who experience an early pregnancy,³² 75% of youth who are incarcerated,³³ and 66% of youth who experience homelessness go on to graduate high school.³⁴ In the future state, we

assume that all of the young people who experience a foster care placement, an early pregnancy, incarceration, or homelessness will go on to graduate at the same rate (90%) as their peers.

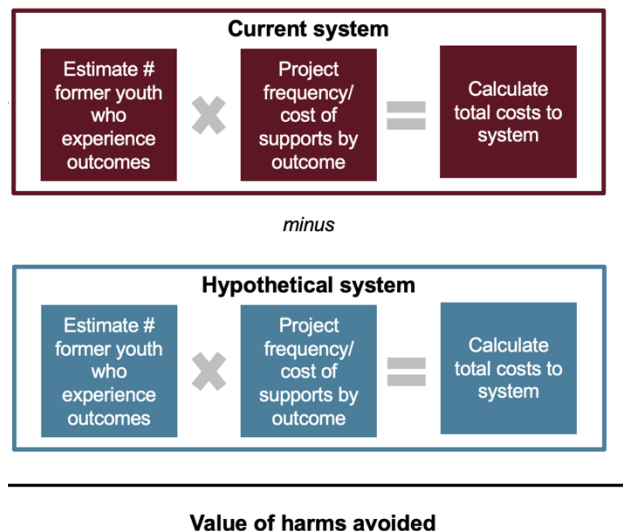
Using these assumptions, we adjusted the inputs to the current and future cost calculations described in the previous section and reran the math. (Importantly, we subtracted from the number of youth experiencing each event the number of youth for whom that was a second event, using the methodology described in Assumption 1 above. As a result, the total number of youth experiencing each disruption is smaller in this future state.)

Based on these calculations, we estimated that the total cost of these four disruptions in a hypothetical future system where young peoples’ needs were met upon first intervention amounts to approximately **\$204 billion** over the lifetimes of the youth currently receiving services from care agencies.

What is the “value of harms avoided”?

To understand the “value of harms avoided” — in other words, the dollars that could be saved and reinvested elsewhere in the community if young people got the support and healing they needed from their first intervention by a government agency — we simply subtracted the cost of a system where the first intervention worked from the cost of the current system (see Figure 6). This dollar amount represents the amount of money that could be saved and reinvested in the community if interventions worked to address young peoples’ needs the first time they came into contact with an agency.

Figure 6. Calculating the “value of harms avoided”



Based on this calculation, the value of harms avoided is approximately **\$1.5 trillion** — more than \$612,000 over the lifetimes of each young person currently in the system.³⁵ These funds could be saved and reinvested in communities if our care agencies could better provide the kind

of support a young person experiencing disruption needs to return to school and an educational trajectory alongside their peers.

Limitations to our approach

As noted in the introduction, this brief describes an initial attempt to calculate the current cost of disruptive events in a system that does not reliably or regularly provide young people with the resources and supports they need to experience adult outcomes on par with their peers. There are several limitations to our approach, described below. Importantly, these limitations should not be seen as undermining the calculation entirely but rather as an opportunity for other analysts and researchers to improve on our work. We're offering both a starting point and an invitation to do it better. With that in mind, we want to acknowledge those limitations in our work.

First and foremost, available data are, to put it mildly, limited. Because agencies operate independently from one another, they capture data independently — meaning it's very likely that thousands of young people are counted two, three, or more times across different systems. We cannot, and did not attempt to, fix that underlying issue. In addition, agencies count the people in their care differently. For example, counts of individuals experiencing homelessness are often reported as point-in-time counts, meaning that the data reflect the number of people receiving services on a given day. Those point-in-time counts aren't typically averaged over a month or a year. Similarly, counts of young women giving birth are typically totaled over the course of a fiscal year. Where possible, we adjusted data to be consistent.

We also rely exclusively on numbers gleaned from existing research to understand, for example, the rate of youth in foster care who end up homeless as adults or the rate of youth who are incarcerated who end up relying on public benefits as adults. Each of these individual studies is bound by particular contexts, and include their own assumptions and limitations. Therefore, our aggregation of data across multiple reports no doubt creates fundamental inconsistencies within our analysis.

Second, research tells us that traumatic events often compound. Youth who have been homeless or in foster care are more likely to be incarcerated than their peers,³⁶ while youth exiting the justice system or the foster care system are more likely to end up homeless.³⁷ Pregnant and parenting youth often face additional barriers if they are also homeless or in the foster care or juvenile justice systems.³⁸ These are complicated cycles, and one disruptive event often cascades into many more, compounding the adversity these young people face and the barriers to their success and livelihood as adults. Compounded events likely lead to even worse outcomes for young people. We did not try to model these compounding impacts in this calculation. (We did, however, attempt to model what happens to costs in a system that supports young people upon their first interaction, where an initial disruptive event *does not* lead to subsequent disruptive events.)

Third, this calculation only captures the effects of four concrete disruptions that youth experience and four discrete adult outcomes. Many other life circumstances can disrupt a young person's life, from hospitalization to needing to work full time. Many of these events are uncounted and, often, uncountable. These experiences often result in adult outcomes that we did not attempt to capture here, such as increased medical costs associated with higher rates of mental health service usage stemming from childhood trauma. This model does not make any attempt to account for experiences or outcomes outside of those explicitly listed here.

Finally, we do not attempt to model the impact of any particular “solution” to fix the current system. As described in the introduction, there are many reasons that the current system gets the outcomes it does, from budget and staffing challenges in individual agencies to broader, systemic problems, like fragmentation across agencies. We don’t attempt in this calculation to disentangle these challenges, and we also don’t attempt to model the impacts on the system of a particular approach. Instead, we simply hypothesize a future state in which the system works as it should, the first time a young person interacts with it.

Conclusion

Taxpayers spend millions of dollars annually on services to support young people when they experience traumatic, disruptive events. There are a host of reasons why it’s often difficult for young people to get the services they need to manage their circumstances, heal from trauma, and return to school, work, and life. Without this support and healing, these young people go on to experience challenges in adulthood, including homelessness, incarceration, reliance on public benefits, and un- and under-employment, at rates much higher than their peers.

We wanted to understand how much money could be repurposed for other investments if these systems worked most of the time. This is by no means an authoritative model; rather, it is an initial attempt to build a coherent model across multiple, siloed data sets. There’s a lot of room for improvement here, and this is an open invitation to other scholars, researchers, and academics to build on what we’ve begun.

Appendix

As described in the limitations section of this report, we rely on data from a wide variety of sources, including government agencies and nonprofits, as well as on research by universities, think tanks, and other organizations. The data do not align perfectly across all these sources; however, we feel that the data we included are the best, most reliable sources of data that exist given the differences in how agencies and organizations collect and report information.

Throughout our review of data and research, we sought to balance reliability with recency. As a result, some of the cost estimates found in the sources above are quite old. We applied a 2% inflation rate to convert all dollar amounts to 2021 dollars. This inflation rate was also applied to the long-term cost estimations, inflating the annual cost of the adult outcome to the year in which the adult is expected to experience it.

