# How Do Public Investments in Children Vary with Age? A Kids' Share Analysis of Expenditures in 2008 and 2011 by Age Group 

Sara Edelstein<br>Julia Isaacs<br>Heather Hahn<br>Katherine Toran

I
URBAN INSTITUTE

# How Do Public Investments in Children Vary with Age? 

A Kids' Share Analysis of
Expenditures in 2008 and 2011 by Age Group

October 2012

Sara Edelstein<br>Julia Isaacs<br>Heather Hahn<br>Katherine Toran

Copyright © 2012. The Urban Institute. Permission is granted for reproduction of this file, with attribution to the Urban Institute.

The Urban Institute is a nonprofit, nonpartisan policy research and educational organization that examines the social, economic, and governance problems facing the nation. The views expressed are those of the authors and should not be attributed to the Urban Institute, its trustees, or its funders.

The authors are grateful to the Foundation for Child Development for sponsoring this research and to the authors of previous reports on children's budgets for laying the groundwork for this series. They also express appreciation to Olivia Golden and Gene Steuerle for their insightful comments.

## CONTENTS

List of Tables and Figures ..... iv
Executive Summary ..... v
Introduction ..... 1
Results .....  3
How much does the federal government spend on children of different ages? ..... 3
How have federal expenditures by age changed from 2008 to 2011 ? ..... 4
How does the distribution of expenditures by age vary across major federal programs? ..... 5
How does the distribution of expenditures by age vary across major categories? ..... 7
How much do federal, state, and local governments combined spend on children of different ages? ..... 9
How does the distribution of federal, state, and local spending by age vary across major categories? ..... 10
Conclusion ..... 13
Appendix: Methods ..... 14
Notes ..... 20
References ..... 21

## LIST OF TABLES AND FIGURES

Figure 1. Per Capita Federal Expenditures in 2011, by Age ..... 3
Figure 2. Per Capita Federal Expenditures on Children in 2008 and 2011, by Age ..... 4
Figure 3. Per Capita Expenditures on Children in 2011, by Age: 10 Largest Federal Programs and Tax Provisions ..... 5
Figure 4. Per Capita Federal Expenditures on Children in 2011, by Major Category and Age. ..... 8
Figure 5. Per Capita Federal and State/Local Spending on Children in 2008, by Age ..... 9
Figure 6. Per Capita Education and Other Spending on Children in 2008, by Age: Federal and State/Local ..... 12
Table 1. Per Capita Expenditures on Children in 2011: 10 Largest Federal Programs and Tax Provisions by Age ..... 6
Table 2. Federal Expenditures on Children in 2011, by Age and Category ..... 8
Table 3. Federal versus State and Local Spending in 2008, by Age and Category ..... 11
Table A1. Federal Expenditures on Children in 2011, by Age, Category, and Program .....  16
Table A2. Methods for Calculating Multipliers for 10 Largest Federal Programs and Tax Provisions in 2011 .....  18

## EXECUTIVE SUMMARY

There is a striking contrast in how different levels of government invest in children of various ages, both in amounts of funding and in the relative roles of the federal, state, and local governments. State and local governments provide nearly three-quarters of the total public investment in children age 6 and older, primarily through public education. In contrast, the federal government provides three-quarters ( 76 percent) of the total public investment in infants and toddlers, mainly through health care. Each governmental level provides about half of investments in children age 3 to 5 ( 53 percent state and local, 47 percent federal). Combined across all government levels, public spending is highest for school-age children and lowest for children under age 3.

This report on public investments in children by age analyzes federal expenditures on children in 2008, before the recession, and in 2011, when federal spending was still strongly affected by the recession. It also analyzes total public spending (federal, state, and local) by age group in 2008 , the last year for which complete state and local data are available.

Federal per capita expenditures in 2011 were highest on children age 2 and younger $(\$ 6,578)$ and shrank as children entered older age groups (ages 3-5, 6-11, and 12-18). These comprehensive federal estimates include tax expenditures-that is, reductions in taxes as a result of child-oriented tax provisions-in addition to direct spending from federal programs, also known as outlays.

The pattern of higher federal investment in younger children in 2011 was partly driven by the recession and the growth in federal spending on safety net programs in response to the higher number of needy children and families. According to the 2011 poverty statistics, a quarter ( 25 percent) of children age 0 to 5 are poor, compared with 20 percent of other children. Many federal programs and tax provisions, such as Medicaid, the Earned Income Tax Credit, the Supplemental

Nutrition Assistance Program, and other nutrition programs, are targeted toward families at the lower end of the income distribution.

Federal expenditures on children were more even across age groups in 2008, although they still trended downward with age. Federal spending per capita increased for all age groups during the recession, but it increased most dramatically for the youngest children. As caseloads for safety net programs grew during the recession, federal spending on younger children experienced a large increase. Much of this increase was driven by dramatic growth in the Medicaid program, which spends more on infants than other children due to broad coverage and high neonatal costs. For 2012, we expect total federal spending on children to fall below 2011 levels, but it is hard to know whether the future distribution of spending across age groups will more closely resemble 2008 or 2011 spending patterns.

Different federal programs and tax provisions vary in how funds are distributed by age. Federal Medicaid expenditures per child were more than twice as high for infants and toddlers than for other age groups in 2011, at about $\$ 1,800$ (or almost a third of the total per capita
expenditures for this age group). Major tax provisions, such as the Earned Income Tax Credit and the Child Tax Credit, also had higher per capita expenditures for younger children, likely because these children's families were, on average, less well-off. Income support programs followed contrasting patterns by age. Temporary Assistance for Needy Families (TANF), for example, spent more money on younger children, who are, on average, poorer. In contrast, Social Security expenditures were higher per child as age increased, because older children are more likely to have elderly or disabled parents or to qualify for a survivor's payment as a result of a parent's death.

The largest nutritional support, the Supplemental Nutrition Assistance Program (SNAP, formerly food stamps), spent less as children got older, again showing that programs targeting low-income populations allocate more resources to the youngest citizens.

Some federal education and early care programs concentrated resources on younger children (Head Start, Child Care and Development Fund), while others largely supported older children (Title I, Special Education). Looking across all education and early care programs, federal expenditures were highest for preschool-age children (age 3-5), followed by school-age children (6-11 and 12-18), with the lowest levels on infants and toddlers ( $0-2$ ).

Summing across all programs and tax provisions, the federal government spends more per capita on the youngest age group ( $0-2$-year-olds) and gradually declining amounts on older age
groups. This trend was evident in both 2008 and 2011, although it was more pronounced in 2011.

The distribution of spending by age shifts dramatically with the addition of state and local spending. Total public spending per capita is highest for children age 6-11 and next-highest for those age 12-18. Children age $3-5$ fall to third place, and infants and toddlers (age 0-2) are provided with the lowest level of total support per capita. Because of data constraints, these total (federal, state, and local) estimates do not include the effects of all tax provisions, and the estimates are for 2008; state and local spending on children overall and on school-age children in particular may have decreased since 2008 because of the recession's impact on state budgets.

The large amounts of state and local funds spent on public education drive the trend of higher total spending on school-age children. States and localities are increasing their early education and care spending on children age 3-5, but they still spend much less on these children than on older children. Since state and local governments spend very little on infants and toddlers, this age group has the lowest level of total public spending. For infants and toddlers, the federal government plays the largest role. While states and localities focus on addressing older children's developmental needs primarily through schools and associated services, the federal government spreads its support more evenly across various spending categories. This analysis suggests that the fiscal health and priority choices of all levels of government matter when it comes to investments in children.

## INTRODUCTION

How we budget reveals our priorities for government and, to some extent, for society. Investing in children has always been an important goal for families and, to greater or lesser degree over time, for the United States government. Although public spending on children was concentrated for most of our early history on state and local education, today the federal government partners with state and local governments to provide for the health, education, nutrition, security, and development of children. Support may take the form of direct (or in-kind) supports, such as public education or social services, or it may be delivered to families with children through cash or tax benefits. These supports affect not only families' present prosperity, but also the future development of children and the country. However, despite the importance that government services play in children's lives, information on how children fare is often unavailable in the budget debates.

