

## Counting What Counts: Taking Results Seriously for Vulnerable Children and Families

This year marks the 20th edition of the *KIDS COUNT Data Book*, the 20th time that the Annie E. Casey Foundation has amassed critically important data on the well-being of our nation's children and families into a single, easy-to-access volume that is now backed by an extensive online data system.

Our Foundation has invested millions of dollars over two decades not only to produce the annual KIDS COUNT volumes, but also to distribute them far and wide (more than 1 million copies to date) and to underwrite an array of advocacy efforts aimed at bringing these data to the public's attention and promoting appropriate policy responses.

The Casey Foundation has made these investments based on our conviction that data-driven decision-making offers a powerful—and sorely underutilized—tool to improve results for children. Results matter, and achieving positive results requires us to keep our eyes on the prize: carefully measuring the well-being of children; setting meaningful goals for their care and development; identifying those who are suffering or being left behind; strategically publicizing the performance of public programs; and maintaining society's focus on the evolving, objectively measured needs of the next generation.

Results always matter. But they take on added importance in this time of economic crisis. The combination of increasing joblessness and mushrooming home foreclosures is putting unprecedented pressure on millions of families. The threat is especially dire for children born to families mired in poverty, as well as for kids facing special risks, whose well-being depends on the quality of support provided by government-financed systems that are increasingly strapped for cash.

These challenging circumstances demand that we do more with less. They demand accountability. And at the heart of accountability, both literally and figuratively, is the word “count.” Accountability requires counting.

In this 2009 *KIDS COUNT Data Book* essay, we examine our nation’s progress in this crucial counting process. How well are we as a nation, and in our states and communities, marshalling the available information to address pressing needs and create meaningful opportunities for vulnerable children? How well are we keeping track of children’s well-being, measuring the impact of public programs, and holding ourselves collectively accountable for the healthy development of children? How effectively are we using new information technology to improve outcomes for those in need?

Although we see isolated advances, we mostly find that America’s efforts on these fronts remain seriously wanting. This essay documents a persisting inattention to results in many services and systems designed to assist children and families, and an unfortunate array of missed opportunities to improve outcomes through better use of information and technology. Looking ahead, the Casey Foundation recommends a series of action steps

to increase the quantity and quality of available data, better utilize data to improve policy and practice, hold public agencies accountable for results, and mobilize states and communities to take data-driven action on behalf of vulnerable children and families.

Despite the budgetary shortfalls facing all levels of government, now is the wrong time to scale back data gathering and analysis. Improving the volume and accessibility of good, timely, widely used, and easily understood data can lead to better-informed policies, more focused programming, and more efficient use of taxpayer dollars. Better and better-used data can also provide the basis for a robust cycle of continuous improvement in our efforts to support children, families, and communities. Although some may argue the cost of this investment, it amounts to a tiny fraction of current public expenditures on children and families, with a potentially immense payoff in reduced waste and improved results.

“What gets measured gets done,” says the old truism, and what gets measured and fed back gets done well. In these difficult times, with millions of children’s well-being on the line, we simply must do a better job of counting what counts.

### Twenty Years of Important But Insufficient Progress

Since KIDS COUNT was inaugurated 20 years ago, the United States has made noteworthy progress in the collection of data related to children and families, and our appreciation for data-driven policymaking has grown substantially. Evidence of this can be seen in the response to the KIDS COUNT initiative itself. In addition to distributing 1 million-plus copies of the national *Data Book* since 1990, the Casey Foundation and its partners have published

more than 500 separate state-level data books and hundreds of briefs exploring the policy implications of KIDS COUNT data. Each year, our KIDS COUNT website receives hundreds of thousands of visits, from which users generate more than 1 million specific data tabulations.<sup>1</sup>

Surveys find that 75 percent of state legislators nationwide are aware of KIDS COUNT, and more than half say that they read KIDS COUNT reports and find the data useful and relevant. Likewise, surveys find high levels of awareness and appreciation for KIDS COUNT among business leaders, county officials, congressional staff members, and other data users.<sup>2</sup> The release of the *KIDS COUNT Data Book* generates more than 1,000 news stories per year in newspapers with total readership exceeding 50 million, plus television news coverage seen by 15 million to 20 million viewers.<sup>3</sup>

This response to KIDS COUNT is just one sign of a broad shift in the past two decades toward stronger measurement and a greater focus on outcomes accountability. To begin, there has been a growing interest in capturing and publicizing data. For example, in the years following our inaugural publication, the Federal Interagency Forum on Child and Family Statistics was established and initiated an annual report, *America’s Children*, that presents national data on dozens of child well-being indicators compiled by 22 federal agencies.<sup>4</sup> Similarly, a number of private organizations—including Child Trends and the Foundation for Child Development—also initiated or expanded their efforts to compile and analyze data on children’s well-being.