The following tables provide links to the sources we used for all our data inputs, as well as any notes, caveats, or assumptions we made when we used those data in the model.

Table 1. Age ranges of youth included in calculations

Disruption	Age ranges of youth
Foster care placement	All individuals ages 0-20
Early, unplanned, unwanted pregnancy	All females under 19
Incarceration	All youth included in the state juvenile justice system (0-18), state adult system (ages 18-24), and federal justice system
Homelessness	In calculating direct costs to the system, we included only those children and youth 0-18 (unaccompanied or in families) classified as sheltered homeless. In projecting the impact of homelessness on adult outcomes, we included all children and youth 0-18 (unaccompanied or in families) classified as sheltered, unsheltered, and “doubled-up.”

Table 2. Data sources for inputs to current state calculations for youth disruptive events

Data point	Source	Notes
Foster care		
Total youth in foster care	“The AFCARS Report: Preliminary FY 2019 Estimates as of June 23, 2020 — No. 27,” U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children’s Bureau, https://www.acf.hhs.gov/sites/default/files/documents/cb/afcarsreport27.pdf .	
Average months spent in foster care	“Foster Care Statistics 2018,” U.S. Department of Health and Human Services, Administration for Children and Families, Children’s Bureau, May 2020, https://www.childwelfare.gov/pubPDFs/foster.pdf .	Median amount of time spent in care was 14.7 months, converted to days.

Cost per month spent in foster care	Dana Connelly and Kristina Rosinsky, “Federal and State/Local Child Welfare Agency Spending per Child, 2004–2014,” Child Trends, June 2018, https://www.childtrends.org/wp-content/uploads/2018/06/Federal-and-State-Local-Child-Welfare-Agency-Spending-per-child_ChildTrends_June2018.pdf .	This represents approximately \$172 in federal spending per child-by-child welfare agencies during that fiscal year. In SFY 2014, child welfare agencies in the United States spent \$16.3 billion in state and local funds, or approximately \$222 per child.
Unplanned, unwanted, early pregnancy		
Number of births per year	Table 21. Births, by gestational age (weeks) and by age and race and Hispanic origin of mother: United States, 2018, Sum of Under 15 and 15-19. Joyce A. Martin, Brady E. Hamilton, Michelle J.K. Osterman, and Anne K. Driscoll, “Births: Final Data for 2018,” U.S. Department of Health and Human Services and Centers for Disease Control and Prevention <i>National Vital Statistics Report</i> 68, no. 13 (November 27, 2019), https://www.cdc.gov/nchs/data/nvsr/nvsr68/nvsr68_13-508.pdf .	
Percentage of teen moms having repeat (second, third) births	“Preventing Repeat Teen Births,” Centers for Disease Control and Prevention Vital Signs, April 2013, https://www.cdc.gov/vitalsigns/teenpregnancy/index.html .	<p>Nearly one in five births to teen mothers, ages 15 to 19, is a repeat birth. Most repeat births (86%) are second births; 13% are third.</p> <p>We increased the number of teen births to account for the 20% of births that are first and second children. In the future state, we did not include these repeat births, assuming the youth received the help they needed from the system after the first early, unplanned pregnancy.</p>
Average Medicaid charges for vaginal birth	“The Cost of Having a Baby in the United States,” Truven Health Analytics, January 2013, https://www.nationalpartnership.org/our-work/resources/health-care/maternity/archive/the-cost-of-having-a-baby-in-the-us.pdf .	
Average Medicaid charges for cesarean birth	“The Cost of Having a Baby,” https://www.nationalpartnership.org/our-work/resources/health-care/maternity/archive/the-cost-of-having-a-baby-in-the-us.pdf .	

Percentage of total births that are vaginal	Table 2, page 12: “The Cost of Having a Baby,” https://www.nationalpartnership.org/our-work/resources/health-care/maternity/archive/the-cost-of-having-a-baby-in-the-us.pdf .	
Percentage of total births that are cesarean	Table 2, page 12: “The Cost of Having a Baby,” https://www.nationalpartnership.org/our-work/resources/health-care/maternity/archive/the-cost-of-having-a-baby-in-the-us.pdf .	
Percentage of teen mothers receiving public benefits	“The Cost of Having a Baby,” https://www.nationalpartnership.org/our-work/resources/health-care/maternity/archive/the-cost-of-having-a-baby-in-the-us.pdf .	
Percentage of mothers using WIC formula	Fully formula fed + partially breastfed. See: “Table 7-1: Participant Distributions Used to Estimate Costs for Current and Revised Food Packages,” National Academy of Sciences, May 1, 2017, https://www.ncbi.nlm.nih.gov/books/NBK435907/table/tab_7-1/?report=objectonly .	
Cost to feed an infant	Monthly per-participant WIC food package costs after rebates as redeemed for infants and mothers. See: Victor Oliveira, Mark Prell, and Xinzhe Cheng, “The Economic Impacts of Breastfeeding: A Focus on USDA’s Special Supplemental Nutrition Program for Women, Infants, and Children (WIC),” U.S. Department of Agriculture Economic Research Report Number 261, February 2019, https://www.ers.usda.gov/webdocs/publications/91273/err-261.pdf?v=5277.9 .	We limited our calculation of the direct costs associated with raising a child to only include the expense of a child to the first four years of a child’s life. This four-year limit corresponds with the mom’s age upon reaching “adulthood” rather than the entire cost over the child’s lifetime.
Cost to feed a toddler	Table 4.1: Nicole Kline, Kevin Meyers Mathieu, and Jeff Marr, “WIC Participant and Program Characteristics 2018 Food Packages and Costs Final Report,” U.S. Department of Agriculture, November 2020, https://fns-prod.azureedge.net/sites/default/files/resource-files/WICPC2018FoodPackage.pdf .	
Monthly cost for infant childcare	Figure 1, Center-based infant child care: Simon Workman and Steven Jessen-Howard, “Understanding the True Cost of Child Care for Infants and Toddlers,” Center for American Progress, November 15, 2018, https://www.americanprogress.org/issues/early-childhood/reports/2018/11/15/460970/understanding-true-cost-child-care-infants-toddlers/ .	
Monthly cost for toddler childcare	Figure 1, Center-based toddler child care: Workman and Jessen-Howard, “Understanding the True Cost,” https://www.americanprogress.org/issues/early-childhood/reports/2018/11/15/460970/understanding-true-cost-child-care-infants-toddlers/ .	

