TAX POLICY CENTER



RESEARCH REPORT

The Return on Investing in Children

Helping Children Thrive

Elaine Maag, Cary Lou, Michelle Casas, Hannah Daly, Gabriella Garriga, and Lillian Hunter September 2023





ABOUT THE URBAN INSTITUTE

The Urban Institute is a nonprofit research organization that provides data and evidence to help advance upward mobility and equity. We are a trusted source for changemakers who seek to strengthen decision making, create inclusive economic growth, and improve the well-being of families and communities. For more than 50 years, Urban has delivered facts that inspire solutions—and this remains our charge today.

Copyright © September 2023. Urban Institute. Permission is granted for reproduction of this file, with attribution to the Urban Institute. Cover image by Klaus Vedfelt/Getty Images.

Contents

Acknowledgments	v
Executive Summary	vi
Introduction	1
How Cash Supports Help Children	4
Major Programs	4
Impacts of Cash Assistance	5
Short-Term Benefits	5
Long-Term Benefits	6
How In-Kind Investments Help Children	7
Child Care and Early Education	7
Major Programs	7
Impacts of Child Care and Early Education Programs	7
Short-Term Benefits	8
Long-Term Benefits	8
K-12 Education	9
Major Programs	9
Impacts of K–12 Education Programs	10
Short-Term Benefits	10
Long-Term Benefits	10
Health	11
Major Programs	11
Impacts of Health Programs	12
Short-Term Benefits	12
Long-Term Benefits	13
Housing	14
Major Programs	14
Impacts of Housing Programs	15
Short-Term Benefits	15
Long-term Benefits	15
Nutrition	16
Major Programs	16
Impacts of Nutrition Programs	17
Short-Term Benefits	17
Long-Term Benefits	18

Conclusion	20
Where Are Public Investments in Children Headed?	21
Notes	24
References	25
About the Authors	32
Statement of Independence	33

Acknowledgments

This report was funded by the Peter G. Peterson Foundation and the Annie E. Casey Foundation, as part of the Kids' Share project; and the Doris Duke Foundation, as part of the Innovations in Cash Assistance for Children initiative. We are grateful to them and to all our funders, who make it possible for Urban to advance its mission.

The views expressed are those of the authors and should not be attributed to the Urban Institute, its trustees, or its funders. Funders do not determine research findings or the insights and recommendations of Urban experts. Further information on the Urban Institute's funding principles is available at urban.org/fundingprinciples.

The authors thank Greg Acs, Gina Adams, Mary Bogle, Megan Gallagher, Erica Greenberg, Poonam Gupta, Heather Hahn, Jenny Haley, Emily Johnston, Diane Levy, and Elaine Waxman for thoughtful comments on an earlier drafts; Elli Nikolopoulos, Anna Farr, and Jamie Klinenberg for research and editorial assistance; and Krista Smith for editing.

Executive Summary

Each year, the federal government invests over \$500 billion in children through direct cash payments, including tax credits, and in-kind goods such as childcare, education, food subsidies, and healthcare coverage. Relative to total federal spending, spending on children is typically a small share (about 10 percent) and is scheduled to decline as a share of the federal budget in coming years. That may be short-sighted, because research shows these investments can have large short- and long-term payoffs for the children receiving the benefits as well as society at large.

Investments in children often are used to combat the negative effects of growing up in poverty, which span the life course: diminished brain development in young children, worse school preparation, reduced educational attainment, more limited skills development, poorer health, worse employment outcomes, and an increased likelihood of criminal justice involvement. Failing to investing adequately in children can prevent children from reaching their full potential.

The payoff of any one investment can be difficult to assess, because children benefit from a constellation of connected programs. Strong evidence suggests that investments that reduce poverty and direct resources at very young children have particularly high payoffs. In total, analysts estimate that long-term, some programs can return \$10 for each dollar invested in children (Garfinkel et al. 2022; Hendren and Sprung-Keyser 2020).

This report details major government investments in children, summarizing existing research on the long- and short-term payoffs of each.

Introduction

For children to thrive, they need adequate food and shelter, high-quality health care and education, safe environments, and supportive parents and families (Isaacs and Edelstein 2017). Though families provide primary support for their children, the government also invests in children through tax credits and public programs that have both short- and long-term benefits for children and the nation.

Each year, the federal government invests over \$500 billion in children through tax credits; cash payments; and the provision of goods and services such as education, child care subsidies, health care coverage, and food subsidies.¹ The largest of these investments are cash supports delivered through the tax system and public benefit programs. Of the roughly \$560 billion the federal government spent on children in 2019,² \$128 billion came through the child tax credit (CTC), \$62 billion through the earned income tax credit (EITC), and \$33 billion through other tax provisions. An additional \$65 billion in cash benefits for children came through Social Security survivor and dependent benefits, Supplemental Security Income (SSI), and other income security programs.

The government also makes substantial in-kind investments, including investments that allow the purchase of health insurance and services. The federal government invested \$121 billion in children's health in 2019, primarily supporting health coverage through Medicaid and the Children's Health Insurance Program (CHIP); \$60 billion in children's nutrition through programs supporting access to healthy food, including the Supplemental Nutritional Assistance Program (SNAP) and child nutrition programs; and \$47 billion in kindergarten through grade 12 (K-12) education. State and local governments provided an additional \$870 billion in direct support for schools. Federal spending on education is generally targeted at schools serving children from families with low incomes, children with disabilities, and school improvement initiatives. State and local government spending on education is primarily in support of public education. The federal government invests smaller amounts in child care and early education programs (\$19 billion) supporting children's development and parents' ability to work, social service programs (\$15 billion) supporting family stability and child welfare, and public housing and housing assistance programs (\$8 billion), and youth training programs (\$1 billion).

Public spending on children pays off in both the short and long term by helping children grow to their full potential. Investments in children act through multiple, interconnected pathways. These investments combat the negative effects of growing up in poverty, including diminished brain development, inferior school preparation, reduced educational attainment, more limited skills development, poorer health, worse employment outcomes, and an increased likelihood of involvement with the criminal justice system (National Academies of Sciences, Engineering, and Medicine 2019). See box 1 for more on the costs and consequences of child poverty.

In the short term, public spending on children primarily benefits the children and families participating in programs. The benefits include lower rates of poverty, decreased likelihood of experiencing food insecurity, more nutritious diets, greater access to health care, less exposure to health and environmental hazards, lower stress, greater brain development, increased academic achievement, and lower school absence rates.

Long-term payoffs result from having healthier, better supported childhoods. The long-term benefits of investing in children are experienced by society more broadly as well as the individuals themselves. These payoffs include greater productivity—as a result of having a more educated, healthier, and more skilled labor force—and the associated tax revenues (McLaughlin and Rank 2018). Public investments in children also lead to savings for government and society in the form of lower spending on criminal justice, on health care for chronic diseases (both public and private spending), and on social services and public programs for adults.

The societal return on any single government investment can be difficult to measure because children are affected by a constellation of programs, but estimates reach \$10 or more per dollar invested for some programs (Garfinkel et al. 2022; Hendren and Sprung-Keyser 2020). In general, research suggests that payoffs are particularly high from investments in reducing child poverty (McLaughlin and Rank 2018) and programs directed at very young children (Heckman and Masterov 2007). A majority (60 percent) of federal spending on children is targeted at children in families with lower incomes (below twice the federal poverty level). In addition, per capita federal spending on children across all programs and tax provisions is greatest for infants and toddlers and gradually declines as children age (Edelstein et al. 2012).

The estimated economic payoffs of specific children's programs have been found to be greatest for programs addressing health (Belli, Bustreo, and Preker 2005; Hendren and Sprung-Keyser 2020), early care and education (Reynolds et al. 2011; Hendren and Sprung-Keyser 2020), and K–12 education (Levin 2009). Researchers estimate that children's health and education programs increase real future tax revenues by more than their cost, making them a positive long-term investment for the government as well as society (Hendren and Sprung-Keyser 2020). Spending on child health and education programs also has the strongest evidence of positive associations with child outcomes such as test scores and child mortality (Harknett et al. 2003). The EITC and housing programs are also estimated to have large and positive benefits if their contributions to increased academic achievement are included, which

results in higher adult earnings and higher tax revenues (Hendren and Sprung-Keyser 2020). Further, though smaller economic payoffs result from investments in youth training programs and spending on children with disabilities, they result in greater equity and justice, the economic value of which is not easily quantified (Hendren and Sprung-Keyser 2020).

Child poverty is costly for children and families as well as society. We lay these costs out in box 1. The remainder of the brief describes the different types of public programs the government invests in and their impacts on children and society.

BOX 1

The Cost of Child Poverty

Child poverty is costly to the US, just as it is to affected individuals. Researchers estimate that child poverty costs the US between \$500 billion and \$1.03 trillion annually. The largest cost is reduced productivity later in life. Children experiencing poverty tend to earn less and pay less in taxes, and they are more likely to require public supports later in life. In addition, children growing up in poverty are more likely to require spending to remediate the effects of child homelessness and maltreatment (Holzer et al. 2008; McLaughlin and Rank 2018). These negative outcomes are worse for children spending at least half their childhood in poverty (persistent poverty) than for those who experience poverty for a shorter period (Ratcliffe 2015).

The effects of poverty can be seen across a child's lifetime. Poverty in early childhood is connected to reduced gray matter development. This likely results from less cognitive stimulation, stressful and unsafe living conditions, and family instability (Damron 2015). Evidence suggests that children living in poverty start school less prepared and often face lower teacher expectations. This can lead to reduced achievement in school (McLoyd 1998). Children who live in poverty are also more likely as adolescents to drop out of high school and have a lower probability of graduating from college as young adults (Ratcliffe 2015; Pungello et al. 2010). An inferior education leads to the development of fewer skills and abilities, resulting in lower-paying and less stable jobs and substantially reduced earnings (McLaughlin and Rank 2018).