This report looks at federal expenditures on children by age in 2011, the most recent year for which data are available, and in 2008, to observe patterns before the recession. It also analyzes total public spending (federal, state, and local) by age group in 2008, the last year for which complete state and local data are available. The report draws on a database developed by the Urban Institute to track federal expenditures on children across more than a hundred federal programs and tax provisions. Analyses of these data are reported annually in Kids'Share reports that look comprehensively at trends in federal and state spending and tax expenditures on children-the kids' share of public expenditures. ${ }^{1}$ The most recent report, released in July 2012, is Kids' Share 2012: Report on Federal Expenditures on Children through 2011. ${ }^{2}$

The current analysis by age focuses on expenditures on children divided into four age groups: infants and toddlers (age 0-2), preschoolage children (age 3-5), elementary-school-age children (age 6-11), and adolescents (age 12-18). A clear picture of spending on children at different
ages aids efforts to analyze expenditure patterns that consider research findings on children's needs according to age. Some research indicates that investing in children at young ages is critical for child development and may offer the highest rate of return (Heckman and Masterov 2007). This may be particularly true for children in disadvantaged situations (Doyle et al. 2007). Because most state and local spending is directed toward education, and such education is largely provided to older children, the federal government plays a particularly important role in investing in children during their earliest years. This may be in part because a number of federal programs focus on poor and near-poor individuals and families, and poverty is negatively correlated with age: 25 percent of children age $0-2$ are poor, compared with 19 percent of children age $12-18 .{ }^{3}$

Although Kids'Share reports present the extent of federal spending on children and the categories and programs involved, it is beyond their scope to make pronouncements on what allocations are most efficient. The authors also do not assess the efficiency, success, or worth
of each program. Instead, this report compiles information to develop a comprehensive estimate on how spending on children varies by age level.

We present our findings on the federal government's expenditures on children in each age group, in aggregate and per capita. While we focus on federal expenditures in 2011, we also examine federal expenditures in 2008, analyzing how federal expenditures by age changed during the recession. Our examination of federal expenditures includes a closer look at the 10 largest
federal programs and tax provisions for children, followed by an analysis of expenditures on age groups by category.

Finally, we examine how state and local spending, which makes up two-thirds of all government spending on children, combines with federal spending to produce an overall government distribution of spending by age and category. For this analysis, we rely on data for 2008, though we discuss how findings may differ in 2011. Our conclusion discusses the implications of our findings for children.

## RESULTS

## How much does the federal government spend on children of different ages?

Federal expenditures on children totaled approximately $\$ 445$ billion in 2011, with about 85 percent from direct spending on federal programs (outlays) and about 15 percent from reductions in taxes (tax expenditures). This spending was fairly evenly distributed across three broad age groups of children (age 0-5, 6-11, and 12-18). The youngest children received 34 percent of expenditures ( $\$ 152.8$ billion), with slightly more than half this amount spent on children age $0-2$ and the remainder spent on children age 3-5. Elementary-school-age children received 32 percent ( $\$ 141.2$ billion) of expenditures, and adolescents received 34 percent
( $\$ 150.8$ billion). However, because the population was not evenly divided among the three age groups-the two younger groups each made up about 31 percent of the population, while the older group constituted 38 percent-greater differences were found in per capita expenditures across age groups than were seen among aggregate expenditures.

Federal expenditures per child in 2011 were highest for infants and toddlers and decreased with age (figure 1). This was true of both outlays and tax expenditures. Expenditures per child age $0-2$ totaled $\$ 6,578$, while for adolescents they totaled $\$ 5,110$.

Several factors account for this pattern. First, the federal Medicaid program spends more on infants and toddlers than on any other age group, both before and during the recession. Second,

FIGURE 1. Per Capita Federal Expenditures in 2011, by Age

children age 5 and younger, infants and toddlers especially, tend to live in poorer families than older children; as a result, younger children receive more per child from programs targeted by income level. This includes Medicaid, the Earned Income Tax Credit (EITC), and SNAP and other nutrition programs. These programs grew during the recession in response to higher numbers of eligible families as well as temporary expansions under the American Recovery and Reinvestment Act of 2009 (ARRA). Finally, federal expenditures on education and early care focus on children age 3 to 5, tapering off for older children (whose education is funded primarily by states and localities)—although these trends were less true in 2010 and 2011 as ARRA increased federal funding for $\mathrm{K}-12$ education. Other spending factors shaped the trend as well, but these three are the most influential.

## How have federal expenditures by age changed from 2008 to 2011?

Expenditures were higher in 2011 than they were in 2008 for all age groups, but the size of the difference varied with age (figure 2). Much of the
increase over this period stemmed from higher federal expenditures in response to the recession, mostly because of more people applying for or deemed eligible for benefits in economic hard times, but also because of ARRA, which provided additional federal funds to stimulate the economy, support needy families, and provide fiscal relief to states and localities during the recession. Expenditures increased the most, by 27 percent, for the youngest children, while they grew 19 percent for children age 3-5 and 16 percent for each of the two older age groups. As a result, whereas 2008 expenditures showed a slight downward trend by age group, 2011 expenditures showed a greater distinction between the youngest and oldest children.

Young children, who tend to have younger parents with more limited work experiences, have higher poverty rates than older children. As a result, they receive a disproportionate share of federal safety net programs. Medicaid spending is particularly targeted toward younger children, not just because of their high rates of poverty, but also because of broad coverage for infants and high neonatal costs. As caseloads for Medicaid, SNAP, and other safety net programs

FIGURE 2. Per Capita Federal Expenditures on Children in 2008 and 2011, by Age


[^0]grew during the recession, federal spending on younger children experienced large increases, especially for infants and toddlers. For these children 0 to 2 years old, Medicaid spending per child grew 54 percent, compared with a 43 percent increase for the other age groups combined. Moreover, Medicaid and SNAP accounted for 66 percent of the growth in young children's federal expenditures over the past three years, while making up about 55 percent of spending growth for children age 3 and older.

Somewhat surprisingly, ARRA did not explain the higher growth in expenditures on younger children in 2011, although it did contribute to the general increase in spending on children between 2008 and 2011. We analyzed ARRA expansion funds by age and found that the additional funds were targeted more toward school-age children (through programs such as the State Fiscal Stabilization Fund, Title I/ Accelerating Achievement and Ensuring Equity, and Special Education) than to young children (who benefited from expansions to programs such as Head Start and Early Head Start as well as Medicaid and SNAP expansions). For example, only 4 percent of federal Medicaid expenditures
on children in 2011 were attributable to ARRA; most of the growth in Medicaid was due to growth in the number of families eligible and applying for assistance.

We expect federal funding for children to fall in 2012, as ARRA funds are exhausted and families slowly recover from the recession. But it is difficult to predict the future pattern of spending by age; we cannot say whether the distribution across ages will more closely resemble 2008 or 2011 spending patterns.

## How does the distribution of expenditures by age vary across major federal programs?

The 10 largest federal programs and tax provisions among all children in 2011 made up 75 percent of federal expenditures on children and had varying distributions by age (figure 3). Some had consistently high expenditures for all ages, while others were among the top 10 because of high expenditures only on children of certain ages.