Number of years in childcare		Setting equal to the number of years that teen moms collect WIC benefits, this assumption should be consistent across benefits.
Percentage of children ages 0-4 in center-based childcare program	Figure 2. Primary Child Care Arrangement for Preschoolers (Ages 0-4): "Child Care in State Economies – 2019 Update," Committee for Economic Development of the Conference Board, https://www.ced.org/childcareimpact .	
Youth incarceration		
Youth in custody (0-18)	"Statistical Briefing Book: Juveniles in Corrections, One Day Count of Juveniles in Residential Placement Facilities, 1997-2018," U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention, https://www.ojjdp.gov/ojstatbb/corrections/qa08201.asp?qaDate=2018 .	The count of state prisoners aged 18-24 was limited to 2013. The Bureau of Justice Statistics (BJS) only conducts a study on the age of state prison populations every 10 years. The next report will not be released until 2023.
Youth on probation (0-18)	Page 50: Cases resulting in formal probation: Sarah Hockenberry and Charles Puzanchera, "Juvenile Court Statistics 2018," National Center for Juvenile Justice, April 2020, https://ojjdp.ojp.gov/sites/g/files/xyckuh176/files/media/document/juvenile-court-statistics-2018.pdf , and "Statistical Briefing Book: Juveniles in Corrections, One Day Count of Juveniles in Residential Placement Facilities, 1997-2018," U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention, https://www.ojjdp.gov/ojstatbb/corrections/qa08201.asp?qaDate=2018 .	The count of persons aged 18-24 on parole is limited to 15 states only. BJS releases an annual survey of those on probation/parolees, but it doesn't include any age data. The only report we could find that had age ranges of the parolee population was limited to 15 states (Arkansas, Florida, Kentucky, Louisiana, Maryland, Montana, New York, North Carolina, Ohio, Oregon, South Carolina, Tennessee, Texas, Utah, and Wisconsin) and is therefore missing probation counts for the other 35 states.
Youth in custody (19-24)	Federal: Sum of Under 18, Ages 18-21, Ages 22-25: "Statistics: Inmate Age," Federal Bureau of Prisons, February 12, 2021, https://www.bop.gov/about/statistics/statistics_inmate_age.jsp .	
Youth on probation (19-24)	Table 2: Page 663, No. of Persons on Probation Age Group 18-24: Christopher Wildeman, Alyssa W. Goldman, and Emily A. Wang, "Age-Standardized Mortality of Persons on Probation, in Jail, or in State Prison and the General Population, 2001-2012," Public Health Reports, October 11, 2019, https://journals.sagepub.com/doi/full/10.1177/0033354919879732 .	The youth on probation (19-24) data set shows the population of youth on probation for the period of 2001-2012. This is not a snapshot in time; therefore, data has been divided by number of years to come up with an annual average.

Cost per day spent in custody /incarcerated	“Policy Brief 2020—Sticker Shock: The Cost of Youth Incarceration,” Justice Policy Institute, July 30, 2020, http://www.justicepolicy.org/research/12928 .	
Average days spent in custody /incarcerated	“Statistical Briefing Book: Juveniles in Corrections, Percent of Residents Remaining in Placement by Placement Status, 2017,” U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention, https://www.ojjdp.gov/ojstatbb/corrections/ga08401.asp?qaDate=2017&text=no&maplink=link1 .	Weighted average of days since admission by percentage of population in custody.
Cost per month spent on probation	“Supervision Costs Significantly Less Than Incarceration in Federal System,” United States Courts, July 18, 2013, https://www.uscourts.gov/news/2013/07/18/supervision-costs-significantly-less-incarceration-federal-system .	Daily cost of supervision by probation officers.
Average months on probation	“States Can Shorten Probation and Protect Public Safety,” Pew Charitable Trusts, December 3, 2020, https://www.pewtrusts.org/en/research-and-analysis/reports/2020/12/states-can-shorten-probation-and-protect-public-safety .	
Youth homelessness		
Sheltered homeless youth (0-24)	EXHIBIT 3.3: Demographic Characteristics of Homeless People in Families With Children (Sheltered People in Families Under 18 and Ages 18-24) PLUS EXHIBIT 4.1: PIT Estimates of Unaccompanied Homeless Youth (Sheltered Unaccompanied Youth Under 18 and Aged 19-24): Meghan Henry et al., “The 2019 Annual Homeless Assessment Report (AHAR) to Congress—Part 1: Point-in-Time Estimates of Homelessness,” U.S. Department of Housing and Urban Development, Office of Community Planning and Development, January 2020, https://www.huduser.gov/portal/sites/default/files/pdf/2019-AHAR-Part-1.pdf .	
Unsheltered homeless youth (0-24)	EXHIBIT 3.3: Demographic Characteristics of Homeless People in Families With Children (Unsheltered People in Families Under 18 and Ages 18-24) PLUS EXHIBIT 4.1: PIT Estimates of Unaccompanied Homeless Youth (Unsheltered Unaccompanied Youth Under 18 and Aged 19-24): Meghan Henry et al., “The 2019 Annual Homeless Assessment Report (AHAR) to Congress—Part 1: Point-in-Time Estimates of Homelessness,” U.S. Department of Housing and Urban Development, Office of Community Planning and Development, January 2020,	

	https://www.huduser.gov/portal/sites/default/files/pdf/2019-AHAR-Part-1.pdf .	
Doubled-up/couch-surfing youth (grades K-12)	Table 6. Number of enrolled homeless students, by primary nighttime residence: “Federal Data Summary School Years 2015-16 Through 2017-18: Education for Homeless Children and Youth,” National Center for Homeless Education, January 2020, https://nche.ed.gov/wp-content/uploads/2020/01/Federal-Data-Summary-SY-15.16-to-17.18-Published-1.30.2020.pdf .	
Average cost per day in a homeless shelter	Dennis P. Culhane, “Testing a Typology of Family Homelessness Based on Patterns of Public Shelter Utilization in Four U.S. Jurisdictions: Implications for Policy and Program Planning,” University of Pennsylvania, School of Social Policy and Practice, May 15, 2007, https://repository.upenn.edu/cgi/viewcontent.cgi?article=1069&context=spp_papers .	Because shelter days can be readily converted into estimated costs based on jurisdictional reimbursement rates, estimated average household costs by cluster are provided in Table 1. The long-stay groups have an average cost of \$21,692 in Columbus (\$116 per day); \$30,812 per family in Philadelphia (\$94.23 per day); \$48,440 in Massachusetts (\$110 per day); and \$55,200 in New York (\$100 per day).
Average length of stay in a homeless shelter	EXHIBIT F.1: Average Lengths of Time Homeless (in Days) in Emergency Shelter and Transitional Housing by Geographic Category: Meghan Henry, Anna Mahathey, and Meghan Takashima, “The 2019 Annual Homeless Assessment Report (AHAR) to Congress—Part 2: Estimates of Homelessness in the United States,” U.S. Department of Housing and Urban Development, Office of Community Planning and Development, January 2020, https://www.huduser.gov/portal/sites/default/files/pdf/2018-AHAR-Part-2.pdf .	
Number of times spent homeless throughout life	Figure 3.1: Number of Homeless Episodes (n = 650), weighted average: “Final Report — Street Outreach Program Data Collection Study,” United States Department of Health & Human Services, Family and Youth Services Bureau, April 12, 2016, https://www.acf.hhs.gov/archive/fysb/report/final-report-street-outreach-program-data-collection-study .	