Children who grow up in poverty are also more likely to require additional government investments. Children who experience poverty are more likely to have been arrested by age 20 (Ratcliffe 2015). They also are at higher risk of poor health outcomes, which is likely related to inadequate access to medical care (Schickendanz, Szilagyi, and Dreyer 2021).³Many strategies can alleviate poverty and its impacts on children.

How Cash Supports Help Children

Some federal investments in children provide cash to families through the tax system or other programs. Below we describe these cash supports and their impacts on children in the short and long term.

Major Programs

Federal tax credits, primarily the CTC and the EITC, account for the lion's share of cash assistance to families with children. Social Security and Veterans Benefits also provide income supports, and more narrowly targeted cash payments are delivered by the Temporary Assistance for Needy Families (TANF) program and SSI program. The benefits from the tax credits accrue to a broad group of children: just under half of benefits from tax credits go to families in the bottom 40 percent of the income distribution, and even families with high incomes receive some benefits.⁴ In contrast, almost all direct payments from TANF and SSI go to families with low incomes.

The CTC is the largest tax program supporting children. It provides a benefit of up to \$2,000 per child younger than 17, and up to \$1,600 is available as a tax refund if the benefit exceeds the taxes the family owes. Almost all families with children benefit from the CTC: benefits begin to phase in when earnings reach \$2,500 and begin to phase out only once income reaches \$200,000 for a single parent or \$400,000 for a married couple. For 2021, pandemic response legislation temporarily made the credit fully refundable (eliminated the phase-in) and increased the maximum benefit to up to \$3,000 per child ages 6 to 17 and \$3,600 per child younger than 6.

The EITC boosts working families' incomes by providing a credit of up to \$7,400 (in 2023) to working parents with at least three children. Smaller credits are available for families with fewer children. The credit is targeted at families with low and moderate incomes; it increases along with earnings up to the maximum benefit level before beginning to decline at around \$22,000 in annual income and fully phasing out at around \$60,000 in income. The credit is refundable, meaning families can receive the credit as a tax refund if it exceeds the taxes they owe. Since these tax credits phase in with income, they tend to provide substantial support to families with incomes close to the poverty level but little support to families with lower incomes (Hardy and Ziliak 2014).

The federal government directs additional cash payments to relatively narrow groups of people through a small set of programs. TANF provides limited monthly cash assistance to families with very

low incomes. States set eligibility and benefit levels, and the maximum monthly cash payment for a family of three in 2020 ranged from \$170 in Mississippi to \$1,086 in New Hampshire (Knowles et al. 2022). SSI provides a monthly cash benefit to children with severe disabilities living in families with very low incomes. In general, families must have incomes below the federal poverty level to qualify for the full SSI child benefit. The strict eligibility criteria mean that fewer than 2 percent of children receive benefits from SSI.⁵ Finally, survivor and dependent benefits through Social Security and Veterans Benefits provide income supports to children and their families.

Impacts of Cash Assistance

Cash payments to families with children allow families to purchase goods and services without restrictions on the funds' use. This assistance can provide direct benefits to children and reduce parents' stress. Research suggests that these investments pay off in both the short and long term by reducing material hardship, which in turn can improve health and educational attainment as well as improve a child's home environment. Both can set children up for better long-term education and employment outcomes (Cooper and Stewart 2020).

Short-Term Benefits

In the near term, cash payments are associated with reductions in material hardship, reductions in adverse childhood experiences, and improved parenting habits—all of which can benefit children. Cash assistance generally has been linked to a decrease in child maltreatment, thus playing a protective role for children in families with low incomes, who are generally more at risk of abuse and neglect. Recent evidence suggests that, particularly among families with low incomes, regular monthly payments can be a powerful factor in reducing hardship, likely because they provide some protection from income volatility and allow families to meet ongoing needs such as food, housing, and utilities.

A series of studies documents the positive effects of the EITC across many dimensions of childhood. Analysts find that the EITC reduces the incidence of low birth weight (Hoynes, Miller, and Simon 2015; Wicks-Lim and Arno 2017), and older children experience improvements in health status (Baughman and Duchovny 2016). Children in families who receive the EITC also see improved test scores (Maxfield 2015; Chetty, Friedman, and Rockoff 2011), are more likely to complete high school (Bastian and Michelmore 2018), and are more likely to enroll in college (Manoli and Turner 2018). Receipt of the EITC is linked with reduced household crowding for mothers and their children (Pilkauskas and Michelmore 2019). Finally, the EITC reduces mental health problems and stress among parents (Evans and Garthwaite 2014), which can reduce the incidence of child maltreatment.

Tax credits also reduce food insecurity (Batra and Hamad 2021), which is associated with depressed physical, cognitive, and social-emotional development in children (Hines, Markowitz, and Johnson 2021). These reductions in food insecurity are concentrated around the time of benefit receipt during tax season (McGranahan and Schanzenbach 2013). However, in 2021, when the CTC was delivered as monthly payments from July through December, food insecurity declined after the initial payment and then remained low through the year (Perez-Lopez 2021; Parolin et al. 2022). The effect was most pronounced among families with annual incomes of less than \$35,000 (Parolin et al. 2022). This suggests that timing of payments can affect how well they achieve certain outcomes.

Cash benefits through TANF and SSI have also been correlated with reduced food insecurity (Schmidt, Shore-Sheppard, and Watson 2016) and with better parenting habits, which can include displaying higher sensitivity to a child's needs and providing more stimulation, supporting a child's cognitive development (Guldi et al. 2022).

Long-Term Benefits

Benefits from cash payments for children persist into adulthood. A large body of work has found that receipt of the EITC and CTC in childhood improves children's educational outcomes and leads to better overall health (Chetty, Friedman, and Rockoff 2011; Bastian and Michelmore 2018; Jones, Wang, and Yilmazer 2022). Particularly among single mothers, the EITC increases employment, which provides an additional income boost for families with children (Hoynes and Patel 2015).

Cash payments can lay a stronger foundation for a child's long-term development. For example, increased incomes appear to buffer the risk of reduced brain development among children, which is more likely for children growing up in poverty. Evidence from the Baby's First Years study suggests that children's brain activity changes as a result of the additional family income in a way that is associated with development of positive cognitive skills (Troller-Renfree et al. 2022). This important early development bolsters health and well-being later in life (Mustard 1999).

Finally, regular cash payments reduce income volatility over the course of the year. Prior research suggests that income volatility is negatively associated with educational attainment (Hardy 2014; Hardy and Marcotte 2020). Income volatility also leads to worse health later in life (Cheng et al. 2020).

How In-Kind Investments Help Children

The federal government makes additional investments in children that directly provide or subsidize the purchase of goods and services including child care, education, health insurance, housing, and food. Below we analyze the ways in which some (but not all) in-kind spending on children benefits society. Some programs are excluded because it is difficult to tease out the effect of certain investments or because robust research on their benefits does not exist.

Child Care and Early Education

Early investments in children's education and care are associated with positive child development outcomes as well as greater economic stability for families. Public investments in child care and early education come in the form of free and reduced-price child care and preschool.

Major Programs

Head Start, the best-known of the early childhood programs, is a free preschool program for qualifying children up to age 5.⁶ Free and reduced-price public preschool and public prekindergarten programs have also expanded in recent years as state and local governments have invested in new programs. The federal and state governments also help parents pay for care through child care subsidies provided by the Child Care and Development Fund.

Impacts of Child Care and Early Education Programs

Disparities between children in low- and high-income families start early and continue as children age. For example, children from low-income families are often exposed to millions fewer words, placing them on average at a disadvantage in building vocabulary and comprehension (Hart and Risley 2003). Investments in the earliest years of a child's life can deliver substantial benefits that improve children's short-term development and long-term well-being while also supporting parental employment (Council of Economic Advisers 2023).

Short-Term Benefits

When compared to alternative care settings, Head Start appears to provide access to higher-quality settings and experiences for young children, which leads to improved cognitive development and health. These benefits largely tend to fade by first grade, except among students with special needs or disabilities. Head Start also leads to improved parenting practices, which can benefit children. These benefits appear to persist for several years (Puma et al. 2010).

Preschool can provide young children with an enriching and supportive environment that nurtures growth. By providing this environment, public preschool improves cognitive development and school readiness for all children, but it especially benefits Black children, Hispanic children, and children from low-income families (Ahmad and Hamm 2013; Phillips et al. 2017; Yoshikawa et al. 2013). Key to the success of these programs is providing instructional, social, and emotional interactions that include back-and-forth communication that is consistent and responsive, helping children's brains develop and preparing them to be ready to learn (Phillips et al. 2017).

Preschool and early childhood programs also offer benefits to parents, serving as child care that allows parents to work more and improve their economic security. For example, when the District of Columbia began offering public preschool to all 3- and 4-year-olds, there was a significant increase in the number of mothers working, providing a boost to families' economic well-being (Malik 2018). Additionally, mothers who received help paying for child care expenses were 40 percent more likely to retain employment after two years and also experienced stronger wage growth compared to those who did not receive help (Glynn, Farrell, and Wu 2013).

Long-Term Benefits

Research showed that the immediate effects of Head Start on test scores faded during early elementary school, but later studies suggested a longer-term payoff to participating in the program. Children who had participated in Head Start were more likely to have better executive functioning, graduate from high school, experience lower rates of poor health later in life, have higher rates of employment, and achieve higher earnings later in life compared to their siblings who did not participate (Deming 2009). In a summary of literature on the effects of early childhood education, reviewing a variety of high-quality but methodologically diverse studies, Duncan and Magnuson (2013) found long-term evidence of greater educational attainment, higher earnings, and lower rates of crime.

In one study, participation in subsidized preschool programs was linked to a decreased likelihood of being placed in special education, a decrease in the rate of grade retention, and a higher likelihood of graduating from high school than demographically similar children who had not participated in these programs (McCoy et al. 2017).