The Medicaid program has the highest level of per capita expenditures, for children as a whole

FIGURE 3. Per Capita Expenditures on Children in 2011, by Age: 10 Largest Federal Programs and Tax Provisions


Note: Earned Income Tax Credit (EITC) and Child Tax Credit (CTC) spending includes the refundable and nonrefundable portions of the credits.
and for each age group individually. As shown in table 1 , Medicaid expenditures per child 0 to 2 years old totaled $\$ 1,792$, a figure almost double the expenditures on any other program for any age group. Medicaid alone made up 27 percent of all federal expenditures on infants and toddlers. ${ }^{4}$

There are several reasons Medicaid spending was so much higher for the youngest children, besides the high levels of poverty experienced by their families. First, young children are eligible up to higher family income levels in most states. In 2011, the median income cutoff for children age $6-18$ was 100 percent of the federal poverty level, but for children age $1-5$ it was 133 percent, and for children less than 1 year old it was 185 percent of the federal poverty level (Heberlein et. al 2011). ${ }^{5}$ Second, infants are particularly likely to be enrolled in Medicaid since their mothers become connected with benefits while in the hospital for childbirth ( 40 percent of births are covered by Medicaid; ${ }^{6}$ see Kaiser Family Foundation 2011). In addition, specialized neonatal intensive care for ill or premature infants is expensive.

For children in the older age groups, Medicaid spending per capita was less than half
what it was on the youngest children. Even so, the program still made up 13 to 17 percent of overall expenditures for each of the older age groups. Note that these Medicaid spending estimates do not include spending under the Children's Health Insurance Program (CHIP), which was also a significant source of health spending, especially for older children, or spending under Vaccines for Children, which had substantial expenditures for children age $0-2$.

Several tax provisions, particularly the EITC and the child tax credit (CTC), had large expenditures for children in each age group. These tax credits are split between cash payments refunded to families and reductions in tax liabilities. The EITC and the CTC were both expanded under ARRA for tax years 2009 and 2010, resulting in increased expenditures in 2009-11.

The EITC was the second- or third-largest source of expenditures for all age groups (table 1). EITC expenditures were highest for the youngest children (\$902 per capita), and, partly because of the inverse relationship of poverty with age, declined with age. This age gradient was stronger in 2011 than in 2008, as EITC expenditures grew 23

TABLE 1. Per Capita Expenditures on Children in 2011: 10 Largest Federal Programs and Tax Provisions by Age

\left.| Age 0-2 |  | Age 3-5 |  | Age 6-11 |  | Age 12-18 |
| :--- | :---: | :--- | :--- | :--- | :--- | :--- | :--- |$\right]$

Note: Earned Income Tax Credit and Child Tax Credit spending includes the refundable and nonrefundable portions of the credits.
SNAP: Supplemental Nutrition Assistance Program; WIC: Special Supplemental Nutrition Program for Women, Infants and Children; TANF: Temporary Assistance for Needy Families.
percent for children age $0-5$ but only 17 percent for children age $6-18$. The same downward trend by age was found for the CTC, though in this case a large drop-off occurred for the oldest group because children over age 16 are not eligible. Another tax provision, the dependent exemption, was the fifth- or sixth-largest source of federal expenditures for all four age groups, with per capita reductions in taxes under this tax provision ranging from $\$ 425$ to $\$ 489$ per child.

The Supplemental Nutrition Assistance Program was a major program for children of all ages and expanded greatly from 2008 expenditure levels. For children $0-5$, SNAP expenditures grew 87 percent from 2008, and for older children they grew 81 percent. For all children except adolescents, SNAP accounted for 9 to 10 percent of federal expenditures. Child Nutrition, which provides funding for the National School Lunch Program, as well as smaller breakfast, child care food, and summer food programs, appeared in the top 10 programs for all but the youngest age group. It was highest ( $\$ 357$ per capita) for elementary-school-age children, for whom it amounted to 6 percent of federal expenditures. In contrast, the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) is targeted at the youngest children; it made up 6 percent of federal expenditures for infants and toddlers, and was their sixth-largest program.

Accelerating Achievement and Ensuring Equity (Title I), the primary federal education program, was the fourth-largest program for elementary-age children and represented 9 percent of their federal expenditures. Additionally, it ranked in the top 10 for preschool- and kindergarten-age children. Special Education ranked in the top 10 for all but the youngest children. Both these programs experienced increases from 2008 because of ARRA, which accounted for 24 percent of Title I and 30 percent of Special Education spending in 2011. For preschool children, Head Start—which also was boosted by ARRA—was a large source of spending, making up over 10 percent of expenditures. Though Head Start does not serve the older two age groups and

Title I does not serve the youngest, these programs were still among the largest overall due to high expenditures on the children they serve.

Two income security programs, Social Security and TANF, ranked among the top 10 for children overall, but resources were distributed by age in opposite directions. Social Security spending was weighted toward older childrenwith $\$ 474$ spent per child age $12-18$ but only $\$ 34$ spent per child age $0-2-$ because older children are more likely to have elderly or disabled parents or to qualify for a survivor's payment as a result of a parent's death. In contrast, TANF spending shrank as children got older, because it is the youngest children whose parents are most likely to have sufficiently low incomes to qualify for TANF assistance. Another income security program, Supplemental Security Income (SSI), ranked in the top 10 for children ages 6-11 and $12-18$, but not for other age groups; it tends to serve older children because it takes time for children's disabilities to be identified, and once a child begins receiving disability payments, payments generally continue over time.

## How does the distribution of expenditures by age vary across major categories?

Combining program expenditures into categories paints a fuller portrait of how spending varied for children of different ages (figure 4) and how money was distributed across ages within each area. We consider all programs and tax provisions included in our analysis, not just the 10 largest programs or tax provisions discussed previously, although they drive many trends. See appendix table A1 for a full listing of all programs included in our analysis; estimates of expenditures by age and category, are included in table A1 and summarized in table 2 and figure 4.

The package of federal expenditures on the youngest children was largely made up of health, nutrition, and tax expenditures. Despite research indicating education interventions may be best made at the youngest ages, the federal government

FIGURE 4. Per Capita Federal Expenditures on Children in 2011, by Major Category and Age


Notes: Tax provisions includes refundable portions of tax credits and reductions in taxes. Other includes housing, social services, and training.

TABLE 2. Federal Expenditures on Children in 2011, by Age and Category

|  | Age 0-2 | Age 3-5 | Age 6-11 | Age 12-18 | All children |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Spending (\$ billions) |  |  |  |  |
| Income security | 5.1 | 6.1 | 16.1 | 25.8 | 53.1 |
| Tax provisions | 28.5 | 25.3 | 45.2 | 45.3 | 144.2 |
| Health | 25.4 | 11.6 | 21.6 | 29.3 | 87.9 |
| Education and early care | 3.6 | 17.7 | 31.7 | 25.5 | 78.6 |
| Nutrition | 13.3 | 10.8 | 20.9 | 14.8 | 59.9 |
| Housing, social services, and training | 2.6 | 2.8 | 5.6 | 10.1 | 21.0 |
| TOTAL | 78.5 | 74.3 | 141.2 | 150.8 | 444.8 |
| As a \% of this program's spending on children |  |  |  |  |  |
| Income security | 10\% | 12\% | 30\% | 48\% | 100\% |
| Tax provisions | 20\% | 18\% | 31\% | 31\% | 100\% |
| Health | 29\% | 13\% | 25\% | 33\% | 100\% |
| Education and early care | 5\% | 23\% | 40\% | 32\% | 100\% |
| Nutrition | 22\% | 18\% | 35\% | 25\% | 100\% |
| Housing, social services, and training | 12\% | 13\% | 27\% | 48\% | 100\% |
| TOTAL | 18\% | 17\% | 32\% | 34\% | 100\% |
| As a \% of spending on this age group |  |  |  |  |  |
| Income security | 7\% | 8\% | 11\% | 17\% | 12\% |
| Tax provisions | 36\% | 34\% | 32\% | 30\% | 32\% |
| Health | 32\% | 16\% | 15\% | 19\% | 20\% |
| Education and early care | 5\% | 24\% | 22\% | 17\% | 18\% |
| Nutrition | 17\% | 15\% | 15\% | 10\% | 13\% |
| Housing, social services, and training | 3\% | 4\% | 4\% | 7\% | 5\% |
| TOTAL | 100\% | 100\% | 100\% | 100\% | 100\% |

[^1]does not invest heavily in education and care until children reach age 3 . Nor do the youngest children receive significant income security support; their low rates of receipt of Social Security or SSI benefits offset their relatively high rates of receipt of TANF assistance.