At the federal level, the heightened interest in data has prompted significant improvements in government efforts to collect information on the

circumstances and well-being of U.S. residents. For example, for years, most data were compiled only once every decade through the constitutionally mandated census. Although a small number of surveys and studies funded by federal agencies supplemented the census, the data were at best limited in their depth and timeliness, making more precise measurement of many important indicators challenging, if not impossible.

Today, this situation is much improved. The U.S. Census Bureau now conducts the American Community Survey that collects detailed information from 3 million U.S. households every year and includes many measures related to children. In addition, the federal government also issues several new surveys to better monitor children's health, behavior, educational progress, civic engagement, and alcohol-tobacco-drug use, thereby providing state- and local-level information on important areas of well-being that were not previously researched.

In addition to a heightened federal interest in data collection about the well-being of children and families, we've also seen an increased focus on measuring the impact of government programs designed to help them. In 1993, Congress enacted the Government Performance and Results Act, requiring every federal agency to develop and monitor quantitative measures for their performance, a process that has continued (in modified form) ever since.

Also, Congress has increased data and reporting requirements for many programs receiving federal support and established high-stakes performance goals for several programs and systems that affect children's well-being, including the No Child Left Behind Act, the Temporary Assistance for Needy Families (TANF) program, and state child welfare systems.

Likewise, many state governments have begun measuring systems and programs against quantitative performance goals, often establishing both state-level children's cabinets to monitor trends and set concrete benchmarks for advancing the well-being of families and issuing local-level report cards to assess progress.

These developments are encouraging, but nowhere near sufficient. We have embraced the language of accountability and the rhetoric of results-oriented programming, but we've made much less headway toward putting these aspirations into effective practice. Our progress in harnessing the power of data to optimize outcomes for vulnerable children and families falls far short of what is possible, far short of what is needed, and far short of what private industry has achieved in its efforts to maximize profits.

Over the past two decades, advances in computer and telecommunications technology have radically changed how people all over the world spend their time, communicate with friends and colleagues, and gather their news. The information revolution has also reshaped the way business gets done in virtually every sector of our economy. New information technologies and data-driven decision-making techniques are demonstrating powerful results.

- In business, millions of American managers now turn on their computers and see a “data dashboard”—an interactive and continually updated graphic scorecard measuring their organization's progress on a range of key performance indicators, from employee turnover to sales per square foot of shelf space.

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- In medicine, according to a recent study, hospitals employing electronic health records and other automated information technology are seeing significantly better results and lower costs than hospitals that still rely on paper records.<sup>5</sup>

- In professional sports, the Oakland Athletics made the major league baseball playoffs for 4 straight years (2000 through 2003) despite a below-average payroll by applying a sophisticated new approach to statistical analysis that enabled the team to consistently identify underpriced talent<sup>6</sup>—and ushered in a new data- and statistics-driven generation of sports coaching and management.

- In political campaigning, superior voter and volunteer databases and the innovative use of Web-based social networks were critical factors in Barack Obama's success in the 2008 presidential campaign.

#### The Merits of Measuring

At the Annie E. Casey Foundation, we believe that the effective use of information also offers immense promise in the realm of public services—including abundant opportunities to improve child and family well-being. In our own experiences and those of our grantees, we've seen how good data, when used properly, can powerfully boost the effectiveness of government-financed human service programs and improve the lives of vulnerable children—particularly when tied to a purposeful advocacy campaign. Some examples follow.