Researchers estimate that for every dollar invested in state and district prekindergarten programs for 3- and 4-year-olds in low-income families, the median return on investment is about \$4.20, relative to demographically similar children who did not participate in the programs (Ramon et al. 2018). Participants in the programs that were studied were more likely to complete high school, earn higher incomes later in life, and were less likely to participate in criminal activity or use social safety net programs. They also experienced lower health care costs in adulthood.

K-12 Education

Kindergarten through high school education lays the foundation for basic skills development and postsecondary education opportunities. As noted elsewhere, cash assistance and investments in health and housing often result in better education outcomes. So too, do direct investments in education.

Major Programs

Most funding for K–12 education comes from state and local government (Lou et al. 2023). State tax revenues and local revenues primarily from property taxes each provide close to half of education funding, and the federal government provides less than 10 percent of funding (Chingos and Blagg 2017). However, the amount invested in children's education differs substantially across states (Isaacs and Edelstein 2017) and even across localities within states based on state policies and local responses (Chingos and Blagg 2017).

To help equalize these funding differences, the federal government provides substantial funding through the Education for the Disadvantaged (Title I) program, which boosts funding in areas with high concentrations of children from families with low incomes. While this program is aimed at helping to close racial and economic achievement gaps (Reardon 2011), Title I funding can be distributed unequally, as states with smaller populations receive more funding per low-income student compared to states with larger populations (Miller 2009).

The federal government provides substantial funding via the Individuals with Disabilities Education Act to support K–12 special education for children with disabilities. This funding is often distributed unequally. Researchers have found that changes made to this program in 1997 disadvantaged states with more K–12 students, more students living in poverty, more students receiving special education, and more nonwhite and Black students (Kolbe, Dhuey, and Doutre 2022).

The federal government also supports programs aimed at boosting the quality of K–12 education through reduced class sizes, teacher improvement, research, and training. Federal supports help with the education of priority groups, including children who live in rural areas, are in tribes, live in military families or abroad, speak English as a second language, or are homeless.

Impacts of K-12 Education Programs

Generally, education investments make it more likely that children will do well in school and graduate from high school and postsecondary school. This, in turn, makes them more likely to be employed and to achieve higher earnings. Education can also improve economic mobility (Shambaugh, Bauer, and Breitwieser 2018). Failure to graduate from high school is associated with poorer health later in life, a higher likelihood of engaging in criminal behavior, and a higher likelihood of needing public assistance. These outcomes are all costly for the individual and society (Rumberger 2019).

Short-Term Benefits

Investments in K–12 education can promote better classroom experiences. Federal funding initiatives targeted at students with low incomes allow schools to hire more qualified and culturally aware teachers and create better learning environments, which have been shown to improve students' achievement (Gallagher and Chingos 2017). Higher K–12 per pupil funding is associated with higher standardized test scores (Lafortune, Rothstein, and Schanzenbach 2018) and higher graduation rates (Candelaria and Shores 2017). When funding for education fell during the Great Recession, this decline was correlated with lower test scores and lower rates of graduation from high school (Jackson, Wigger, and Xiong 2021).

Long-Term Benefits

Education increases income through two channels: more highly educated people are more likely to be employed, and they tend to work in jobs with higher pay. The increasing share of students graduating

from high school has been critical to improvements in productivity, a precondition of better wages (Shambaugh, Bauer, and Breitwieser 2018). Americans with higher levels of education generally earn higher wages—and they have also experienced higher wage growth over time (Shambaugh, Bauer, and Breitwieser 2018). Research has found that higher spending on public schools, implemented as part of funding equalization in the 1970s and 1980s, was associated with increases in adult earnings for children exposed to funding increases, compared with prior students (Jackson, Persico, and Johnson 2016).

Higher levels of education are associated with better adult health. This is in part because more highly educated people are more likely to have access to health benefits at their jobs (Baum, Ma, and Payea 2013) and are more likely to work in safer workplaces (Peters et al. 2022).

Improvements in education and the associated increases in earnings boost tax revenue and save money for the government by lowering spending on the criminal justice system and social service programs for adults (Mitra and Zheng 2011).

Health

Multiple factors influence good health, and many of them are related to non-health-specific investments such as income supports and housing.

In this section, we focus on access to health care as an input, and specifically on the impact of publicly supported health insurance on access to services, family finances, and children's education in the short term and on health, education, and employment in the long term.

Major Programs

In 2020, Medicaid and CHIP provided health coverage for 35 million children and 9 million children, respectively (Centers for Medicare and Medicaid Services 2021). Created in 1965 and jointly funded by states and the federal government, Medicaid finances health services for people with low incomes or disabilities; medical, dental, vision, hearing, and mental health benefits for children are comprehensive, and accessing services typically requires no or only minimal cost sharing. CHIP covers pregnant people and children whose incomes are too high for Medicaid but who might not otherwise have insurance, usually offering benefits as comprehensive as Medicaid's and with low cost sharing (Brooks and Whitener 2017). States have flexibility to set eligibility guidelines within federal rules, so each state's

eligibility requirements are different; the median Medicaid/CHIP income eligibility level in 2023 is 255 percent of the federal poverty level⁷, and most states cover at least some children who are noncitizens but are legally present in the US (Buettgens and Ramchandani 2022). Rules governing children's eligibility are more generous than those for other groups such as parents, and other adults (Brooks, Gardner et al. 2023). Enrollment in these programs has increased since the pandemic; over half of the children in the United States are now enrolled in Medicaid or CHIP (Alker and Osorio 2023). Children are the largest group of Medicaid beneficiaries (46.2 percent in January 2023) but represented less than 20 percent of Medicaid expenditures in 2017 (Truffer, Wolfe, and Rennie 2017). Medicaid and CHIP are especially important for serving children of color, as more than half of Medicaid beneficiaries identify as Black, Hispanic, Asian, or another nonwhite race or ethnicity (MACPAC 2020).

Impacts of Health Programs

Investing in Medicaid for children supports families in two ways. First, it improves access to care and use of quality health services, and, thus, overall health (Thompson 2017). Second, it reduces families' financial burdens related to health services. Health in early childhood, beginning with prospective parents' health, is vitally important to a person's health throughout the rest of their life (Center on the Developing Child at Harvard University 2010).

Short-Term Benefits

Medicaid impacts children in the short term by allowing them to affordably obtain needed medical services (such as annual checkups and sick visits to address acute needs) (Boudreaux, Golberstein, and McAlpine 2015). Children benefit not only when they are covered by Medicaid or CHIP rather than uninsured, but also when their parents have coverage. Parental health affects children's health and well-being because children depend on their parents or other caregiving adults, and, thus, poor health or lack of access to care among parents and caregivers can also affect children. Prior research shows that when a parent self-reports their health as good or excellent, their child is more than three times as likely to be in good health as a child with similar characteristics but with parents who are in poor or fair health. (Murphey et al. 2018). In addition, research shows that when parents have health care coverage, their children also have improved access to care. A study from 2017 found that children were 29 percentage points more likely to have an annual health care visit if their parents were enrolled in Medicaid (Venkataramani, Pollack, and Roberts 2017).

Medicaid also lowers financial strain and reduces the risk of medical bankruptcy for families with low incomes and high health needs (Boudreaux, Golberstein, and McAlpine 2015). Medicaid kept at least 2.6 million but potentially as many as 3.4 million people out of poverty in 2010, based on the supplementary poverty measure that accounts for more resources and costs, due to the lowering of out-of-pocket medical spending (Sommers and Oellerich 2013). In reviewing initial state adoptions of Medicaid between 1966 and 1970, Boudreaux, Golberstein, and McAlpine (2015) found that the introduction of Medicaid in a state decreased that state's residents' probability of having medical debt by 11 percent.

Long-Term Benefits

Medicaid has numerous significant effects on children's long-term health and other outcomes. Impacts are evident even during adolescence. Children eligible for Medicaid between ages 2 and 4 experienced improved health from ages 9 to 17, relative to similarly situated older children who were not eligible for Medicaid (Currie, Decker, and Lin 2008). These benefits continue into adulthood. Studies have found that children with low incomes who were covered by Medicaid from birth to age 6 showed significant improvements in adult health as measured by an index combining information on high blood pressure, diabetes, heart disease / heart attack, and obesity (Boudreaux, Golberstein, and McAlpine 2015). Wherry and colleagues (2018) found that Medicaid exposure in early childhood is associated with fewer hospitalizations and less utilization of the emergency department, particularly for Black enrollees, in adulthood. They found the association particularly pronounced for visits related to chronic illness and for patients living in neighborhoods with low incomes.

Research has also shown that being on Medicaid in early childhood reduces long-run mortality (Georgetown Center for Children and Families 2017). Child mortality declined more quickly in states with larger Medicaid expansions in the 1960s, and these mortality declines were especially robust for nonwhite children (Goodman-Bacon 2021).

In utero Medicaid coverage is also important and has effects on children later in their lives. Prenatal Medicaid coverage reduced chronic conditions when children reached their mid-20s in a cohort study by Miller and Wherry (2019). Work by the Commonwealth Fund based on a review of the literature shows that Medicaid coverage of pregnant women and children is associated with better overall health and reduced mortality.

Medicaid also has positive effects on other outcomes, such as education and employment. Medicaid eligibility at birth is associated with increased academic performance in reading at ages 9 and 14 (Levine

and Schanzenbach 2009). Medicaid has educational impacts past primary education, as a study based on a period of Medicaid expansion in the 1980s and 1990s found that increases in childhood Medicaid eligibility decreased the high school dropout rate and increased the college completion rate (Cohodes et al. 2014). Additionally, receipt of Medicaid in childhood is associated with higher rates of employment later in life and lower rates of receipt of disability program utilization up to 50 years later (Goodman-Bacon 2021).