Children over 2 years old had some support from each category, with early care and education particularly prominent for pre-k and kindergarten children ( $\$ 1,437$ per capita), as they were served by Head Start and the Child Care and Development Fund in addition to other federal education programs. For teenagers, income security was prominent (\$873 per capita), reflecting payments from Social Security and SSI. Other expenditures, which include housing, social services, and training, were also concentrated among the oldest children, who were the only recipients of training funds and were served more by social service programs such as Foster Care and Adoption Assistance.

## How much do federal, state, and local governments combined spend on children of different ages?

State and local spending made up two-thirds of all public spending on children in 2008.

Including spending from these sources significantly changes the patterns of spending on children by age. Federal, state, and local spending combined were higher for older children than younger children, reaching \$14,641 per capita for children age 6-11 and \$13,663 for children age 12-18 (figure 5). As discussed further below, relatively high spending for these age groups reflects large state and local investments in education. In contrast, federal and state spending per child age $0-2$ totaled only $\$ 5,415$. Spending on preschool children fell in between, at $\$ 8,602$ per capita. Looking at state and local spending alone, per capita spending on the oldest age group was nearly eight times as high as spending on the youngest age group.

The pattern in federal and state spending across age groups in 2008 was similar to the 2004 pattern found in our previous Kids'Share analysis by age (Macomber et al. 2010). Both reports find that total public spending was highest for children age 6-11, and lowest for children age 0-2 (note that the Macomber et al. report did not have data on children age 12-18). The balance of state and local and federal spending also remained roughly the same across all age groups.

FIGURE 5. Per Capita Federal and State/Local Spending on Children in 2008, by Age


[^2]The pattern in 2011 may differ somewhat as a result of the recession, though we do not yet have complete state and local data past 2008. Preliminary estimates indicate that as the recession hit state and local budgets, state and local spending on children fell from 2008 to 2011, after adjusting for inflation, with the decline concentrated in education spending. In contrast, federal spending increased between 2008 and 2011, as a result of the response of federal programs to the recession and the enhanced funding under ARRA. ${ }^{7}$ As a result, the relative mix of federal versus state/local funding appears to have shifted, with state and local spending shifting from 68 percent of all public spending on children in 2008 to roughly 61 percent in 2011 (Isaacs et al. 2012). While this may lead to a decline in both state/ local and total spending on education for 6to 18 -year-olds, the decline is unlikely to be large enough to substantially change the overall patterns shown in figure 5.

Also, as noted in the appendix, our estimates for combined federal, state, and local spending do not include the full effects of tax provisions on tax liabilities; they only include the cash payments of tax refunds provided under the federal EITC and CTC, along with state earned income tax credits (cash payments and reductions in taxes), but no other state tax provisions. ${ }^{8}$

The portion of spending that comes from the federal government versus state and local governments was higher for the youngest children, while the reverse was true for schoolage children; children age 3-5 received major support from both levels of government (table 3). State and local governments provide nearly three-quarters of the total public investment in children age 6 and older, whereas the federal government provides three-quarters ( 76 percent) of investments in infants and toddlers and nearly half (47 percent) of investments in children in preschool or kindergarten (age 3-5).

As a point of comparison, the federal government plays an even stronger role in spending for adults age 65 and older. More than 95 percent of public spending on the elderly is federally funded, primarily through Social Security and Medicare, with less than 5 percent coming from state and local governments. Total public spending on the elderly is also sharply higher than spending on any of the child age groups: $\$ 26,355$ per capita on the elderly in 2008 (Isaacs et al. 2012), compared with $\$ 14,641$ per capita on 6 - to 11 -year-olds and $\$ 5,415$ per capita for those $0-2$ years old.

## How does the distribution of federal, state, and local spending by age vary across major categories?

When all federal, state, and local public spending is combined, education and early care becomes the largest category of spending for all age groups except infants and toddlers (see figure 6). Moreover, state and local governments contribute the majority of education and care spending for all children over age 2 . Even for 3- to 5-year-olds, to whom the federal government contributes significant resources through Head Start, the preschool portion of Title I, and the preschool portion of Special Education, threequarters ( 78 percent) of education and early care spending is state and local (see table 3). For the two older age groups, over 90 percent of education spending is state and local, with total education spending of $\$ 10,879$ per elementary-school-age child and $\$ 9$, 971 per adolescent. Infants and toddlers are the exception: state and local governments provide very little on early care and education, and only 22 percent of all education and early care spending for that age group.

If one excludes education spending, combined federal/state spending on "everything else" shows a trend of highest investments in younger children, gradually declining for

TABLE 3. Federal versus State and Local Spending in 2008, by Age and Category

|  | Federal spending (\$ billions) | \% federal | State spending (\$ billions) | \% state | Total spending (\$ billions) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| TOTAL | 299.6 | 32\% | 626.9 | 68\% | 926.5 |
| Age 0-2 | 52.8 | 76\% | 16.3 | 24\% | 69.1 |
| Age 3-5 | 49.6 | 47\% | 56.4 | 53\% | 106.0 |
| Age 6-11 | 93.5 | 27\% | 255.5 | 73\% | 348.9 |
| Age 12-18 | 103.8 | 26\% | 298.7 | 74\% | 402.4 |
| Income security | 47.7 | 80\% | 12.1 | 20\% | 59.8 |
| Age 0-2 | 4.7 | 66\% | 2.5 | 34\% | 7.2 |
| Age 3-5 | 5.5 | 71\% | 2.2 | 29\% | 7.7 |
| Age 6-11 | 14.3 | 79\% | 3.8 | 21\% | 18.1 |
| Age 12-18 | 23.2 | 86\% | 3.7 | 14\% | 26.9 |
| Tax provisions | 74.6 | 97\% | 2.2 | 3\% | 76.8 |
| Age 0-2 | 14.4 | 97\% | 0.5 | 3\% | 14.8 |
| Age 3-5 | 49.6 | 99\% | 0.4 | 1\% | 50.0 |
| Age 6-11 | 23.4 | 97\% | 0.6 | 3\% | 24.1 |
| Age 12-18 | 23.7 | 97\% | 0.7 | 3\% | 24.5 |
| Health | 62.5 | 59\% | 43.0 | 41\% | 105.6 |
| Age 0-2 | 18.7 | 61\% | 12.0 | 39\% | 30.6 |
| Age 3-5 | 31.1 | 84\% | 5.8 | 16\% | 36.9 |
| Age 6-11 | 15.2 | 59\% | 10.7 | 41\% | 25.9 |
| Age 12-18 | 20.5 | 58\% | 14.6 | 42\% | 35.1 |
| Education and early care | 54.4 | 9\% | 563.1 | 91\% | 617.5 |
| Age 0-2 | 3.0 | 78\% | 0.9 | 22\% | 3.8 |
| Age 3-5 | 13.4 | 22\% | 47.3 | 78\% | 60.7 |
| Age 6-11 | 21.4 | 8\% | 237.9 | 92\% | 259.3 |
| Age 12-18 | 16.6 | 6\% | 277.1 | 94\% | 293.7 |
| Other | 60.4 | 90\% | 6.4 | 10\% | 66.8 |
| Age 0-2 | 12.1 | 96\% | 0.6 | 4\% | 12.7 |
| Age 3-5 | 9.4 | 92\% | 0.8 | 8\% | 10.2 |
| Age 6-11 | 19.1 | 89\% | 2.4 | 11\% | 21.6 |
| Age 12-18 | 19.7 | 88\% | 2.6 | 12\% | 22.3 |

Notes: Other includes nutrition, housing, and social services at the federal level, and child welfare programs at the state level. Tax provisions includes refundable portions of federal tax credits, but not reductions in federal taxes; at the state level, it includes only state earned income tax credits, not other tax provisions. All amounts are in 2011 dollars.
older age groups, with the federal government contributing the majority of spending (see figure 6).