Table 3. Data sources for long-term outcomes of youth who experienced disruptive events

Data point	Source	Notes
Education outcomes		
Percentage of youth in foster care who don't receive a HS diploma	Molly Sarubbi, Emily Parker, and Brian A. Sponsler, "Strengthening Policies for Foster Youth Postsecondary Attainment," Education Commission of the States, October 2016, https://www.ecs.org/wp-content/uploads/Strengthening_Policies_for_Foster_Youth_Postsecondary_Attainment-1.pdf .	
Percentage of youth who experience an early, unplanned pregnancy who don't receive a HS diploma	"Reproductive Health: Teen Pregnancy," Centers for Disease Control and Prevention, March 1, 2019, https://www.cdc.gov/teenpregnancy/about/index.htm .	
Percentage of youth who are incarcerated who don't receive a HS diploma	Appendix data: Highest educational attainment for formerly incarcerated people: Lucius Couloute, "Getting Back on Course: Educational Exclusion and Attainment Among Formerly Incarcerated People," Prison Policy Initiative, October 2018, https://www.prisonpolicy.org/reports/education.html-table3 .	
Percentage of youth who experience homelessness who don't receive a HS diploma	Average of state data from Table 12. Adjusted cohort graduation rates among homeless students: "Federal Data Summary School Years 2015-16 Through 2017-18: Education for Homeless Children and Youth," National Center for Homeless Education, January 2020, https://nche.ed.gov/wp-content/uploads/2020/01/Federal-Data-Summary-SY-15.16-to-17.18-Published-1.30.2020.pdf .	
Percentage of youth in foster care who don't graduate college	Sarubbi, Parker, and Sponsler, "Strengthening Policies," https://www.ecs.org/wp-content/uploads/Strengthening_Policies_for_Foster_Youth_Postsecondary_Attainment-1.pdf .	
Percentage of youth who experience an early, unplanned pregnancy who don't graduate college	"Postcard: Teen Pregnancy Affects Graduation Rates," National Conference of State Legislatures, June 17, 2013, https://www.ncsl.org/research/health/teen-pregnancy-affects-graduation-rates-postcard.aspx .	
Percentage of youth who are incarcerated who don't graduate college	Appendix data: Highest educational attainment for formerly incarcerated people: Couloute, "Getting Back on Course," https://www.prisonpolicy.org/reports/education.html-table3 .	

<p>Percentage of youth who experience homelessness who don't graduate college</p>	<p>"Data Quest," California Department of Education, https://data1.cde.ca.gov/dataquest/.</p>	<p>CA homeless college enrollment rates: Students experiencing homelessness in California who graduate from high school are less likely to enroll in college: 50% compared to 64% of all high school graduates, per CDE.</p> <p>This is enrollment in college, NOT college graduation rates. This is a data limitation.</p> <p>We reduced this enrollment statistic by the national average dropout rate: About 62% of students who began seeking a bachelor's degree at a four-year institution in fall 2012 completed that degree at the same institution within six years.</p>
<p>Adult incarceration</p>		
<p>Percentage of youth in foster care who become incarcerated</p>	<p>Average of female and male data in Table 103: Mark E. Courtney et al., "Midwest Evaluation of the Adult Functioning of Former Foster Youth: Outcomes at Age 26," Chapin Hall at the University of Chicago, 2011, https://www.chapinhall.org/wp-content/uploads/Midwest-Eval-Outcomes-at-Age-26.pdf.</p>	
<p>Percentage of youth who experience an early, unplanned pregnancy who become incarcerated</p>		<p>Because there aren't rigorous data on the likelihood of early, unplanned pregnancy leading to incarceration in adulthood, we cannot establish a causal or correlational relationship. We have made a simplifying assumption that there is no link between these two disruptive life events.</p>
<p>Percentage of youth who are incarcerated who become</p>	<p>Anna Aizer and Joseph J. Doyle, "Juvenile Incarceration, Human Capital and Future Crime: Evidence from Randomly-Assigned Judges," <i>Quarterly Journal of Economics</i> 130, no. 2 (2015): 759-803,</p>	<p>Sum of normal chances of becoming incarcerated to increased chances of incarceration as an adult if incarcerated as a youth</p>

incarcerated as adults	https://mitsloan.mit.edu/shared/ods/documents/?DocumentID=4287 .	
Percentage of youth who experience homelessness who become incarcerated	Stephen Metraux, Caterina G. Roman, and Richard S. Cho, "Incarceration and Homelessness," 2007 National Symposium on Homelessness Research, https://www.huduser.gov/portal/publications/pdf/p9.pdf .	Only a handful of studies examine the overlap of prison and homelessness, and the extant literature has limited comparability due to variation in the study populations and the time frames used. However, taken together, the research suggests that about a tenth of the population coming into prisons have recently been homeless, and at least the same percentage of those who leave prisons end up homeless, for at least some period of time.
Adult homelessness		
Percentage of youth in foster care who experience homelessness in adulthood	Table 10. Homelessness and Couch Surfing Since Most Recent Interview — "Ever since last interview": Courtney et al., "Midwest Evaluation," https://www.chapinhall.org/wp-content/uploads/Midwest-Eval-Outcomes-at-Age-26.pdf .	
Percentage of youth who experience an early, unplanned pregnancy who experience homelessness in adulthood	"Shelter and Housing Options for Domestic and Sexual Violence Victims in Massachusetts— Recommendation Report," Housing and Shelter Study Commission of Chapter 260 of the Acts of 2014, Massachusetts Office for Victim Assistance (MOVA), August 2017, https://malegislature.gov/Bills/190/SD2315.pdf .	Thirty percent of expectant and parenting teens in Massachusetts experienced homelessness in fiscal year 2012. The original source is no longer available online but is quoted in this MA house bill. Data limited to pregnant teens in MA.
Percentage of youth who are incarcerated who experience homelessness in adulthood	Appendix Table 2: 98 Sheltered Homeless (per 10,000): Lucius Couloute, "Nowhere to Go: Homelessness Among Formerly Incarcerated People," Prison Policy Initiative, August 2018, https://www.prisonpolicy.org/reports/housing.html .	Using the Sheltered Homeless population ONLY because this is applied to the direct cost of homelessness.
Percentage of youth who experience homelessness who experience homelessness in adulthood	Barbara Duffield, "Reimagining Homelessness Assistance for Children and Families," <i>Journal of Children and Poverty</i> 26, no. 2 (2020): 293-313, https://www.tandfonline.com/doi/full/10.1080/10796126.2020.1813535 .	Research based on HUD's own data shows that parents who had experienced childhood homelessness were 37% more likely to have

		experienced repeated or persistent homelessness in adulthood before a shelter stay than parents who had not experienced childhood homelessness (Zachary and Shinn, 2018).
Use of public benefits		
Percentage of youth in foster care who access public benefits in adulthood	Table 51. Receipt of Government Benefits During the Past Year by Gender, Average of Female and Male “Any Means Tested Program”: Courtney et al., “Midwest Evaluation,” https://www.chapinhall.org/wp-content/uploads/Midwest-Eval-Outcomes-at-Age-26.pdf .	
Percentage of youth who experience an early, unplanned pregnancy who access public benefits in adulthood	See note.	There is no data on the relationship between youth early, unplanned pregnancy and adult use of public benefits. Instead, we make the simplifying assumption that all youth who experience unplanned, unwanted, and early pregnancy and do not graduate HS will access public benefits.
Percentage of youth who are incarcerated who access public benefits in adulthood	See note.	There is no data on the relationship between youth incarceration and adult use of public benefits. Instead, we make the simplifying assumption that all youth who are incarcerated and do not graduate HS will access public benefits.
Percentage of youth who experience homelessness who access public benefits in adulthood	See note.	There is no data on the relationship between youth homelessness and adult use of public benefits. Instead, we make the simplifying assumption that all youth who experience homelessness and do not graduate HS will access public benefits.