Medicaid impacts academic and employment outcomes by "improving children's health, by increasing financial stability in their households, and by enabling the diagnosis of disabilities relevant for learning which can lead to the proper tailoring of school resources," according to Qureshi and Gangopadhyaya (2021). Increased access to treatment and health care means that health conditions are better managed, and healthier children miss less school, concentrate better, and learn more (Bleakley 2007; Miguel and Kremer 2004).

Finally, investing in health also saves the government money over the long run. For each dollar spent on children's health coverage, the government receives a \$1.78 return (which includes savings from hospitalizations and emergency visits and increased future taxes paid by children) (Hendren and Sprung-Keyser 2020).

Housing

Although the federal government spends less money on children through housing assistance programs than through other program categories, housing impacts children in important ways. Housing programs support households financially by assisting with their largest expense and can facilitate access to better neighborhoods and better schools for children.

Major Programs

Federal housing programs include tax credits; vouchers (housing payment assistance); zoning programs; public housing (rental housing administered by the government); and grants designed to help families, particularly families with low incomes, access adequate and affordable housing. The goals of federal housing assistance programs are numerous but include allowing families with low incomes to have opportunities to access quality housing in improved neighborhoods with more resources.

Impacts of Housing Programs

Housing assistance helps stabilize families and frees up income that would otherwise be spent on rent. Creating affordable access to safe and stable housing for families increases their access to low-poverty neighborhoods and schools and can positively impact children's health, education, and economic outcomes. Adverse housing conditions, such as crowded living quarters, can result in poor mental health and well-being (Schwartz 2006). Frequent moves, sometimes referred to as unstable housing, puts older children at risk of developing adverse mental health conditions that are less prominent among those with stable homes (Bovell-Ammon et al. 2020). Inadequate housing—often occupied by lowerresourced families, particularly Black and Hispanic families—is also associated with health hazards, such as lead, mold, and rodent exposure, and inadequate heating and air-conditioning (Schwartz 2006). Adverse housing circumstances contribute significantly to the health disparities that families of color face (Bovell-Ammon et al. 2020).

Short-Term Benefits

Housing vouchers are associated with reduced household crowding, decreased prevalence of living with relatives or friends, fewer subsequent housing moves, and less homelessness—all of which benefit children's mental health and well-being (Wood, Turnham, and Mills 2008). Research directly examining the impact of housing programs on children's mental health and well-being is limited, but there is some evidence to suggest that children living in public housing have better mental health outcomes than children who are on the waiting list for housing assistance (Fenelon, Slopen, and Newman 2023).

Housing assistance can help improve children's educational outcomes. A study of student academic performance among families who received housing vouchers in New York City found significant academic gains in math and language arts after voucher receipt (Schwartz et al. 2020). In a similar study in Wisconsin, comparing the academic performance of children in families who had received housing vouchers relative to those who had not received vouchers and those who received vouchers later, Carlson and colleagues found modest improvements in math scores (2019).

Long-term Benefits

The long-term benefits of investments in housing are mixed and depend on how long a child was exposed to investments and the type of investment being made. Housing programs can allow families and children access to better neighborhoods—those with lower poverty, better schools, and more

accessible health options, all of which can positively impact children later in life (Chetty, Hendren, and Katz 2016). Research generally finds that investments that are focused on young children and those that allow families to move to low-poverty neighborhoods have the highest payoff (Collinson and Ludwig 2019).

Although early research on a broad demonstration project that allowed families to move to highopportunity neighborhoods showed limited benefits for children, later analysis suggested significant improvements in long-run earnings among children who had moved when they were relatively young (Chetty, Hendren, and Katz 2016). Other studies found that children who were displaced from disadvantaged neighborhoods through the destruction of public housing, relative to those who remained in public housing, were more likely to be employed and earn more and were less likely to drop out of high school (Chyn 2018).

Voucher programs have been shown to decrease neighborhood disadvantage exposure and likelihood of living in a high-poverty neighborhood for nonwhite families, while project-based housing increases exposure to disadvantaged neighborhoods (Fenelon, Slopen, and Newman 2023). Families also show nuance in their housing decisions. One study found that housing assistance vouchers did not lead to families with low incomes accessing neighborhoods with better schools unless the families had school-age children (Horn, Ellen, and Schwartz 2014); another study found that voucher holders did move toward better schools when given information about opportunities (Ellen, Horn, and Schwartz 2016).

Nutrition

Public nutrition programs provide resources to help families afford an adequate and nutritious diet and direct access to food. A healthy diet is critical to children's development and wellbeing and is associated with better health, educational outcomes, and economic success as adults. Assistance from nutrition programs can help reduce families' financial strain.

Major Programs

The US Department of Agriculture (USDA) administers several nutrition programs that benefit children and combat food insecurity, defined as a lack of access to sufficient food or to food of an adequate quality to meet basic needs. These programs fall into two broad categories: near-cash benefits, such as SNAP and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), and the provision of meals through children's nutrition programs at schools and child care sites.

SNAP (formerly known as food stamps), the largest federal food assistance program, provides families with low incomes about \$6 per person per day⁸ in benefits that can be used to purchase healthy food.⁹ Similarly, WIC provides benefits to children, mothers, and pregnant women who are deemed to be at nutritional risk, allowing them to purchase specific food items, such as eggs, milk, fruits, vegetables, and infant formula, that are intended to promote healthy development.¹⁰

Child nutrition programs, including the National School Lunch Program, the School Breakfast Program, the Summer Food Service Program, and the Child and Adult Care Food Program, are all relatively small programs that operate under the same funding source. The National School Lunch Program provides free or reduced-price nutritionally balanced lunches to children at public and nonprofit private schools.¹¹ The School Breakfast Program provides reimbursement to states to operate nonprofit breakfast programs in schools and residential child care institutions.¹² The Summer Food Service Program reimburses providers who serve free meals to students during the summer months when school is not in session.¹³ The Child and Adult Care Food Program reimburses participating child and adult care for nutritious meals and snacks provided to eligible children and adults.¹⁴

Impacts of Nutrition Programs

Nutrition programs support children and families by helping them access an adequate and nutritious diet and by acting as a budget supplement that alleviates other forms of hardship. Households receiving SNAP or WIC benefits spend more on food than they would without the benefit and are also able to reduce other forms of material hardship by putting additional resources toward housing, utilities, and medical expenses. Longer term, the benefits are associated with better health and economic sufficiency in adulthood.

Short-Term Benefits

Nutrition programs are designed to reduce food insecurity among families with low incomes. Food insecurity represents a leading health and nutrition issue in the United States, affecting just over 12 percent of households with children.¹⁵ Children experiencing food insecurity are more than twice as likely to report being in fair or poor health than their non-food insecure peers and are more than 1.4

times as likely to have asthma, even after controlling for other characteristics (Gundersen and Ziliak 2015). Food insecurity is associated with worse general health, forgone medical care, less access to preventive health services, higher health care costs, and poorer educational outcomes in the short term for both younger and older children (Thomas, Miller, and Morrissey 2019; Carlson and Llobrera 2022).

SNAP also reduces overall financial hardship among participants. SNAP is associated with increases in the ability to pay for nonfood essential expenses; one study showed that the inability to fully pay for housing and utilities fell by 7.2 and 15.3 percentage points, respectively, among SNAP recipients. Additionally, SNAP benefits reduced medical financial hardship by 8.5 percentage points, relative to those likely to experience financial hardship who did not receive SNAP benefits (Shaefer and Gutierrez 2013).

Children in families receiving SNAP benefits in areas where food prices are lower (and thus benefits are worth more) receive more preventive health care and miss fewer days of school, relative to their peers facing higher food prices (Hoynes, Bronchetti, and Christensen 2017). They are also less likely to have utilized emergency room services (Hoynes, Bronchetti, and Christensen 2017). Additionally, in a systematic review of observational studies on the effects of WIC on birth outcomes, WIC participation during pregnancy was associated with lower risk for preterm birth, low-birth-weight infants, and infant mortality (Venkataramani et al. 2022; Chorniy, Currie, and Sonchak 2019; Bitler and Currie 2005; Testa and Jackson 2021). Further, Schwartz and Rothbart (2019) did not find significant effects on students' weight status with the introduction of universal free meals—they found negative, but insignificant, effects on overweight, obesity, and body mass index.

Finally, nutrition programs have positive impacts on children's education. Children in families receiving SNAP benefits (when compared to those eligible but not receiving) are less likely to need to repeat a grade (Beharie, Mercado, and McKay 2017). Similarly, a study of universal free meal receipt through child nutrition programs in New York City middle schools found that universal free meals increased scores on English language arts and math standardized tests for both poor and nonpoor students, with the largest increases among poor students. This study also found that universal meals may reduce the stigma of free lunch programs and thus increase uptake, and benefits.

Long-Term Benefits

While SNAP enrollment increases immediate food security through the receipt of benefits, evidence suggests it may also increase long-term food security. By improving financial security, nutrition benefits

can improve long-term trajectories related to food security (Insolera, Cohen, and Wolfson 2022). Adults whose families enrolled in SNAP when they were children are three times more likely to be food secure than those who were eligible as children but did not participate in the program (Insolera, Cohen, and Wolfson 2022). Additionally, adults who participated in both SNAP and WIC as children see a fourfold increase in their likelihood of food security (Insolera, Cohen, and Wolfson 2022).

In addition, food security in childhood is linked to better health outcomes in adulthood, such as decreasing the incidence of low-weight births, obesity, and heart disease (Carlson and Llobrera 2022). Access to SNAP in utero and during early childhood is associated with a reduction in metabolic syndrome—a group of conditions that include obesity, high blood pressure, heart disease, and diabetes—of 0.3 standard deviations for women and 0.5 standard deviations for men. Women were also 34 percentage points more likely to report good health in adulthood if they were enrolled in SNAP during this period (Hoynes, Schanzenbach, and Almond 2016).