The "other" spending on infants and toddlers is primarily health spending, which made up 44 percent of total public spending for the youngest children and 6 to 13 percent of public spending on older groups (data not shown). Combining federal and state spending, income security programs made up 10 percent
of spending for infants and toddlers but less for older children. Refundable portions of taxes also were a larger component of spending for younger children: they made up 21 percent of spending for children $0-2$ years old, while their percentage was about half of that for pre-k and kindergarten-age children and a third of that for older children. Consistently across age groups, the vast majority of refundable tax spending was at the federal level.

FIGURE 6. Per Capita Education and Other Spending on Children in 2008, by Age: Federal and StatelLocal


Notes: Other includes spending not on on education and early care, excepting tax expenditures. All amounts in 2011 dollars.

## CONCLUSION

This report reveals how government programs and tax provisions distribute expenditures on children by age. Federal child-related expenditures in 2011 were highest per child age $0-2$ and declined as children got older. Federal expenditures were higher in 2011 than in 2008 for all ages, but especially for children age $0-2$, for whom they grew 27 percent. The growth in federal safety net programs in response to the recession resulted in higher spending on this age group.

The distribution of federal funds by age differed depending on the category of expenditures and the specific program. Health expenditures were higher for the youngest children, mainly due to Medicaid. Tax expenditures (i.e., the EITC and CTC) declined as children got older, as did nutrition expenditures, reflecting the targeting of those benefits on low-income families and the lower incomes of younger families with younger children. Income security was the only major category with increasing per capita expenditures as children got older, because higher TANF expenditures on young children were outweighed by higher Social Security expenditures on older children. Federal education and early care expenditures were highest for age 3-5 because of Head Start, Title I, and Special Education.

Total public spending from federal, state, and local government sources was highest for children age $6-11$, followed by those age 12-18. The large role of states and localities in funding education drove this trend. States and localities are increasing their education and care spending on children age $3-5$, but total spending on these children still is much less than on older children. Finally, public
spending is lowest on infants and toddlers. For infants and toddlers, and, to a lesser extent, preschool-age children, the federal government plays a large role. While states and localities focus on addressing older children's developmental needs primarily through schools and associated services, the federal government spreads its support more evenly across various spending categories. This analysis suggests that the fiscal health and priority choices of all levels of government matters when it comes to investments in children.

Recent budget concerns have made clear that very large decisions are likely to change significantly the pattern of government spending and taxes in the near future. As elected officials consider the choices before them regarding spending on children's programs and tax provisions, it is important that they understand the needs of children at different ages, the potential benefits of investing in children when they are young, and the distribution of program spending among different age groups. Wisely allocating those funds, of course, can significantly affect how children will fare not just currently but in later childhood and adulthood.

## APPENDIX: METHODS

This report, like all Kids' Share reports, relies on a comprehensive database of expenditures for children that was developed by researchers at the Urban Institute. The database includes outlays (spending) from federal programs that benefit children and tax expenditures from child-related tax provisions.

Estimating children's share of public expenditures requires collecting data from numerous sources and making certain assumptions and judgment calls. Expenditure data are collected for each program, relying primarily on outlay estimates from the Appendix to the Budget of the United States Government, Fiscal Year 2013 (and past years). Many analyses also include information on tax expenditures, gathered from the Analytical Perspectives volume of the budget. Next, significant efforts are put into estimating the portions of programs that go specifically to children, and that go to the four age groups of children: $0-2,3-5,6-11$, and $12-18$. For the analyses by age group, we refined and updated earlier reports examining spending in the three younger age groups and across children from birth to age 11. ${ }^{9}$ All budget numbers presented in this report represent federal fiscal years and are expressed in 2011 dollars, unless otherwise noted.

For a program to be included (as a whole or in part) in any of our Kids' Share analyses, it must meet at least one of the following criteria: benefits or services are entirely for children or include a portion that provides benefits directly for children, family benefit levels increase when children are included in the application for the benefit, or children are necessary for a family to qualify for any benefits. Not all programs
that provide benefits to families are included under our definition of spending on children. Excluded, for example, are unemployment compensation, tax benefits for home ownership, and other benefits where the amount of the benefit the adult receives is not conditional on the presence or number of children. Further, this analysis does not include programs that provide benefits to the population at large, such as various public goods in the form of roads, communications, national parks, and environmental protection.

In reporting federal expenditures on children, our most comprehensive measure includes tax expenditures (e.g., reduced tax liabilities as a result of the Child Tax Credit, the dependent exemption, or other provisions in the tax code) as well as direct program outlays. However, we do not have measures of state and local tax expenditures. Therefore, our estimates of total public spending (federal/state/local) focus on outlays only, combining federal outlays with state and local outlays, so we have a consistent measure of "spending" across the different levels of government. Some tax provisions are included in this outlay measure: the federal outlay measure includes the portions of the Earned Income Tax Credit and Child Tax Credit that are paid out to families as a tax refund (and are treated by the Treasury Department as outlays
rather than reductions in tax liabilities), and the state and local estimate includes all spending associated with state earned income tax credits. Our estimates of state and local spending are taken from the Rockefeller Institute State Funding Database (2010; described in Billen et al. 2007) and incorporate spending on a dozen major programs, including elementary and secondary education, state programs associated with major federal programs (Medicaid, the Children's Health Insurance Program [CHIP], the Maternal and Child Health Program, TANF, Child Support Enforcement, Child Care and Development, Child Welfare, etc.), and state earned income tax credits.

This report divides spending on children among four age groups, building on previous reports that have examined spending by age of child. We chose to consider children age $0-2$ because infants and toddlers have distinctly different needs than older children. Note that this does not include prenatal or birth and delivery costs under Medicaid, which, while critical to the well-being of children, are not easily available in Medicaid data sources, pushing us to define childhood as beginning at birth. Our second group, age $3-5$, covers children of the age to be enrolled in preschool, Head Start, or kindergarten. The $6-11$ age group covers children typically in elementary school. Lastly, children age 12-18 usually are enrolled in secondary education, and some receive services, such as job training, that younger children do not. We do not include spending on college or postsecondary vocational training, only on training programs that serve youth under 19. While the general rule is to include spending on 18 -year-olds, such spending is excluded in certain programs that define childhood as ending on a child's 18th birthday. Thus, our estimate
of spending on 12 - to 18 -year-olds may not capture all spending on 18 -year-olds.

Our methods for dividing expenditures on children into age groups are similar to our methods for dividing programs into child and non-child spending. We search program web sites, contact agency staff, and use the Urban Institute's unpublished tabulations of survey and administrative data (mainly using the Urban Institute's Transfer Income Model). Where specific data are not available about the ages served by a program, we survey literature for any research indicating how this program serves children at different ages. For programs which do not seem to favor one age group, we may assume that spending is evenly divided by age.

The number of children is not the same in each age group, due to both variation in the number of children at each year of age in 2011 and the inclusion of more years in the older age groups. Thus, per capita spending is the most informative calculation, and we focus on it rather than on aggregate spending in most of the report. The per capita figures are calculated by dividing expenditures by the total number of children in each age group, including children these ages who do not receive any expenditures. These per capita averages ignore differences by age within age groups (e.g., the difference between 1 - and 2 -year-olds), by state, by family income, by disability status, or by other circumstance that might lead to higher or lower than average spending.

Appendix table A1 presents estimates of spending by program and category, for all children and each age group. Appendix table A2 provides further details on our methodology for calculating spending by age for the 10 programs and tax provisions with the largest expenditures on children.