Table 4. Data sources for long-term costs to the system for adult outcomes

Data point	Source	Notes
Adult incarceration		

Annual cost of confinement	“Policy Brief 2020—Sticker Shock: The Cost of Youth Incarceration,” Justice Policy Institute, July 30, 2020, http://www.justicepolicy.org/research/12928 .	
Average time served in years	“A Matter of Time: The Causes and Consequences of Rising Time Served in America’s Prisons,” Urban Institute, July 2017, https://apps.urban.org/features/long-prison-terms/trends.html .	We took the average of all states that had available data.
Cost per month spent on probation	“Supervision Costs Significantly Less Than Incarceration in Federal System,” United States Courts, July 18, 2013, https://www.uscourts.gov/news/2013/07/18/supervision-costs-significantly-less-incarceration-federal-system .	
Average months spent on probation	“States Can Shorten Probation and Protect Public Safety,” Pew Charitable Trusts, December 3, 2020, https://www.pewtrusts.org/en/research-and-analysis/reports/2020/12/states-can-shorten-probation-and-protect-public-safety .	
Average admission age of adults who become incarcerated	E. Ann Carson and William J. Sabol, “Aging of the State Prison Population, 1993–2013,” U.S. Department of Justice, Bureau of Justice Statistics, May 2016, https://www.bjs.gov/content/pub/pdf/asp9313.pdf .	The median age at admission increased from 29 years in 1993 to 32 years in 2003 and 2013.
Adult homelessness		
Average cost per day spent in a homeless shelter	Dennis P. Culhane, “Testing a Typology of Family Homelessness Based on Patterns of Public Shelter Utilization in Four U.S. Jurisdictions: Implications for Policy and Program Planning,” University of Pennsylvania, School of Social Policy and Practice, May 15, 2007, https://repository.upenn.edu/cgi/viewcontent.cgi?article=1069&context=spp_papers .	
Average length of stay in a homeless shelter (# of days)	Meghan Henry, Anna Mahathey, and Meghan Takashima, “The 2019 Annual Homeless Assessment Report (AHAR) to Congress—Part 2: Estimates of Homelessness in the United States,” U.S. Department of Housing and Urban Development, Office of Community Planning and Development, January 2020,	

	https://www.huduser.gov/portal/sites/default/files/pdf/2018-AHAR-Part-2.pdf .	
Average number of homeless stays for adults experiencing episodic homelessness	Culhane, "Testing a Typology of Family Homelessness," https://repository.upenn.edu/cgi/viewcontent.cgi?article=1069&context=spp_papers .	
Average age of adults at first entry into homeless shelters	Brooke Spellman et al., "Costs Associated With First-Time Homelessness for Families and Individuals," U.S. Department of Housing and Urban Development, Office of Policy Development and Research, March 2010, https://www.huduser.gov/publications/pdf/Costs_Homeless.pdf .	
Public benefits		
Monthly SNAP benefit	"SNAP: Frequently Asked Questions," SNAP to Health!, https://www.snaptohealth.org/snap/snap-frequently-asked-questions/ .	
Average number of months receiving benefit	"SNAP: Frequently Asked Questions," https://www.snaptohealth.org/snap/snap-frequently-asked-questions/ .	
Frequency of eligibility to apply for SNAP benefits (years)	"Final Rule: SNAP Requirements for Able-Bodied Adults Without Dependents," U.S. Department of Agriculture Food and Nutrition Service, December 5, 2019, https://www.fns.usda.gov/snap/fr-120419 .	
Age of first using SNAP benefits	See note.	The model assumes that SNAP benefits are received starting in the first year of adulthood.
Monthly TANF benefit	Figure 4. TANF Cash Assistance Maximum Monthly Benefit Amounts for a Single Parent Family with Two Children, 50 States and the District of Columbia, July 2018 Average of Maximum Monthly Benefit Across Each of the 50 States: Gene Falk and Patrick A. Landers, "The Temporary Assistance for Needy Families (TANF) Block Grant: Responses to Frequently Asked Questions," Congressional Research Service, January 25, 2021, https://fas.org/sqp/crs/misc/RL32760.pdf .	
Months using TANF	"Policy Basics: Temporary Assistance for Needy Families," Center on Budget and Policy Priorities, February 6, 2020,	

	https://www.cbpp.org/research/family-income-support/temporary-assistance-for-needy-families .	
Age of first using TANF benefits	See note.	The model assumes that TANF benefits are received starting in the first year of adulthood.
Annual Medicaid spending per enrollee	United States spending for Adults: “State Health Facts: Medicaid Spending per Enrollee (Full or Partial Benefit, FY2014,” Kaiser Family Foundation, https://www.kff.org/medicaid/state-indicator/medicaid-spending-per-enrollee/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D .	
Age of first using Medicaid benefits	See note.	The model assumes that Medicaid benefits are received starting in the first year of adulthood.
Lost income as a result of lower educational outcomes		
Chances of long-term unemployment spell if didn't graduate HS	<p>Table 1. Descriptive statistics of a sample of men, born in the years 1957–64, by whether they ever had an LT, IT, or ST unemployment spell from labor market entry through 2009 Less than high school “Had LT spell”: Donna S. Rothstein, “An Analysis of Long-Term Unemployment,” Monthly Labor Review, U.S. Bureau of Labor Statistics, July 2016, https://www.bls.gov/opub/mlr/2016/article/an-analysis-of-long-term-unemployment.htm.</p>	
Chances of intermediate-term unemployment spell if didn't graduate HS		
Chances of short-term unemployment spell if didn't graduate HS		
Chances of long-term unemployment spell if didn't graduate college		
Chances of intermediate-term unemployment spell if didn't graduate college		
Chances of short-term unemployment spell if didn't graduate college		
Length of long-term unemployment (weeks)		
Length of intermediate-term unemployment (weeks)		
Length of short-term unemployment (weeks)		
Number of long-term unemployment spells for those who experience long-term unemployment		
Number of intermediate-term unemployment spells for those who experience		

intermediate-term unemployment		
Number of short-term unemployment spells for those who experience short-term unemployment		
Median lifetime earnings: less than HS diploma	Figure 1: Anthony P. Carnevale, Stephen J. Rose, and Ban Cheah, "The College Payoff: Education Occupations, Lifetime Earnings," Georgetown University Center on Education and the Workforce, https://www2.ed.gov/policy/highered/reg/hearulemaking/2011/collegepayoff.pdf .	
Median lifetime earnings: HS diploma only		
Median lifetime earnings: some college, no degree		
Median lifetime earnings: associate's degree		
Median lifetime earnings: bachelor's degree		
Median lifetime earnings: graduate or professional degree		
Percentage of U.S. population with less than HS diploma		"Educational Attainment (Table S1501)," United States Census Bureau, https://data.census.gov/cedsci/table?q=educational attainment&tid=ACST1Y2019.S1501&hidePreview=true .
Percentage of U.S. population with HS diploma only		
Percentage of U.S. population with some college, no degree		
Percentage of U.S. population with associate's degree		
Percentage of U.S. population with bachelor's degree		
Percentage of U.S. population with graduate or professional degree		
Length of lifetime earnings (years)	Carnevale, Rose, and Cheah, "The College Payoff," https://www2.ed.gov/policy/highered/reg/hearulemaking/2011/collegepayoff.pdf .	
Average tax rate paid by both employers and employees in the U.S.	"Taxing Wages — The United States," Organisation for Economic Co-operation and Development, http://www.oecd.org/tax/tax-policy/taxing-wages-united-states.pdf .	Average of the tax wedge for a single worker