Research also indicates that childhood access to SNAP yields positive individual outcomes in adulthood that reduce reliance on other public programs, thereby decreasing net public spending (Bailey et al. 2020). Specifically, children who had consistent exposure to SNAP in utero through age 5 have better human capital, financial self-sufficiency, and life expectancy outcomes as adults. They are also less likely to be involved in the carceral system and more likely to live in a high-quality neighborhood. Because of these outcomes, these adults are less likely to enroll in public assistance programs, reducing long-term reliance on government supports and thus decreasing long-term government spending. While the dollar value of this reduction in spending is difficult to estimate, in this instance, economists calculated the marginal value of public funds—the ratio of society's benefits from SNAP to the program's net cost to the government—to be about 56, which means the program is highly cost-effective (Bailey et al. 2020).

SNAP funding also has a multiplier effect that benefits the overall economy, as SNAP benefits boost spending on food production, transportation, and marketing, which supports incomes in these industries and further spending. For a slowing economy, a \$1 billion increase in SNAP benefits associated with higher enrollment in the program is estimated to increase gross domestic product by \$1.54 billion, indicating that SNAP has economic impacts felt beyond those who are directly receiving the benefits (Canning and Stacy 2019). While prior literature has established that the exact value of the multiplier is context-dependent, studies have generally found that when the economy is struggling and more people enroll in SNAP, the multiplier effect is greater than 1, indicating that SNAP spending boosts overall economic productivity, generating a positive return on investment (Canning and Stacy 2019).

Conclusion

Public programs that invest in children generally have a positive return on investment for society, and some also eventually pay for their cost—and more—to government through increased tax revenues and decreased spending on criminal justice and public assistance programs for adults. Cash and income supports and early care and education, health, housing, and nutrition programs for children work in interconnected ways.

Programs that provide cash benefits boost families' resources, allowing them to meet their essential needs and make investments in their children through spending on nutrition, care and education, and health care. Receiving cash assistance also allows parents to spend more personal time investing in their children's development and well-being. Some programs such as the EITC encourage parental employment and elevate parents' earnings and their ability to provide for and invest in their families over time. These investments enhance children's health, education, and skills, which increase their likelihood of employment, boost future earnings, and decrease their probability of involvement with the criminal justice system and use of public services as adults.

In-kind investments in goods and services, such as education and child care, food and nutrition, health coverage and health care, and housing, support children's development in at least two ways. First, these in-kind supports free up families' financial resources to cover essentials and make investments in both parents and children. Second, in-kind benefits and services directly improve children's education, nutrition, health, and safety. Spending on one type of program also tends to have positive effects in other domains. For example, studies have found that early childhood education and child care spending increases children's school preparedness, brain development, and health, which in turn boosts their likelihood of staying in school, graduating from high school, and enrolling in and completing higher education programs. Similarly, health programs not only directly improve children's physical and mental health and reduce the risk of costly chronic conditions later in life, but also enhance children's brain development and academic achievement. Investment in nutrition pays off in the form of reduced food insecurity and improved health and educational outcomes, while investment in housing programs can reduce the risk of exposure to toxins such as lead that harm children's health, as well as open up access to educational opportunities, community resources, and better health care.

Overall, the evidence is strong that not investing in children is harmful and investing in children is productive. The largest long-run payoffs, according to some studies, come from early investments in children through education and child care, and nutrition and health care; though, investments in older

children can have substantial returns as well (Hendren and Sprung-Keyser 2020). Public spending on children by federal, state, and local government has primarily been directed toward health and education programs where there is strong evidence of a positive payoff. Substantial spending has also come in the form of cash benefits distributed through the tax system. Though evidence of the payoff of tax expenditures is mixed, studies show larger positive benefits when the long-term impacts on children are incorporated (Hendren and Sprung-Keyser 2020).

Where Are Public Investments in Children Headed?

The federal government spends a relatively small share of its total budget on children. Programs benefitting children account for less than 10 percent of total federal spending in most years (figure 1). The federal government spends much more on adults, including the approximately 40 percent of total federal outlays devoted to adult Social Security, Medicare, and Medicaid spending in recent years. Even including state and local spending, which is tilted heavily toward children, total public spending benefiting seniors is still about twice the amount spent on children each year (Lou et al. 2023). While there are ethical reasons for social insurance spending on seniors and other adults, research has found much smaller returns for society and taxpayers for most of these programs compared with investments in children (Hendren and Sprung-Keyser 2020).

The relatively large share of the federal budget that is allocated to Social Security, Medicare, and Medicaid benefits for seniors and other adults is poised to increase further, from around 40 percent of federal spending in 2022 to nearly half of all federal spending 10 years from now, as a result of long-run increases in the cost of health care and a growing number of beneficiaries. Along with increasing interest payments on the national debt, which the Congressional Budget Office projects will soon surpass spending on children, these growing budgetary commitments will create pressure to further limit the amount of public investment in children.

FIGURE 1

Share of Federal Budget Outlays Spent on Children and Other Items, Selected Years, 1965–2033

□ All outlays not categorized below

Interest on the debt

Defense

Adult portions of Social Security, Medicare, and Medicaid

Children



URBAN INSTITUTE

Source: Lou, Cary, Heather Hahn, Elaine Maag, Hannah Daly, Michelle Casas, and C. Eugene Steuerle. Forthcoming. *Kids' Share* 2023: *Report on Federal Expenditures on Children through 2022 and Future Projections*. Washington, DC: Urban Institute. Note: Numbers may not sum to totals because of rounding.

During the COVID-19 pandemic, the government made historic investments in children, and federal spending on children reached a high of \$875 billion in fiscal year 2021. A substantial one-year expansion of the CTC and a series of one-time economic impact payments (stimulus checks) substantially boosted cash and income supports for children, which totaled approximately \$490 billion in fiscal year 2021 (Lou et al. 2023). These temporary investments, made in response to the pandemic, led to a historic decline in children's poverty in calendar year 2021 (Burns and Fox 2022). The pandemic response demonstrates that when there is political will to invest in children, it is possible to make these investments—many of which will pay for themselves many times over and benefit society and the economy in the long-run.

Notes

- ¹ All statistics in this and the following paragraph are based on the authors' analysis of data from the Kids' Share database; these data also provided estimates for Lou et al. 2023. All figures are in 2022 dollars.
- ² FY2019 represents the last year before the COVID-19 pandemic, during which spending levels were elevated. We anticipate a return to those levels in FY2023 (Lou et al. 2023).
- ³ Lisa Dubay, Lisa Clemans-Cope, and Nathaniel Anderson, "The link between income and the environments that promote child health," Urban Wire (blog), Urban Institute, April 22, 2015, https://www.urban.org/urbanwire/link-between-income-and-environments-promote-child-health; Dhruv Khullar and Dave A. Chokshi, "Health, Income, and Poverty: Where We Are and What Could Help," Health Affairs Health Policy Brief, October 4, 2018, https://doi.org/10.1377/hpb20180817.901935.
- ⁴ "T22-0254—Tax Benefit of the Child Tax Credit, Child and Dependent Care Tax Credit, and Earned Income Tax Credit, Baseline: Current Law, Distribution of Federal Tax Change by Expanded Cash Income Percentile, 2022," Tax Policy Center, December 28, 2022, https://www.taxpolicycenter.org/model-estimates/individual-incometax-expenditures-december-2022/t22-0254-tax-benefit-child-tax.
- ⁵ Kathleen Romig, "SSI: A Lifeline for Children with Disabilities," Center on Budget and Policy Priorities, May 11, 2017, https://www.cbpp.org/research/social-security/ssi-a-lifeline-for-children-with-disabilities.
- ⁶ "Head Start Services," Office of Head Start, current as of June 30, 2023, https://www.acf.hhs.gov/ohs/about/head-start.
- ⁷ Tricia Brooks, "Unwinding Wednesday #17: It's Imperative for States to Use the 2023 Federal Poverty Levels During the Unwinding" Say Ahhh! (blog), Georgetown University McCourt School of Public Policy Center for Children and Families, January 18, 2023, https://ccf.georgetown.edu/2023/01/18/unwinding-wednesday-17its-imperative-for-states-to-use-the-2023-federal-poverty-levels-during-the-unwinding/.
- ⁸ "A Quick Guide to SNAP Eligibility," Center on Budget and Policy Priorities, updated March 3, 2023, https://www.cbpp.org/research/food-assistance/a-quick-guide-to-snap-eligibility-and-benefits.
- ⁹ "What Can SNAP Buy?" USDA Food and Nutrition Service, updated April 14, 2021, https://www.fns.usda.gov/snap/eligible-food-items.
- ¹⁰ "WIC Frequently Asked Questions," USDA Food and Nutrition Service, updated April 4, 2023, https://www.fns.usda.gov/wic/frequently-asked-questions.
- ¹¹ "National School Lunch Program," USDA Food and Nutrition Service, accessed May 3, 2023, https://www.fns.usda.gov/nslp.
- ¹² "School Breakfast Program," USDA Food and Nutrition Service, accessed May 3, 2023, https://www.fns.usda.gov/sbp/school-breakfast-program.
- ¹³ "Summer Food Service Program," USDA Food and Nutrition Service, accessed May 3, 2023, https://www.fns.usda.gov/sfsp/summer-food-service-program.
- ¹⁴ "Child and Adult Care Food Program," USDA Food and Nutrition Service, accessed May 3, 2023, https://www.fns.usda.gov/cacfp.
- ¹⁵ "Food Security in the U.S.: Key Statistics and Graphics," USDA Economic Research Service, updated October 17, 2022, https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-u-s/key-statistics-graphics/#children.