TABLE A1. Federal Expenditures on Children in 2011, by Age, Category, and Program

|  | Spending (\$ Millions) |  |  |  |  | As a \% of This Program's Spending on Children |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Age 0-2 | Age 3-5 | Age 6-11 | Age 12-18 | All children | Age 0-2 | Age 3-5 | Age 6-11 | Age 12-18 | All children |
| TOTAL | 78,518 | 74,293 | 141,161 | 150,782 | 444,754 | 18\% | 17\% | 32\% | 34\% | 100\% |
| INCOME SECURITY | 5,145 | 6,132 | 16,096 | 25,754 | 53,127 | 10\% | 12\% | 30\% | 48\% | 100\% |
| Social Security | 403 | 1,202 | 5,746 | 13,976 | 21,327 | 2\% | 6\% | 27\% | 66\% | 100\% |
| TANF | 2,968 | 2,534 | 3,960 | 4,221 | 13,683 | 22\% | 19\% | 29\% | 31\% | 100\% |
| Supplemental Security Income | 795 | 1,479 | 4,213 | 4,493 | 10,980 | 7\% | 13\% | 38\% | 41\% | 100\% |
| Child Support Enforcement | 588 | 588 | 1,176 | 1,373 | 3,725 | 16\% | 16\% | 32\% | 37\% | 100\% |
| Veterans' Benefits | 390 | 327 | 993 | 1,678 | 3,388 | 12\% | 10\% | 29\% | 50\% | 100\% |
| Railroad Retirement | 1 | 1 | 6 | 14 | 23 | 5\% | 5\% | 28\% | 61\% | 100\% |
| TAX PROVISIONS | 28,459 | 25,297 | 45,157 | 45,287 | 144,200 | 20\% | 18\% | 31\% | 31\% | 100\% |
| Refundable portions of tax credits | 15,417 | 13,452 | 23,187 | 23,607 | 75,663 | 20\% | 18\% | 31\% | 31\% | 100\% |
| Earned Income Tax Credit | 10,543 | 9,216 | 15,064 | 16,558 | 51,382 | 21\% | 18\% | 29\% | 32\% | 100\% |
| Child Tax Credit | 4,128 | 4,018 | 7,784 | 6,761 | 22,691 | 18\% | 18\% | 34\% | 30\% | 100\% |
| Other outlays from tax provisions ${ }^{a}$ | 746 | 217 | 339 | 287 | 1,590 | 47\% | 14\% | 21\% | 18\% | 100\% |
| Reductions in taxes | 13,041 | 11,846 | 21,970 | 21,680 | 68,537 | 19\% | 17\% | 32\% | 32\% | 100\% |
| Dependent exemption | 5,837 | 5,631 | 10,860 | 12,547 | 34,875 | 17\% | 16\% | 31\% | 36\% | 100\% |
| Child Tax Credit | 4,259 | 4,146 | 8,031 | 6,975 | 23,410 | 18\% | 18\% | 34\% | 30\% | 100\% |
| Dependent Care Credit | 1,441 | 1,143 | 1,366 | 124 | 4,074 | 35\% | 28\% | 34\% | 3\% | 100\% |
| Earned Income Tax Credit | 222 | 194 | 318 | 349 | 1,084 | 21\% | 18\% | 29\% | 32\% | 100\% |
| Other reductions in taxes ${ }^{b}$ | 1,282 | 731 | 1,396 | 1,685 | 5,094 | 25\% | 14\% | 27\% | 33\% | 100\% |
| HEALTH | 25,377 | 11,572 | 21,630 | 29,342 | 87,922 | 29\% | 13\% | 25\% | 33\% | 100\% |
| Medicaid | 21,389 | 10,121 | 17,864 | 24,479 | 73,853 | 29\% | 14\% | 24\% | 33\% | 100\% |
| CHIP | 1,129 | 760 | 2,773 | 3,622 | 8,284 | 14\% | 9\% | 33\% | 44\% | 100\% |
| Vaccines for Children | 2,109 | 362 | 580 | 623 | 3,674 | 57\% | 10\% | 16\% | 17\% | 100\% |
| Immunization | 458 | 79 | 126 | 135 | 798 | 57\% | 10\% | 16\% | 17\% | 100\% |
| Other health ${ }^{\text {c }}$ | 292 | 250 | 287 | 483 | 1,312 | 22\% | 19\% | 22\% | 37\% | 100\% |
| EDUCATION and EARLY CARE | 3,611 | 17,691 | 31,737 | 25,532 | 78,571 | 5\% | 23\% | 40\% | 32\% | 100\% |
| Title I | 0 | 2,475 | 13,284 | 3,777 | 19,536 | 0\% | 13\% | 68\% | 19\% | 100\% |
| Special Education | 609 | 2,606 | 6,134 | 7,714 | 17,062 | 4\% | 15\% | 36\% | 45\% | 100\% |
| State Fiscal Stabilization | 0 | 902 | 3,743 | 4,304 | 8,948 | 0\% | 10\% | 42\% | 48\% | 100\% |
| Head Start | 846 | 7,521 | 0 | 0 | 8,367 | 10\% | 90\% | 0\% | 0\% | 100\% |
| Child Care and Development | 2,156 | 2,404 | 1,306 | 218 | 6,084 | 35\% | 40\% | 21\% | 4\% | 100\% |
| School Improvement | 0 | 548 | 2,277 | 2,618 | 5,443 | 0\% | 10\% | 42\% | 48\% | 100\% |
| Impact Aid | 0 | 135 | 558 | 642 | 1,335 | 0\% | 10\% | 42\% | 48\% | 100\% |
| Dependents' Schools Abroad | 0 | 145 | 553 | 527 | 1,225 | 0\% | 12\% | 45\% | 43\% | 100\% |

TABLE A1. Federal Expenditures on Children in 2011, by Age, Category, and Program (Continued)

|  | Spending (\$ Millions) |  |  |  |  | As a \% of This Program's Spending on Children |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Age 0-2 | Age 3-5 | Age 6-11 | Age 12-18 | All children | Age 0-2 | Age 3-5 | Age 6-11 | Age 12-18 | All children |
| Innovation and Improvement | 0 | 104 | 433 | 498 | 1,035 | 0\% | 10\% | 42\% | 48\% | 100\% |
| Vocational/Adult Education | 0 | 0 | 0 | 942 | 942 | 0\% | 0\% | 0\% | 100\% | 100\% |
| Other education ${ }^{\text {d }}$ | 0 | 851 | 3,450 | 4,293 | 8,593 | 0\% | 10\% | 40\% | 50\% | 100\% |
| NUTRITION | 13,342 | 10,797 | 20,945 | 14,813 | 59,897 | 22\% | 18\% | 35\% | 25\% | 100\% |
| SNAP | 7,846 | 7,659 | 12,177 | 9,067 | 36,749 | 21\% | 21\% | 33\% | 25\% | 100\% |
| Child Nutrition | 622 | 2,101 | 8,768 | 5,691 | 17,181 | 4\% | 12\% | 51\% | 33\% | 100\% |
| WIC | 4,870 | 1,036 | 0 | 55 | 5,961 | 82\% | 17\% | 0\% | 1\% | 100\% |
| Commodity Supplemental Food | 5 | 1 | 0 | 0 | 6 | 82\% | 17\% | 0\% | 1\% | 100\% |
| OTHER | 2,583 | 2,804 | 5,596 | 10,054 | 21,037 | 12\% | 13\% | 27\% | 48\% | 100\% |
| Housing | 1,727 | 1,787 | 3,125 | 3,140 | 9,779 | 18\% | 18\% | 32\% | 32\% | 100\% |
| Section 8 LowIncome Housing | 1,305 | 1,340 | 2,360 | 2,338 | 7,343 | 18\% | 18\% | 32\% | 32\% | 100\% |
| Low-Rent Public Housing | 221 | 222 | 376 | 373 | 1,193 | 19\% | 19\% | 32\% | 31\% | 100\% |
| Low Income Home Energy | 176 | 201 | 349 | 390 | 1,116 | 16\% | 18\% | 31\% | 35\% | 100\% |
| Other housinge | 24 | 24 | 40 | 39 | 127 | 19\% | 19\% | 31\% | 31\% | 100\% |
| Social services | 856 | 1,017 | 2,471 | 5,454 | 9,798 | 9\% | 10\% | 25\% | 56\% | 100\% |
| Foster Care | 410 | 334 | 726 | 2,903 | 4,373 | 9\% | 8\% | 17\% | 66\% | 100\% |
| Adoption Assistance | 70 | 278 | 858 | 1,113 | 2,318 | 3\% | 12\% | 37\% | 48\% | 100\% |
| Social Services Block Grant | 149 | 149 | 297 | 347 | 941 | 16\% | 16\% | 32\% | 37\% | 100\% |
| Other social services ${ }^{f}$ | 228 | 256 | 590 | 1,092 | 2,166 | 11\% | 12\% | 27\% | 50\% | 100\% |
| Training ${ }^{\text {g }}$ | 0 | 0 | 0 | 1,460 | 1,460 | 0\% | 0\% | 0\% | 100\% | 100\% |