Table 5. Data sources for relationships between disruptive events in youth

Data point	Source	Notes
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Chances of early, unplanned pregnancy		
Chances of becoming pregnant if youth is in the foster care system	Table 84: Mark E. Courtney et al., "Midwest Evaluation of the Adult Functioning of Former Foster Youth: Outcomes at Age 26," Chapin Hall at the University of Chicago, 2011, https://www.chapinhall.org/wp-content/uploads/Midwest-Eval-Outcomes-at-Age-26.pdf .	
Chances of becoming pregnant if youth has already experienced an early, unplanned pregnancy		The current state already increases this population for the first and second children of youth who experience multiple early, unplanned pregnancies. As such, we use the total births in one year rather than the number of early, unplanned pregnancies.
Chances of becoming pregnant if youth has been incarcerated		Because there isn't rigorous data on the likelihood of incarceration leading to early, unplanned pregnancy in adolescence, we cannot establish a causal relationship. If data could become available, this could be updated for it. For now, we have made a simplifying assumption that there is NO link between these two disruptive life events.
Chances of becoming pregnant if youth has been homeless	Sanna J. Thompson, Kimberly A. Bender, Carol M. Lewis, and Rita Watkins, "Runaway and Pregnant: Risk Factors Associated With Pregnancy in a National Sample of Runaway/Homeless Female Adolescents," <i>Journal of Adolescent Health</i> 43, no. 2 (August 2008): 125-132, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2742657/ .	
Chances of incarceration		
Portion of the state prison population that were in foster care	Nicholas Zill, "Report: Adoption From Foster Care: Aiding Children While Saving Public Money," Brookings, May 19, 2011, https://www.brookings.edu/research/adoption-from-foster-care-aiding-children-while-saving-public-money/ .	

Portion of the federal prison population that were in foster care	Zill, "Report: Adoption From Foster Care," https://www.brookings.edu/research/adoption-from-foster-care-aiding-children-while-saving-public-money/	
Chances of becoming incarcerated if youth experienced an early, unplanned pregnancy		Note: Because there isn't rigorous data on the likelihood of early, unplanned pregnancy leading to incarceration in adolescence, we cannot establish a causal relationship. If data could become available, this could be updated for it. For now, we have made a simplifying assumption that there is NO link between these two disruptive life events.
Chances of becoming incarcerated if youth has already been incarcerated	Figure 3: "No Place for Kids: The Case for Reducing Juvenile Incarceration," Annie E. Casey Foundation, October 4, 2011, https://www.aecf.org/resources/no-place-for-kids-full-report/ .	
Chances of becoming incarcerated if youth has been homeless	Lisa Pilnik, "Implementing Change: Addressing the Intersections of Juvenile Justice and Youth Homelessness for Young Adults," http://www.juvjustice.org/sites/default/files/resource-files/Implementing Change - Juvenile Justice and Youth Homelessness.pdf .	
Chances of homelessness		
Chances of experiencing homelessness if youth is in the foster care system	Amy Dworsky, Laura Napolitano, and Mark Courtney, "Homelessness During the Transition From Foster Care to Adulthood," American Journal of Public Health (Suppl 2) 103, no. S2 (2013), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3969135/pdf/AJPH.2013.301455.pdf .	
Chances of experiencing homelessness if youth experienced an early, unplanned pregnancy		Because there isn't rigorous data on the likelihood of early, unplanned pregnancy leading to homelessness in adolescence, we cannot establish a causal relationship. If data could become available, this could

		be updated for it. For now, we have made a simplifying assumption that there is NO link between these two disruptive life events.
Chances of experiencing homelessness if youth has already been incarcerated	Appendix Table 2: Lucius Couloute, "Nowhere to Go: Homelessness Among Formerly Incarcerated People," Prison Policy Initiative, August 2018, https://www.prisonpolicy.org/reports/using.html .	
Chances of experiencing homelessness if youth has been homeless		Our current state cost of intervention for youth homelessness multiplies the per-stay cost in a homeless shelter times 3.6 (or the average number of times homeless youth in a survey reported experiencing homelessness throughout their adolescent lives). Instead of reducing the population number, we are reducing the total cost per disruption by removing the factor of 3.6 and assuming that the first time a youth goes to a homeless shelter, they are given the supports they need to avoid future periods of homelessness
Chances of foster care placement		
Chances of being in foster care if youth is in the foster care system	See note.	Because of a lack of data, we did not attempt to establish a link between any of the disruptive events and subsequent foster care placement and did not adjust the future state foster care population.
Chances of being in foster care if youth has experienced an early, unplanned pregnancy		
Chances of being in foster care if youth has been incarcerated		
Chances of being in foster care if youth has been homeless		

Table 6. Education outcomes for the average population

Data point	Source	Notes
Average chances of not graduating HS	"Educational Attainment (Table S1501)," United States Census	Estimate for population 25 years and over

	Bureau, https://data.census.gov/cedsci/table?q=educationalattainment&tid=ACSST1Y2019.S1501&hidePreview=true .	
Average chances of not graduating college	“Educational Attainment (Table S1501),” United States Census Bureau, https://data.census.gov/cedsci/table?q=educationalattainment&tid=ACSST1Y2019.S1501&hidePreview=true .	
Average chances of becoming incarcerated	Thomas P. Bonczar and Allen J. Beck, “Bureau of Justice Statistics Special Report: Lifetime Likelihood of Going to State or Federal Prison,” U.S. Department of Justice, Office of Justice Programs, March 1997, https://www.bjs.gov/content/pub/pdf/LIgsfp.pdf .	
Average chances of experiencing homelessness	Jack Tsai, “Lifetime and 1-Year Prevalence of Homelessness in the U.S. Population: Results From the National Epidemiologic Survey on Alcohol and Related Conditions-III,” <i>Journal of Public Health</i> 40, no. 1 (March 2018): 65-74, https://academic.oup.com/jpubhealth/article/40/1/65/3074503 .	
Average chances of using public benefits	“Public Assistance Income or Food Stamps/SNAP in the Past 12 Months for Households,” United States Census Bureau, https://data.census.gov/cedsci/table?q=snapuse&tid=ACSDT5Y2019.B19058&hidePreview=false .	Takes the number of households with cash public assistance or food stamps/SNAP divided by the total number of households in the U.S.