References

- Ahmad, Farah Z., and Katie Hamm. 2013. The School-Readiness Gap and Preschool Benefits for Children of Color. Washington, DC: Center for American Progress.
- Alker, Joan, and Aubrianna Osorio. 2023. Child Uninsured Rate Could Rise Sharply if States Don't Proceed with Caution. Washington, DC: Georgetown University Center for Children and Families.
- Bailey, Martha J., Hilary W. Hoynes, Maya Rossin-Slater, and Reed Walker. 2020. "Is the Social Safety Net a Long-Term Investment? Large-Scale Evidence from the Food Stamps Program." NBER Working Paper Series 26942. Cambridge, MA: National Bureau of Economic Research.
- Bastian, Jacob, and Katherine Michelmore. 2018. "The Long-Term Impact of the Earned Income Tax Credit on Children's Education and Employment Outcomes." *Journal of Labor Economics* 36 (4): 1127–63.
- Batra, Akansha, and Rita Hamad. 2021. "Short-Term Effects of the Earned Income Tax Credit on Children's Physical and Mental Health." Annals of Epidemiology 58:15–21.
- Baughman, Reagan A., and Noelia Duchovny. 2016. "State Earned Income Tax Credits and the Production of Child Health: Insurance Coverage, Utilization, and Health Status." *National Tax Journal* 69 (1): 103–31.
- Baum, Sandy, Jennifer Ma, and Kathleen Payea. 2013. Education Pays, 2013: The Benefits of Higher Education for Individuals and Society. Trends in Higher Education Series. New York: College Board.
- Beharie, Nisha, Micaela Mercado, and Mary McKay. 2017. "A Protective Association between SNAP Participation and Educational Outcomes among Children of Economically Strained Households." *Journal of Hunger and Environmental Nutrition* 12 (2): 181–92.
- Belli, Paolo C., Flavio Bustreo, and Alexander Preker. 2005. "Investing in Children's Health: What Are the Economic Benefits?" *Bulletin of the World Health Organization* 83 (10): 777–84.
- Bitler, Marianne, and Janet Currie. 2005. "Does WIC Work? The Effects of WIC on Pregnancy and Birth Outcomes." Journal of Policy Analysis and Management 24 (1): 73–91.
- Bleakley, Hoyt. 2007. "Disease and Development: Evidence from Hookworm Eradication in the American South." Quarterly Journal of Economics 122 (1): 73–117.
- Boudreaux, Michel H., Ezra Golberstein, and Donna D. McAlpine. 2015. "The Long-Term Impacts of Medicaid Exposure in Early Childhood: Evidence from the Program's Origin." *Journal of Health Economics* 45: 161–75.
- Bovell-Ammon, Alison, Diane Yentel, Mike Koprowski, Chantelle Wilkinson, and Megan Sandel. 2020. "Housing Is Health: A Renewed Call for Federal Housing Investments in Affordable Housing for Families with Children." *Academic Pediatrics* 21 (1): 19–23.
- Brooks, Tricia, Allexa Gardner, Peyton Yee, Jennifer Tolbert, Bradley Corallo, Sophia Moreno, and Meghana Ammula. 2023. Medicaid and CHIP Eligibility, Enrollment, and Renewal Policies as States Prepare for the Unwinding of the Pandemic-Era Continuous Enrollment Provision. San Francisco, CA: KFF.
- Brooks, Tricia, and Kelly Whitener. 2017. *Medicaid and CHIP 101: Medicaid and CHIP's Foundational Role in Covering Kids and Families*. Washington, DC: Georgetown University Center for Children and Families.
- Buettgens, Matthew, and Urmi Ramchandani. 2023. *The Health Coverage of Noncitizens in the United States*, 2024. Washington, DC: Urban Institute.
- Burns, Kalee, and Liana Fox. 2022. "The Impact of the 2021 Expanded Child Tax Credit on Child Poverty." Census Bureau Working Paper SEHSD-WP2022-24. Washington, DC: United States Census Bureau.
- Candelaria, Christopher, and Kenneth Shores. 2017. "Court-Ordered Finance Reforms in the Adequacy Era: Heterogeneous Causal Effects and Sensitivity." *Education Finance and Policy* 14 (1): 31–60.

- Canning, Patrick, and Brian Stacy. 2019. The Supplemental Nutrition Assistance Program (SNAP) and the Economy: New Estimates of the SNAP Multiplier. Washington, DC: US Department of Agriculture, Economic Research Service.
- Carlson, Deven, Hannah Miller, Robert Gaveman, Sohyun Kang, Alex Schmidt, and Barbara Wolfe. 2019. "The Effect of Housing Assistance on Student Achievement: Evidence from Wisconsin." *Journal of Housing Economics* 44:61–73. https://doi.org/10.1016/j.jhe.2019.01.002.
- Carlson, Steven, and Joseph Llobrera. 2022. SNAP Is Linked with Improved Health Outcomes and Lower Health Care Costs. Washington, DC: Center on Budget and Policy Priorities.
- Center on the Developing Child at Harvard University. 2010. The Foundations of Lifelong Health Are Built in Early Childhood. Cambridge, MA: Harvard University.
- Centers for Medicare and Medicaid Services. 2021. Federal Fiscal Year (FFY) 2020 Statistical Enrollment Data System (SEDS) Reporting. Baltimore, MD: Centers for Medicare and Medicaid Services.
- Cheng, Siwei, Kyriaki Kosidou, Bo Burström, Charlotte Björkenstam, Anne R. Pebley, and Emma Björkenstam. 2020. "Precarious Childhoods: Childhood Family Income Volatility and Mental Health in Early Adulthood." *Social Forces* 99 (2): 672–99. https://doi.org/10.1093/sf/soaa020.
- Chetty, Raj, John N. Friedman, and Jonah E. Rockoff. 2011. "The Long-Term Impacts of Teachers: Teacher Value-Added and Student Outcomes in Adulthood." NBER Working Paper Series 17699. Cambridge, MA: National Bureau of Economic Research.
- Chetty, Raj, Nathaniel Hendren, and Lawrence Katz. 2016. "The Effects of Exposure to Better Neighborhoods on Children: New Evidence from the Moving to Opportunity Experiment." *American Economic Review* 106 (4): 855– 902.
- Chingos, Matthew, and Kristin Blagg. 2017. *Making Sense of State School Funding Policy*. Washington, DC: Urban Institute.
- Chorniy, Anna, Janet Currie, and Lyudmyla Sonchak. 2019. "Does Prenatal WIC Participation Improve Child Outcomes?" NBER Working Paper Series 24691. Cambridge, MA: National Bureau of Economic Research.
- Chyn, Eric. 2018. "Moved to Opportunity: The Long-Run Effects of Public Housing Demolition on Children." American Economic Review 108 (10): 3028–56.
- Cohodes, Sarah, Daniel Grossman, Samuel Kleiner, and Michael F. Lovenheim. 2014. "The Effect of Child Health Insurance Access on Schooling: Evidence from Public Insurance Expansions." NBER Working Paper Series 20178. Cambridge, MA: National Bureau of Economic Research.
- Collinson, Robert, and Jens Ludwig. 2019. Neighborhoods and Opportunity in America. Washington, DC: Brookings Institution.
- Cooper, Kerris, and Kitty Stewart. 2020. "Does Household Income Affect Children's Outcomes? A Systematic Review of the Evidence." Child Indicators Research 14:981–1005.
- Council of Economic Advisors. 2022. Annual Report of the Council of Economic Advisors. Washington, DC: US Government Printing Office.
- Currie, Janet, Sandra Decker, and Wanchuan Lin. 2008. "Has Public Health Insurance for Older Children Reduced Disparities in Access to Care and Health Outcomes?" *Journal of Health Economics* 27 (6): 1567–81.
- Damron, Neil. 2015. Poverty Fact Sheet: Brain Drain: A Child's Brain on Poverty. Madison, WI: Institute for Research on Poverty and Morgridge Center for Public Service.
- Deming, David. 2009. "Early Childhood Intervention and Life-Cycle Skill Development: Evidence from Head Start." American Economic Journal: Applied Economics 1 (3): 111–34.
- Duncan, Greg J., and Katherine Magnuson. 2013. "Investing in Preschool Programs." *Journal of Economic Perspectives* 27 (2): 109–32.