TANF: Temporary Assistance for Needy Families; CHIP: Children's Health Insurance Program; SNAP: Supplemental Nutrition Assistance Program; WIC: Special Supplemental Nutrition Program for Women, Infants, and Children.
a. Other outlays associated with tax credits includes Qualified School Construction Bonds, Qualified Zone Academy Bonds, and Adoption Credit.
b. Other reductions in taxes includes exclusion for public assistance benefits, adoption credit and exclusion, exclusion of employer-provided child care, employer-provided child care credit, Qualified School Construction Bonds, Qualified Zone Academy Bonds, exclusion for Social Security retirement and dependents' and survivors' benefits, assistance for adopted foster children, exclusion of certain foster care payments, exclusion for Social Security disability benefits, and exclusion for veterans' death benefits and disability compensation.
c. Other health includes Maternal and Child Health (block grant), children's mental health services, Healthy Start, emergency medical services for children, universal newborn hearing, PREP and abstinence education, birth defects/developmental disabilities, children's graduate medical education, lead hazard reduction, home visiting, and school-based health care.
d. Other education includes Education Jobs Fund, Safe Routes to Schools, Indian Education, English language acquisition, domestic schools, the Institute for Education Sciences, safe schools and citizenship education, hurricane education recovery, and Junior ROTC.
e. Other housing includes rental housing assistance and rent supplement.
f. Other social services includes Community Services Block Grant, certain children and family services programs, child welfare services and training, guardianship, independent living, juvenile justice, missing children, children's research and technical assistance, and family preservation and support.
g. Training includes WIA Youth Formula Grants, Job Corps, YouthBuild Grants, and Youth Offender Grants.


TABLE A2. Methods for Calculating Multipliers for 10 Largest Federal Programs and Tax Provisions in 2011

| Program | Multiplier |  |  |  | Method |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Age 0-2 | Age 3-5 | Age 6-11 | Age 12-18 |  |
| Medicaid | 29\% | 14\% | 24\% | 33\% | Estimates were provided by the Urban Institute's Health Policy Center using 2009 Medicaid expenditure data from the Medic aid Statistical Information System. |
| Earned Income Tax Credit (EITC) <br> Child tax credit (CTC) | $21 \%$ $18 \%$ | $18 \%$ $18 \%$ | $29 \%$ $34 \%$ | $32 \%$ $30 \%$ | For both the EITC and the CTC, data from the TRIM3 model were used to allocate 2008 tax benefits across eligible households with children. Benefit per eligible child was assumed to equal household benefit divided by number of eligible children. The multiplier was then calculated as the portion of benefits allocated to children age 0-18 that was allocated to children age $0-2,3-5,6-11$, and 12-18. |
| Supplemental Nutrition Assistance Program (SNAP) | 21\% | 21\% | 33\% | 25\% | The age multipliers for 2011 are based on Characteristics of Supplemental Nutrition Assistance Program Households: Fiscal Year 2010, Table 3.5, "SNAP Benefits of Participants by Selected Demographic Characteristics," which show benefits to children age $0-1,2-4,5-7,8-11,12-15$, and $16-18$. Benefits are assumed to be distributed evenly within categories; for example, benefits for children age 0-2 include benefits for children 0-1 and a third of benefits for children 2-4. |
| Dependent exemption | 17\% | 16\% | 31\% | 36\% | Same methodology as explained above for the EITC and CTC. |
| Social Security | $\begin{array}{r} \text { OASI } \\ \text { 1\% } \\ \text { DI } \\ 3 \% \end{array}$ | $\begin{array}{r} \text { OASI } \\ 5 \% \\ \text { DI } \\ 7 \% \end{array}$ | $\begin{gathered} \text { OASI } \\ \text { 27\% } \\ \text { DI } \\ 27 \% \end{gathered}$ | OASI <br> 67\% <br> DI <br> 63\% | These multipliers are based on beneficiary data found at Social Security Online, Office of Chief Actuary, Beneficiary Data, "Number of Beneficiaries by Age" (http://www.ssa.gov/OACT/ProgData/byage.html). We assumed benefits were distributed proportionally to beneficiaries. <br> OASI = Old Age and Survivors Insurance <br> DI = Disability Insurance |
| Accelerating Achievement and Ensuring Equity (Title I) | 0\% | 13\% | 68\% | 19\% | Program does not serve ages 0-2. According to a 2009 study by the Department of Education, "State and Local Implementation of the No Child Left Behind Act, Volume VI: Targeting and Uses of Federal Education Funds" (http://www2.ed.gov/rschstat/ eval/disadv/nclb-targeting/index.html), elementary schools received 76 percent of Title I allocations to schools, middle schools received 14 percent, and high schools received 10 percent. We assume the following ages per school type: elementary (grades pre-K-5), age 3-10; middle (grades 6-8), age 11-13; high (grades 9-12), age 14-18. We used this information to estimate the share of Title I funding supporting age $3-5$, age $6-11$, and age $12-18$, assuming roughly equal benefits per child across the different age groups, except we assumed lower benefits for $3-5$-year-olds than for older children. |
| Child Nutrition | 4\% | 12\% | 51\% | 33\% | To estimate the percentage of participants for each age group, we looked at each program separately. We relied on the School Nutrition Dietary Assessment Study III (SNDA), available on the Food and Nutrition Service (FNS) web site, to provide estimates of the age breakdowns for the National School Lunch Program (NSLP) and School Breakfast Program (SBP). We assumed that 5 -year-olds participated in these programs at half the rate of 6 -year-olds, given that some children participate in half-day kindergarten, and readjusted that distribution of participants by age. FNS confirmed that nearly zero children age $0-4$ receive NSLP and SBP benefits. No program data were available for the Summer Food Service Program, so we assumed the same age distributions as for the NSLP. We used data from the Child and Adult Care Food Program (CACFP) web site to calculate the share of participants who are children and data from the Early Childhood and Childcare Study (Glantz et al. 1997) to estimate the proportion of participants in CACFP. Finally, we took the percentage of participants in each age group in each program and multiplied this by the percentage of 2011 obligations that went to each program found in OMB's Appendix to the Federal Budget, FY 2013. |

TABLE A2. Methods for Calculating Multipliers for 10 Largest Federal Programs and Tax Provisions in 2011 (Continued)

| Program | Multiplier |  |  |  | Method |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Age 0-2 | Age 3-5 | Age 6-11 | Age 12-18 |  |
| Special Education | 4\% | 15\% | 36\% | 45\% | First, we calculated the portion of the Grants to States (Part B, C, and D) that went to each age group. We then determined the share of this group receiving services within and outside public schools using Table 11 in the National Center for Education Statistics report, "Characteristics of Private Schools in the United States: Results from the 2003-2004 Private School Universe Survey." We multiply these shares by the cost per pupil for these different settings provided in Exhibit 6 of American Institutes for Research's report "What Are We Spending on Special Education Services in the United States, 1999-2000?" The multiplier is then calculated by dividing the Grants to State for each age group by all state grants (Part D), as reported in the Department of Education Fiscal Year 2012 Budget Request. This multiplier was applied to total outlays, which means that spending on activities other than state grants (e.g., technical assistance, administrative costs) is allocated proportionally to state grants. |
| Temporary Assistance for Needy Families (TANF) | 22\% | 19\% | 29\% | 31\% | The percentage of benefits going to each age group was calculated using a special tabulation of TANF administrative data from fiscal year 2009. |