Endnotes

- ¹ See, for example, Jason Amos, "The Consequences of Dropping Out of High School: Average High School Dropout Has a Negative Net Fiscal Contribution to Society of \$5,200, Says New Report," Alliance for Excellent Education, October 26, 2009, <http://all4ed.org/articles/the-consequences-of-dropping-out-of-high-school-average-high-school-dropout-has-a-negative-net-fiscal-contribution-to-society-of-5200-says-new-report/>;
- Christian Henrichson, Ruth Delaney, Chris Mai, and Ram Subramanian, "The Price of Prisons: Examining State Spending Trends, 2010-2015," Vera Institute of Justice, May 2017, https://storage.googleapis.com/vera-webassets/downloads/Publications/price-of-prisons-2015-state-spending-trends/legacy_downloads/the-price-of-prisons-2015-state-spending-trends.pdf;
- Kate Bartell Nowak, "Educating Children in Foster Care: State Legislation, 2008-2012," National Conference of State Legislatures, May 2013, <http://www.ncsl.org/portals/1/documents/cyf/educatingchildreninfostercare.pdf>;
- ACSD, "School Dropouts: Home and School Effects," *Research Brief* 1, no. 9 (2003), <http://www.ascd.org/publications/researchbrief/v1n09/toc.aspx>; Texas Comprehensive Center, "Teenage Parents and Their Educational Attainment," SEDL, 2011, <http://www.sedl.org/txcc/resources/briefs/number5/index.html>;
- "Adverse Effects," Pregnancy Prevention, Youth.gov, <http://youth.gov/youth-topics/teen-pregnancy-prevention/adverse-effects-teen-pregnancy>;
- "Postcard: Teen Pregnancy Affects Graduation Rates," National Conference of State Legislatures, June 17, 2013, <http://www.ncsl.org/research/health/teen-pregnancy-affects-graduation-rates-postcard.aspx>.
- ² Pam Fessler, "Report: Foster Kids Face Tough Times After Age 18," NPR: Morning Edition, April 7, 2010, <https://www.npr.org/templates/story/story.php?storyId=125594259>.
- ³ "Best Practices in Interagency Collaboration: Youth Homelessness and Juvenile Justice," National Center for Homeless Education, fall 2011, https://nche.ed.gov/downloads/briefs/juv_just.pdf.
- ⁴ Caroline Cournoyer, "Where Are All the Social Workers Going?" *Governing.com*, November 17, 2016, <https://www.governing.com/columns/smart-mgmt/gov-social-workers-turnover.html>.
- ⁵ Hayley Davies, "Trust and Distrust: Listening to Children About Their Relationships With Professionals," *Social Sciences* 8, no. 9 (2019), <https://www.mdpi.com/2076-0760/8/9/251/html>, and Cecilie Sudland, "Challenges and Dilemmas Working With High-Conflict Families in Child Protection Casework," *Child & Family Social Work* (2019), <https://onlinelibrary.wiley.com/doi/full/10.1111/cfs.12680>.
- ⁶ Kelly Robson and Haily T.N. Korman, "Continuity Counts: Coordinated Education Systems for Students in Transition," Bellwether Education Partners, April 2018, https://bellwethereducation.org/sites/default/files/Bellwether_ContinuityCounts_DYD_FINAL.pdf.
- ⁷ "Policy Brief 2020 — Sticker Shock: Calculating the Full Price Tag for Youth Incarceration," Justice Policy Institute, December 9, 2014, <http://www.justicepolicy.org/research/8477>.
- ⁸ National Council on Adoption, "The Human, Social, and Economic Cost of Aging Out of Foster Care," 2015, <https://www.adoptioncouncil.org/files/large/c29246a29debe09>.
- ⁹ Amy Dworsky, Laura Napolitano, and Mark Courtney, "Homelessness During the Transition From Foster Care to Adulthood," *American Journal of Public Health* 103(Suppl 2) (December 2013): S318-S323, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3969135/>.
- ¹⁰ "What Is the Foster Care-to-Prison Pipeline?" *Juvenile Law Center*, May 26, 2018, <https://jlc.org/news/what-foster-care-prison-pipeline#:~:text=According%20to%20the%20latest%20data,two%20years%20of%20leaving%20care>.
- ¹¹ The Urban Institute With Subcontractors, University of California Berkeley, and University of North Carolina Chapel Hill, "Coming of Age: Employment Outcomes for Youth Who Age Out of Foster Care Through Their Middle Twenties," Office of the Assistant Secretary for Planning and Evaluation, *U.S. Department of Health & Human Services*, March 15, 2008, <https://aspe.hhs.gov/basic-report/coming-age-employment-outcomes-youth-who-age-out-foster-care-through-their-middle-twenties>.
- ¹² Thomas P. Bonczar and Allen J. Beck, "Bureau of Justice Statistics Special Report: Lifetime Likelihood of Going to State or Federal Prison," U.S. Department of Justice, Office of Justice Programs, March 1997, <https://www.bjs.gov/content/pub/pdf/Llqsfp.pdf>.
- ¹³ Elizabeth S. Barnert et al., "How Does Incarcerating Young People Affect Their Adult Health Outcomes?" *Pediatrics* 139, no. 2 (February 2017): e20162624, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5260153/#:~:text=The%20small%20existing%20literature%20on,rates%20of%20overweight%20and%20obesity>, and Barry Holman and Jason Ziedenberg, "The Dangers of Detention: The Impact of Incarcerating Youth in Detention and Other Secure Facilities," Justice Policy Institute, http://www.justicepolicy.org/images/upload/06-11_rep_dangersofdetention_ji.pdf.
- ¹⁴ Anna Aizer and Joseph Doyle, "What Is the Long-Term Impact of Incarcerating Juveniles?" *Voxeu.org*, July 16, 2013, <https://voxeu.org/article/what-long-term-impact-incarcerating-juveniles>.
- ¹⁵ Holman and Ziedenberg, "The Dangers of Detention," http://www.justicepolicy.org/images/upload/06-11_rep_dangersofdetention_ji.pdf.
- ¹⁶ Aizer and Doyle, "What Is the Long-Term Impact of Incarcerating Juveniles?" <https://voxeu.org/article/what-long-term-impact-incarcerating-juveniles>.
- ¹⁷ "NN4Y Issue Brief: Consequences of Youth Homelessness," National Network for Youth, https://www.nn4youth.org/wp-content/uploads/IssueBrief_Youth_Homelessness.pdf, and "Youth," Substance Abuse and Mental Health Services Administration, April 15, 2020, <https://www.samhsa.gov/homelessness-programs-resources/hpr-resources/youth>.
- ¹⁸ "The AFCARS Report: Preliminary FY 2019 Estimates as of June 23, 2020 — No. 27," U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau, <https://www.acf.hhs.gov/sites/default/files/documents/cb/afcarsreport27.pdf>.
- ¹⁹ "Foster Care Statistics 2018," U.S. Department of Health and Human Services, Administration for Children and Families, Children's Bureau, May 2020, <https://www.childwelfare.gov/pubPDFs/foster.pdf>.