- Edelstein, Sara, Julia Isaacs, Heather Hahn, and Katherine Toran. 2012. How Do Public Investments in Children Vary with Age? A Kids' Share Analysis of Expenditures in 2008 and 2011 by Age Group. Washington, DC: Urban Institute.
- Ellen, Ingrid, Keren Horn, and Amy Schwartz. 2016. "Why Don't Housing Choice Voucher Recipients Live Near Better Schools? Insights from Big Data." *Journal of Policy Analysis and Management* 35 (4): 884–905.
- Evans, William N., and Craig L. Garthwaite. 2014. "Giving Mom a Break: The Impact of Higher EITC Payments on Maternal Health." American Economic Journal: Economic Policy 6 (2): 258–90.
- Fenelon, Andrew, Natalie Slopen, and Sandra Newman. 2023. "The Effects of Rental Assistance Programs on Neighborhood Outcomes for U.S. Children: Nationwide Evidence by Program and Race/Ethnicity." Urban Affairs Review 59 (3): 832–65. https://doi.org/10.1177/10780874221098376.
- Gallagher, Megan, and Matthew M. Chingos. 2017. Strategies for Supporting Early Reading Proficiency to Close Achievement Gaps. Washington, DC: Urban Institute.
- Garfinkel, Irwin, Laurel Sariscsany, Elizbeth Ananat, Sophie M. Collyer, Robert Paul Hartley, Buyi Wang, and Christopher Wimer. 2022. "The Benefits and Costs of a U.S. Child Allowance." NBER Working Paper Series 29854. Cambridge, MA: National Bureau of Economic Research.
- Georgetown Center for Children and Families. 2017. *Medicaid's Role for Children*. Washington, DC: Georgetown University.
- Glynn, Sarah Jane, Jane Farrell, and Nancy Wu. 2013. The Importance of Preschool and Child Care for Working Mothers. Washington, DC: Center for American Progress.
- Goodman-Bacon, Andrew. 2021. "The Long-Run Effects of Childhood Insurance Coverage: Medicaid Implementation, Adult Health, and Labor Market Outcomes." *American Economic Review* 111 (8): 2550–93.
- Guldi, Melanie, Amelia Hawkins, Jeffrey Hemmeter, and Lucie Schmidt. 2022. "Supplemental Security Income for Children, Maternal Labor Supply, and Family Well-Being: Evidence from Birth Weight Eligibility Cutoffs." *Journal of Human Resources*, published online before print, March 9, 0818-9654R2. https://doi.org/10.3368/jhr.0818-9654R2.
- Gundersen, Craig and James Ziliak. 2015. "Food Insecurity and Health Outcomes." *Health Affairs (Millwood)* 34 (11): 1830–9.
- Hardy, Bradley L. 2014. "Childhood Income Volatility and Adult Outcomes." Demography 51 (5): 1641-65.
- Hardy, Bradley, and Dave Marcotte. 2020. "Ties That Bind? Family Income Dynamics and Children's Post-Secondary Enrollment and Persistence." *Review of Economics of the Household* 20:279–303.
- Hardy, Bradley, and James P. Ziliak. 2014. "Decomposing Trends in Income Volatility: The 'Wild Ride' at the Top and Bottom." *Economic Inquiry* 52 (1): 459–76.
- Harknett, Kristen, Irwin Garfinkel, Jay Bainbridge, Timothy M. Smeeding, Sara McLanahan, and Nancy Folbre. 2003. "Do Public Expenditures Improve Child Outcomes in the U.S.? A Comparison across Fifty States." Working Paper 53. Syracuse, NY: Syracuse University Center for Policy Research.
- Hart, Betty, and Todd R. Risley. 2003. "The Early Catastrophe: The 30 Million Word Gap." *American Educator* 27:4–9.
- Heckman, James J., and Dimitriy V. Masterov. 2007. "The Productivity Argument for Investing in Young Children." *Review of Agricultural Economics* 29 (3): 446–93.
- Hendren, Nathaniel, and Ben Sprung-Keyser. 2020. "A Unified Welfare Analysis of Government Policies." *Quarterly Journal of Economics* 135 (3): 1209–318.
- Hines, Caitlin T., Anna J. Markowitz, and Anna D. Johnson. 2021. "Food Insecurity: What Are Its Effects, Why, and What Can Policy Do About It?" Policy Insights from the Behavioral and Brain Sciences 8 (2): 127–35.

- Holzer, Harry J., Diane W. Schanzenbach, Greg J. Duncan, and Jens Ludwig. 2008. "The Economic Costs of Childhood Poverty in the United States." *Journal of Children and Poverty* 14 (1): 41–61.
- Horn, Keren, Ingrid Ellen, and Amy Schwartz. 2014. "Do Housing Choice Voucher Holders Live Near Good Schools?" *Journal of Housing Economics* 23:28–40.
- Hoynes, Hilary, Erin Bronchetti, and Garret Christensen. 2017. "The Real Value of SNAP Benefits and Health Outcomes." UKCPR Discussion Paper Series 2017-03. Lexington, KY: University of Kentucky Center for Poverty Research.
- Hoynes, Hilary W., Douglas L. Miller, and David Simon. 2015. *Linking EITC Income to Real Health Outcomes*. Davis, CA: UC Davis Center for Poverty Research.
- Hoynes, Hilary, and Ankur J. Patel. 2015. "Effective Policy for Reducing Inequality? The Earned Income Tax Credit and the Distribution of Income." NBER Working Paper Series 21340. Cambridge, MA: National Bureau of Economic Research.
- Hoynes, Hilary, Diane W. Schanzenbach, and Douglas Almond. 2016. "Long-Run Impacts of Childhood Access to the Safety Net." American Economic Review 106 (4): 903–34.
- Insolera, Noura, Alicia Cohen, and Julia A. Wolfson. 2022. "SNAP and WIC Participation during Childhood and Food Security in Adulthood, 1984–2019." *American Journal of Public Health* 112 (10): 1498–506. https://doi.org/10.2105/AJPH.2022.306967.
- Isaacs, Julia B., and Sara Edelstein. 2017. Unequal Playing Field? State Differences in Spending on Children in 2013. Washington, DC: Urban Institute.
- Jackson, C. Kirabo, Claudia Persico, and Rucker C. Johnson. 2016. "The Effects of School Spending on Educational and Economic Outcomes: Evidence from School Finance Reforms." *Quarterly Journal of Economics* 131 (1): 157–218.
- Jackson, C. Kirabo, Cora Wigger, and Heyu Xiong. 2021. "Do School Spending Cuts Matter? Evidence from the Great Recession." *American Economic Journal* 13 (2): 304–35.
- Jones, Lauren E., Guangyi Wang, and Tansel Yilmazer. 2022. "The Long-Term Effect of the Earned Income Tax Credit on Women's Physical and Mental Health." *Health Economics* 31 (6): 1067–102.
- Knowles, Sarah, Ilham Dehry, Katie Shantz, and Sarah Minton. 2022. Graphical Overview of State TANF Policies as of July 2020. OPRE Report 2021-160. Washington, DC: Office of Planning, Research, and Evaluation and Urban Institute.
- Kolbe, Tammy, Elizabeth Dhuey, and Sara Menlove Doutre. 2022. "Unequal and Increasingly Unfair: How Federal Policy Creates Disparities in Special Education Funding." EdWorkingPaper 22-578. Providence, RI: Annenberg Institute at Brown University.
- Lafortune, Julien, Jesse Rothstein, and Diane W. Schanzenbach. 2018. "School Finance Reform and the Distribution of Student Achievement." American Economic Journal: Applied Economics 10 (2): 1–26.
- Levin, Henry M. 2009. "The Economic Payoff to Investing in Educational Justice." *Educational Researcher* 38 (1): 5–20. https://doi.org/10.3102/0013189X08331192.
- Levine, Phillip B., and Diane Whitmore Schanzenbach. 2009. "The Impact of Children's Public Health Insurance Expansions on Educational Outcomes." NBER Working Paper Series 14671. Cambridge, MA: National Bureau of Economic Research.
- Lou, Cary, Heather Hahn, Elaine Maag, Hannah Daly, Michelle Casas, and C. Eugene Steuerle. Forthcoming. *Kids'* Share 2023: Report on Federal Expenditures on Children through 2022 and Future Projections. Washington, DC: Urban Institute.

- MACPAC (Medicaid and CHIP Payment and Access Commission). 2020. MACStats: Medicaid and CHIP Data Book. Washington, DC: MACPAC.
- Malik, Rasheed. 2018. The Effects of Universal Preschool in Washington, DC. Washington, DC: Center for American Progress.
- Manoli, Day, and Nicholas Turner. 2018. "Cash-on-Hand and College Enrollment: Evidence from Population Tax Data and the Earned Income Tax Credit." *American Economic Journal: Economic Policy* 10 (2): 242–71.
- Maxfield, Michelle. 2015. The Effects of the Earned Income Tax Credit on Child Achievement and Long-Term Educational Attainment. Greenville, SC: Institute for Child Success.
- McCoy, Dana Charles, Hirokazu Yoshikawa, Kathleen M. Zoil-Guest, Greg J. Duncan, Holly S. Schindler, Katherine Magnuson, Rui Yang, Andrew Koepp, and Jack P. Shonkoff. 2017. "Impacts of Early Childhood Education on Medium- and Long-Term Educational Outcomes." *Educational Researcher* 46 (8): 474–87. https://doi.org/10.3102/0013189X17737739.
- McGranahan, Leslie, and Diane W. Schanzenbach. 2013. "The Earned Income Tax Credit and Food Consumption Patterns." FRB of Chicago Working Paper 2013-14. Chicago: Federal Reserve Bank of Chicago.
- McLaughlin, Michael, and Mark R. Rank. 2018. "Estimating the Cost of Childhood Poverty in the United States." Social Work Research 42 (2): 73–83.
- McLoyd, Vonnie C. 1998. "Socioeconomic Disadvantage and Child Development." American Psychologist 53 (2): 185–204. https://doi.org/10.1037/0003-066X.53.2.185.
- Miguel, Edward, and Michael Kremer. 2004. "Worms: Identifying Impacts on Education and Health in the Presence of Treatment Externalities." *Econometrica* 72 (1): 159–217.
- Miller, Sarah. 2009. Secret Recipes Revealed: Demystifying the Title I, Part A Funding Formulas. Washington, DC: Center for American Progress.
- Miller, Sarah, and Laura R. Wherry. 2019. "The Long-Term Effects of Early Life Medicaid Coverage." Journal of Human Resources 53 (3): 785–824.
- Mitra, Dana, and Angel Zheng. 2011. Pennsylvania's Best Investment: The Social and Economic Benefits of Public Education. Philadelphia: Education Law Center.
- Murphey David, Elizabeth Cook, Samuel Beckwith, and Jonathan Belford. 2018. The Health of Parents and Their Children: A Two-Generation Inquiry. Bethesda, MD: Child Trends.
- Mustard, J. Fraser. 1999. "Brain Development, Child Development—Adult Health and Well-Being and Paediatrics." *Paediatrics and Child Health* 4 (8): 519–20. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2830783/.
- National Academies of Sciences, Engineering, and Medicine. 2019. A Roadmap to Reducing Child Poverty. Washington, DC: National Academies Press.
- Parolin, Zachary, Elizabeth Ananat, Sophie Collyer, Megan Curran, and Christopher Wimer. 2022. The Differential Effects of Monthly and Lump-Sum Child Tax Credit Payments on Food and Housing Hardship. New York: Columbia University Center on Poverty and Social Policy.
- Perez-Lopez, Daniel J. 2021. Household Pulse Survey Collected Responses Just Before and Just After the Arrival of the First CTC Checks. Washington, DC: United States Census Bureau.
- Peters, Susan E., Jack T. Dennerlein, Gregory R. Wagner, and Glorian Sorenson. 2022. "Work and Worker Health in the Post-Pandemic World: A Public Health Perspective." *Lancet Public Health* 7 (2): E188–94.
- Phillips, Deborah A., Mark W. Lipsey, Kenneth A. Dodge, Ron Haskins, Daphna Bassok, Margaret R. Burchinal, Greg J. Duncan, Mark Dynarski, Katherine A. Magnuson, and Christian Weiland. 2017. Puzzling It Out: The Current State of Scientific Knowledge on Pre-Kindergarten Effects. Washington, DC: Brookings Institution.