## NOTES

1. Earlier reports include Isaacs et al. (2009, 2010, 2011, 2012); Carasso et al. (2008); Carasso, Steuerle, and Reynolds (2007); and Clark et al. (2001).
2. Kids'Share 2012: Report on Federal Expenditures on Children through 2011 can be found at http://www.urban.org/publications/412600.html.
3. U.S. Census Bureau, Current Population Survey, 2012 Annual Social and Economic Supplement, "POV34: Single Year of Age—Poverty Status: 2011," http://www.census.gov/hhes/www/ cpstables/032012/pov/POV34_100.htm.
4. It is beyond the scope of this report to assess how well this relatively high level of Medicaid spending on infants and toddlers meets children's needs for health care. Other researchers at the Urban Institute, however, have identified opportunities, gaps, and potential improvements in the delivery of care to this age group (Kenney and Pelletier 2011; Pelletier and Kenney 2010).
5. This is partly influenced by federal Medicaid guidelines, which require states to cover children age 6-18 who are below 100 percent of the federal poverty level, but children age $0-5$ up to 133 percent of the poverty level. States also may cover children
under age 1 up to 185 percent of the poverty level and receive a federal match for their spending.
6. Delivery costs are not included in our calculations, but childbirth in a hospital results in more infants being covered for later neonatal care.
7. Federal spending increased from 2008 to 2010, then fell in 2011. Even with the decline, federal spending was higher in 2011 than in 2008.
8. There is a small inconsistency in how the EITC is included in the federal versus state estimates: the federal estimate includes the refundable portion of the EITC, or 88 percent of all EITC expenditures; the state estimates include all expenditures associated with state earned income tax credits. While we would prefer to include all expenditures associated with tax provisions in our estimates, data on tax expenditures associated with state tax provisions are not readily available (our data on the state earned income tax credits are the result of a special Rockefeller Institute survey).
9. Earlier reports by age of child include Macomber et al. (2009) (age 0 to 2); Kent et al. (2010) (age 3 to 5); Vericker et al. (2010) (age 6 to 11), and a summary brief covering spending from birth to age 11 (Macomber et al. 2010). The earlier reports did not cover ages 12 to 18 . See http://www.urban. org/projects/kids_share.cfm.

## REFERENCES

Billen, Patricia, Donald Boyd, Lucy Dadayan, and Thomas Gais. 2007. State Funding for Children: Spending in 2004 and How It Changed from Earlier Years. Albany, NY: Nelson A. Rockefeller Institute of Government.

Carasso, Adam, C. Eugene Steuerle, and Gillian Reynolds. 2007. Kids' Share 2007: How Children Fare in the Federal Budget. Washington, DC: The Urban Institute.

Carasso, Adam, C. Eugene Steuerle, Gillian Reynolds, Tracy Vericker, and Jennifer Erhle Macomber. 2008. Kids' Share 2008: How Children Fare in the Federal Budget. Washington, DC: The Urban Institute.

Clark, Rebecca, Rosalind Berkowitz King, Christopher Spiro, and C. Eugene Steuerle. 2001. Federal Expenditures on Children: 1960-1997. Assessing the New Federalism Occasional Paper 45. Washington, DC: The Urban Institute.

Doyle, Orla, Colm Harmon, James J. Heckman, and Richard E. Tremblay. 2007. "Early Childhood Intervention: Rationale, Timing and Efficacy." Working Paper 200705. Dublin: Geary Institute, University College Dublin.
Glantz, Frederic B., David T. Rodda, Mary Jo Cutler, William Rhodes, and Marian Wrobel. 1997. Early Childhood and Child Care Study: Profile of Participants in the CACFP: Final Report Volume I. Alexandria, VA: U.S. Department of Agriculture, Food and Consumer Service, Office of Analysis and Evaluation.
Heberlein, Martha, Tricia Brooks, Jocelyn Guyer, Samantha Artiga, and Jessica Stephens. 2011. Holding Steady, Looking Ahead: Annual Findings of a 50-State Survey of Eligibility Rules, Enrollment and Renewal Procedures, and Cost Sharing Practices in Medicaid and CHIP, 2010-2011. Washington, DC: Kaiser Commission on Medicaid and the Uninsured.

Heckman, James J., and Dimitriy V. Masterov. 2007. "The Productivity Argument for Investing in Young Children." Review of Agricultural Economics 29(3): 446-93.

Isaacs, Julia, C. Eugene Steuerle, Stephanie Rennane, and Jennifer Macomber. 2010. Kids'Share 2010: Report on Federal Expenditures on Children through 2009. Washington, DC: The Urban Institute and The Brookings Institution.

Isaacs, Julia, Tracy Vericker, Jennifer Macomber, and Adam Kent. 2009. Kids' Share: An Analysis
of Federal Expenditures on Children through 2008.
Washington, DC: The Urban Institute.
Isaacs, Julia, Heather Hahn, C. Eugene Steuerle, Stephanie Rennane, and Tracy Vericker. 2011. Kids'Share 2011: Report on Federal Expenditures on Children through 2010. Washington, DC: The Urban Institute and The Brookings Institution.
Isaacs, Julia, Katherine Toran, Heather Hahn, Karina Fortuny, and C. Eugene Steuerle. 2012. Kids' Share 2012: Report on Federal Expenditures on Children through 2011. Washington, DC: The Urban Institute.
Kaiser Family Foundation. 2011. "Medicaid Matters: Understanding Medicaid's Role in Our Health Care System." Washington, DC: Kaiser Commission on Medicaid and the Uninsured.
Kenney, Genevieve, and Jennifer Pelletier. 2011. "Monitoring Duration of Coverage in Medicaid and CHIP to Assess Program Performance and Quality." Academic Pediatrics 11(3): S34-S41.
Kent, Adam, Jennifer Macomber, Julia Isaacs, Tracy Vericker, and E. Bringewatt. 2010. Federal Expenditures on Pre-Kindergarteners and Kindergarteners in 2008 (Ages 3 through 5). Washington, DC: The Urban Institute.
Macomber, Jennifer, Julia Isaacs, Tracy Vericker, and Adam Kent. 2010. Public Investment in Children's Early and Elementary Years (Birth to Age 11). Washington, DC: The Urban Institute.
Macomber, Jennifer, Julia Isaacs, Tracy Vericker, Adam Kent, and P. Johnson. 2009. Federal Expenditures on Infants and Toddlers in 2007. Washington, DC: The Urban Institute.
Nelson A. Rockefeller Institute of Government. 2010. "State Funding for Children Database." http:// www.rockinst.org/government_finance/casey_ database.aspx.
Office of Management and Budget. 2012. Budget of the United States Government, Fiscal Year 2013. Washington, DC: U.S. Government Printing Office.

Pelletier, Jennifer, and Genevieve Kenney. 2010. Improving the Lives of Young Children: Increasing Referrals and Follow-Up Treatment in Medicaid and CHIP. Washington, DC: The Urban Institute.
Vericker, Tracy C., Jennifer Macomber, Julia Isaacs, Adam Kent, and Elizabeth H. Bringewatt. 2010. Federal Expenditures on Elementary-Age Children in 2008 (Ages 6 through 11). Washington, DC: The Urban Institute.

2100 M Street, NW
Washington, DC 20037
ph 202.833.7200
fax 202.467.5775
http://www.urban.org


[^0]:    Notes: Spending includes both outlays and tax reductions. For each age group, the percentage of the total that is outlays versus tax reductions did not shift significantly from 2008 to 2011.

[^1]:    Note: Tax provisions includes refundable portions of tax credits and reductions in taxes.

[^2]:    Notes: Refundable portions of tax credits, but not reductions in taxes, are included at the federal level. At the state level, only state earned income tax credits, not other tax provisions, are included. All amounts are in 2011 dollars.