- ²⁰ Dana Connelly and Kristina Rosinsky, “Federal and State/Local Child Welfare Agency Spending per Child, 2004–2014,” *Child Trends*, June 2018, https://www.childtrends.org/wp-content/uploads/2018/06/Federal-and-State-Local-Child-Welfare-Agency-Spending-per-child_ChildTrends_June2018.pdf.
- ²¹ See Dennis P. Culhane et al., “Testing a Typology of Family Homelessness Based on Patterns of Public Shelter Utilization in Four U.S. Jurisdictions: Implications for Policy and Program Planning,” University of Pennsylvania School of Social Policy and Practice, May 15, 2007, https://repository.upenn.edu/cgi/viewcontent.cgi?article=1069&context=spp_papers. Because shelter days can be readily converted into estimated costs based on jurisdictional reimbursement rates, estimated average household costs by cluster are provided in Table 1. The long-stay groups have an average cost of \$21,692 in Columbus (\$116 per day), \$30,812 per family in Philadelphia (\$94.23 per day), \$48,440 in Massachusetts (\$110 per day), and \$55,200 in New York (\$100 per day).
- ²² Exhibit F.1: Meghan Henry, Anna Mahathey, and Meghan Takashima, “The 2018 Annual Homeless Assessment Report (AHAR) to Congress,” U.S. Department of Housing and Urban Development, Office of Community Planning and Development, September 2020, <https://www.huduser.gov/portal/sites/default/files/pdf/2018-AHAR-Part-2.pdf>.
- ²³ Figure 3.1: “Final Report — Street Outreach Program Data Collection Study,” Family and Youth Services Bureau, April 12, 2016, <https://www.acf.hhs.gov/archive/fysb/report/final-report-street-outreach-program-data-collection-study>.
- ²⁴ Molly Sarubbi, Emily Parker, and Brian A. Sponsler, “Strengthening Policies for Foster Youth Postsecondary Attainment,” Education Commission of the States, October 2016, https://www.ecs.org/wp-content/uploads/Strengthening_Policies_for_Foster_Youth_Postsecondary_Attainment-1.pdf.
- ²⁵ Sarubbi, Parker, and Sponsler, “Strengthening Policies,” https://www.ecs.org/wp-content/uploads/Strengthening_Policies_for_Foster_Youth_Postsecondary_Attainment-1.pdf.
- ²⁶ Average of female and male data in Table 103: Mark E. Courtney et al., “Midwest Evaluation of the Adult Functioning of Former Foster Youth: Outcomes at Age 26,” Chapin Hall at the University of Chicago, 2011, <https://www.chapinhall.org/wp-content/uploads/Midwest-Eval-Outcomes-at-Age-26.pdf>.
- ²⁷ Table 10: Courtney et al., “Midwest Evaluation,” <https://www.chapinhall.org/wp-content/uploads/Midwest-Eval-Outcomes-at-Age-26.pdf>.
- ²⁸ Table 51: Courtney et al., “Midwest Evaluation,” <https://www.chapinhall.org/wp-content/uploads/Midwest-Eval-Outcomes-at-Age-26.pdf>.
- ²⁹ Thompson, Bender, Lewis, and Watkins, “Runaway and Pregnant: Risk Factors Associated with Pregnancy in a National Sample of Runaway/Homeless Female Adolescents,” *Journal of Adolescent Health*, 2008 Aug, 43(2), pp. 125-132, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2742657/>.
- ³⁰ “Educational Attainment (Table S1501),” United States Census Bureau, <https://data.census.gov/cedsci/table?q=educational+attainment&tid=ACSST1Y2019.S1501&hidePreview=true!>.
- ³¹ Sarubbi, Parker, and Sponsler, “Strengthening Policies,” https://www.ecs.org/wp-content/uploads/Strengthening_Policies_for_Foster_Youth_Postsecondary_Attainment-1.pdf.
- ³² “Reproductive Health: Teen Pregnancy,” Centers for Disease Control and Prevention, March 1, 2019, <https://www.cdc.gov/teenpregnancy/about/index.htm>.
- ³³ Lucius Couloute, “Getting Back on Course: Educational Exclusion and Attainment Among Formerly Incarcerated People,” Prison Policy Initiative, October 2018, <https://www.prisonpolicy.org/reports/education.html-table3>.
- ³⁴ “Federal Data Summary School Years 2015-16 Through 2017-18: Education for Homeless Children and Youth,” National Center for Homeless Education, January 2020, <https://nche.ed.gov/wp-content/uploads/2020/01/Federal-Data-Summary-SY-15.16-to-17.18-Published-1.30.2020.pdf>.
- ³⁵ Total costs divided by the total number of young people ages 0-20 served by the foster care system in a calendar year, the number of births to girls under 18 in a calendar year, the number of youth ages 0-24 in custody and on probation in a calendar year, and the number of sheltered, unsheltered, and doubled-up homeless youth ages 0-24. These numbers are not un-duplicated, meaning that a single youth may be counted in two or more categories (e.g., both in foster care and pregnant).
- ³⁶ “Youth Homelessness Overview,” National Conference of State Legislatures, June 18, 2019, <https://www.ncsl.org/research/human-services/homeless-and-runaway-youth.aspx>, and Mindy Mitchell, “Homelessness and Incarceration Are Intimately Linked. New Federal Funding Is Available to Reduce the Harm of Both,” National Alliance to End Homelessness, March 29, 2018, <https://endhomelessness.org/homelessness-incarceration-intimately-linked-new-federal-funding-available-reduce-harm/#:~:text=Homelessness%20is%20intimately%20linked%20with%20the%20criminal%20and%20juvenile%20justice%20systems.&text=And%20people%20returning%20from%20jail.against%20those%20with%20criminal%20records>.
- ³⁷ “Youth Homelessness Overview,” <https://www.ncsl.org/research/human-services/homeless-and-runaway-youth.aspx> and <https://www.prisonpolicy.org/reports/housing.html>, and Mitchell, “Homelessness and Incarceration Are Intimately Linked,” <https://endhomelessness.org/homelessness-incarceration-intimately-linked-new-federal-funding-available-reduce-harm/#:~:text=Homelessness%20is%20intimately%20linked%20with%20the%20criminal%20and%20juvenile%20justice%20systems.&text=And%20people%20returning%20from%20jail.against%20those%20with%20criminal%20records>.
- ³⁸ Robin E. Clark, Linda Weinreb, Julie M. Flahive, and Robert W. Seifert, “Pregnant and Homeless: How Unstable Housing Affects Maternal Health Outcomes,” *Housing Matters*, March 20, 2019, <https://housingmatters.urban.org/research-summary/pregnant-and-homeless-how-unstable-housing-affects-maternal-health-outcomes>; Devan M. Crawford, Emily C. Trotter, Kelley J. Sittner Hartshorn, and Les B. Whitbeck, “Pregnancy and Mental Health of Young Homeless Women,” *American Journal of Orthopsychiatry* 81, no. 2 (April 2011): 173-183, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3383651/>; and C. C. Bruener and J. A. Farrow, “Pregnant Teens in Prison: Prevalence, Management, and Consequences,” *Western Journal of Medicine* 162, no. 4 (April 1995): 328-330, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1022770/>.