- Pilkauskas, Natasha, and Katherine Michelmore. 2019. "The Effect of the Earned Income Tax Credit on Housing and Living Arrangements." *Demography* 56 (4): 1303–26. https://doi.org/10.1007/s13524-019-00791-5.
- Puma, Michael, Stephen Bell, Ronna Cook, and Camilla Heid. 2010. *Head Start Impact Study: Final Report, Executive Summary*. Washington, DC: US Department of Health and Human Services, Administration for Children and Families.
- Pungello, Elizabeth P., Kirsten Kainz, Margaret Burchinal, Barbara H. Wasik, Joseph J. Sparling, Craig T. Ramey, Frances A. Campbell. 2010. "Early Educational Intervention, Early Cumulative Risk, and the Early Home Environment as Predictors of Young Adult Outcomes within a High-Risk Sample." *Child Development* 81:410– 26. https://doi.org/10.1111/j.1467-8624.2009.01403.x.
- Qureshi, Javaeria, and Anuj Gangopadhyaya. 2021. "Childhood Medicaid Eligibility and Human Capital." *Economics of Education Review* 82. https://doi.org/10.1016/j.econedurev.2021.102092.
- Ramon, Ismaila, Sajal K. Chattopadhyay, W. Steven Barnett, Robert A. Hahn, and the Community Preventive Services Task Force. 2018. "Early Childhood Education to Promote Health Equity: A Community Guide Economic Review." *Journal of Public Health Management and Practice* 24 (1): E8–15.
- Ratcliffe, Caroline. 2015. Child Poverty and Adult Success. Washington, DC: Urban Institute.
- Reardon, Sean F. 2011. "The Widening Academic Achievement Gap between the Rich and the Poor: New Evidence and Possible Explanations." In Whither Opportunity? Rising Inequality, Schools, and Children's Life Chances, edited by Richard Murnane and Greg J. Duncan, 91–116. New York: Russell Sage Foundation.
- Reynolds, Arthur J., Judy A. Temple, Barry A. B. White, Suh Ruu Ou, and Dylan L. Robertson. 2011. "Age 26 Cost– Benefit Analysis of the Child-Parent Center Early Education Program." Child Development 82 (1): 379–404.
- Rumberger, Russell W. 2019. "The Economics of High School Dropouts." In *The Economics of Education*, 2nd ed., edited by Michael Lovenheim and Sarah E. Turner, 149–58. New York: Worth Publishers.
- Schickedanz, Adam, Peter G. Szilagyi, and Benard Dreyer. 2021. "Child Poverty and Health in the United States: Introduction and Executive Summary." *Academic Pediatrics* 21 (8): S81–5. https://doi.org/10.1016/j.acap.2021.09.003.
- Schmidt, Lucie, Lara Shore-Sheppard, and Tara Watson. 2016. "The Effect of Safety-Net Programs on Food Insecurity." *Journal of Human Resources* 51 (3): 589–614.
- Schwartz, Alex. 2006. Housing Policy in the United States. New York: Taylor and Francis Group.
- Schwartz, Amy, Karen Horn, Ingrid Ellen, and Sarah Cordes. 2020. "Do Housing Vouchers Improve Academic Performance? Evidence from New York City." *Journal of Policy Analysis and Management* 39 (1): 131–58. https://doi.org/10.1002/pam.22183.
- Schwartz, Amy, and Michah Rothbart. 2019. "Let Them Eat Lunch: The Impact of Universal Free Meals on Student Performance. *Journal of Policy Analysis and Management* 39 (2): 376–410.
- Shaefer, H. Luke, and Italo A. Gutierrez. 2013. "The Supplemental Nutrition Assistance Program and Material Hardships among Low-Income Households with Children. *Social Service Review* 87 (4). https://doi.org/10.1086/673999.
- Shambaugh, Jay, Lauren Bauer, and Audrey Breitwieser. 2018. *Returning to Education: The Hamilton Project on Human Capital and Wages*. Washington, DC: Brookings Institution.
- Sommers, Benjamin D., and Donald Oellerich. 2013. "The Poverty-Reducing Effect of Medicaid." *Journal of Health Economics* 32 (5): 816–32.
- Testa, Alexander, and Dylan Jackson. 2021. "Race, Ethnicity, WIC Participation, and Infant Health Disparities in the United States." Annals of Epidemiology 58:22–8.

- Thomas, Margaret, Daniel Miller, and Taryn Morrissey. 2019. "Food Insecurity and Child Health." *Pediatrics* 144 (4): e20190397.
- Thompson, Owen. 2017. "The Long-Term Health Impacts of Medicaid and CHIP." *Journal of Health Economics* 51:26–40. https://www.sciencedirect.com/science/article/abs/pii/S0167629616305136.
- Troller-Renfree, Sonya V., Molly A. Costanzo, Greg J. Duncan, and Kimberly G. Noble. 2022. "The Impact of a Poverty Reduction Intervention on Infant Brain Activity." *Psychological and Cognitive Sciences* 119 (5): e2115649119.
- Truffer, Christopher, Christian Wolfe, and Kathryn Rennie. 2017. 2016 Actuarial Report on the Financial Outlook for Medicaid. Washington, DC: Office of the Actuary, Centers for Medicare and Medicaid Services, and US Department of Health and Human Services.
- Venkataramani, Maya, S. Michelle Ogunwole, Laura E. Caulfield, Ritu Sharma, Allen Zhang, Susan M. Gross, Kristen M. Hurley, Jennifer L. Lerman, Eric B. Bass, and Wendy L. Bennett. 2022. "Maternal, Infant, and Child Health Outcomes Associated with the Special Supplemental Nutrition Program for Women, Infants, and Children." Annals of Internal Medicine 175 (10): 1411–22.
- Venkataramani, Maya, Craig E. Pollack, and Eric T. Roberts. 2017. "Spillover Effects of Adult Medicaid Expansions on Children's Use of Preventive Services." *Pediatrics* 140 (6): e20170953.
- Wherry, Laura R., Sarah Miller, Robert Kaestner, and Bruce D. Meyer. 2018. "Childhood Medicaid Coverage and Later-Life Health Care Utilization." *Review of Economics and Statistics* 100 (2): 287–302.
- Wicks-Lim, Jeannette, and Peter S. Arno. 2017. "Improving Population Health by Reducing Poverty: New York's Earned Income Tax Credit." SSM Population Health 3:373–81.
- Wood, Michelle, Jennifer Turnham, and Gregory Mills. 2008. "Housing Affordability and Family Well-Being: Results from the Housing Voucher Evaluation." *Housing Policy Debate* 19 (2): 367–412.
- Yoshikawa, Hirokazu, Christina Weiland, Jeanne Brooks-Gunn, Margaret R. Burchinal, Linda M. Espinosa, William T. Gormley, Jens Ludwig, Katherine A. Magnuson, Deborah Phillips, and Martha J. Zaslow. 2013. *Investing in Our Future: The Evidence Base on Preschool*. New York: Foundation for Child Development.

About the Authors

Elaine Maag is a senior fellow in the Urban Institute-Brookings Institution Tax Policy Center and a codirector of the Innovations in Cash Assistance for Children initiative. She is an expert on the taxation of low- and middle-income families. Her work examines the interactions between tax and transfer programs, the impact of cash supports, how well taxes support families, and the administration of tax and transfer programs.

Cary Lou is a senior research associate in the Center on Labor, Human Services, and Population, focusing on policies impacting children and quantitative data and analyses. Mr. Lou holds a BA in history and geography from Dartmouth College and an MPP from Georgetown University.

Michelle Casas is a research analyst in the Center on labor, Human Services, and Population whose work focuses on child care and early education. Her research interests include early childhood education, immigrant families, and supporting the well-being of low-resourced families.

Hannah Daly is a research associate in the Center on Labor, Human Services, and Population whose work focuses on various supports for young people and families. She aims to contribute to work that works towards building abundant public systems that trust people and allow them to thrive. She has a BA in Public Health with a minor in Anthropology from the University of California, Berkeley.

Gabriella Garriga is a research assistant in the Urban-Brookings Tax Policy Center where she helps to create data-driven analyses of federal, state, and local tax codes. She graduated magna cum laude from Trinity University and holds a BA in economics and sociology. Garriga is passionate about research regarding economic policy's impact on housing development and education on a state and local level. Within these research areas, she is most interested in public finance's impact on vulnerable communities.

Lillian Hunter is a research assistant at the Urban-Brookings Tax Policy Center where she has contributed to projects on Medicare financing and the Earned Income and Child Tax Credits. She graduated magna cum laude from Bryn Mawr College with an AB in economics and public health policy.

STATEMENT OF INDEPENDENCE

The Urban Institute strives to meet the highest standards of integrity and quality in its research and analyses and in the evidence-based policy recommendations offered by its researchers and experts. We believe that operating consistent with the values of independence, rigor, and transparency is essential to maintaining those standards. As an organization, the Urban Institute does not take positions on issues, but it does empower and support its experts in sharing their own evidence-based views and policy recommendations that have been shaped by scholarship. Funders do not determine our research findings or the insights and recommendations of our experts. Urban scholars and experts are expected to be objective and follow the evidence wherever it may lead.

500 L'Enfant Plaza SW Washington, DC 20024

.

.

.

.

.

D

.

EBATE

.

.

.

.

.

.

.

.

.

· E L E V A T E

т н

.

.

.

.

.

.

.

.

.

www.urban.org

U

.

.

.

.

.

.

.

.

.

.

.