- Until the Rhode Island KIDS COUNT organization began sounding the alarm about lead poisoning among young children in the mid-1990s, the issue

had generated little attention in the state capitol. To highlight the consequences of lead poisoning on cognitive development and school success, RI KIDS COUNT created a new indicator reflecting the percentage of children entering kindergarten who had ever registered an elevated level of lead in their blood. It also used the new, lower threshold from the Centers for Disease Control to define lead poisoning—a level common among Rhode Island's children that posed a significant risk for cognitive impairment.<sup>7</sup> A 1997 issue brief found that one-fifth of all children entering kindergarten—and more than one-third of children in the state's poorest cities—had a history of elevated blood lead levels.<sup>8</sup> By updating the lead poisoning indicator annually in its state-level data book and publishing a second issue brief on lead poisoning in 2003,<sup>9</sup> RI KIDS COUNT has had a profound impact: Since 1997, the percentage of Rhode Island children entering kindergarten with a history of elevated blood lead levels has shrunk from 28 percent to 5 percent, and in the state's central cities, the rates have fallen from 38 percent to 7 percent.<sup>10</sup> By publicizing existing data and advocating for appropriate responses, other state-level KIDS COUNT organizations achieve similar data-driven policy reforms every year, as do other policy research and advocacy organizations.

- Since 2001, a dedicated team of Casey Foundation specialists, the Casey Strategic Consulting Group (CSCG), has provided expert assistance at no cost to state and local jurisdictions striving to reform their child welfare and juvenile justice systems. Each of their projects has begun with intensive data analysis, often yielding eye-opening

conclusions that crystallized consensus for fundamental reforms. Following the widely publicized death of a 5-year-old foster child in 2001, Maine reached out to the Consulting Group for help in reforming its embattled child welfare agency, the Office of Children and Family Services. By examining the agency's performance data and comparing them to a dozen other states, CSCG (and its partners at the Chapin Hall Center for Children) found systemic problems: Too many foster children were living in group homes and other congregate care settings; many children were spending too long in foster care before being reunified with their families or placed with adoptive families or relatives. Maine has since reformed its child welfare system from top to bottom, embracing a family-centered practice approach and developing a new user-friendly database that tracks progress on a weekly basis. The results have been dramatic: a 67 percent drop in the number of Maine children in congregate care, a 35 percent drop in the total foster care population, and a sizable increase in the number of children placed with relatives. In March 2009, Maine's child welfare system was named a semi-finalist for a prestigious Innovations Award in Children and Family System Reform.

■ Rigorous attention to data has also been a crucial success factor in the Annie E. Casey Foundation's Juvenile Detention Alternatives Initiative (JDAI). This model is now being replicated in more than 100 jurisdictions nationwide and has sharply reduced detention populations in most sites without compromising public safety. One core JDAI practice is to analyze each decision point in the juvenile court process to identify stages where minority

youth appear to be impacted differently from white youth. Site teams then review policies and procedures in stages where disparities are apparent to ferret out their underlying sources. In some cases, risk-assessment instruments might include items that disadvantage minority youth. For example, in some communities, minority youth are more likely than whites to rely on public defender services that may be understaffed and poorly trained. In others, a lack of detention alternatives in minority neighborhoods might increase the odds that youth of color will be confined pending trial. By using data to illuminate these situations, some JDAI sites have made encouraging progress in reducing disparities.<sup>11</sup>

As these examples suggest, the creative and far-sighted use of data has the potential to vastly improve outcomes for children, families, and communities. Data-driven advocacy can help illuminate the need for new programs and better policies and foster a more targeted distribution of public resources. Rigorous data analyses and effective use of modern information technologies can increase worker productivity, reduce waste, diagnose and solve common problems, and help authorities understand and begin eliminating the racial disparities that plague public systems serving minorities and the poor.

Seizing these opportunities, however, is neither automatic nor inevitable. Rather, progress requires purposeful investment to collect the necessary data, and it demands that leaders in both the public and private sectors build the capacity to put those data to effective use. But achieving this is challenging in light of a number of factors that we examine in the following section.

### Dimensions of the Data Deficit

Unfortunately, the successes described in the earlier section remain exceptions, while a persistent and unnecessary *data deficit* continues to compromise our efforts to improve outcomes for children and families. In metaphorical terms, long after the invention of radar and GPS, we continue to fly blind in many or most of our efforts to improve the lives of our neediest children.

In particular, this data deficit remains glaring for two types of information essential to improved decision-making: population data on the needs, characteristics, and well-being of vulnerable children and families and performance data measuring the outcomes of government-funded programs and services to support this population. In addition to these data quality issues, human service systems also lag behind in the use of sophisticated management information tools that can spur rigorous analysis and put usable information into the hands of decision-making practitioners. Below, we explore each of these issues.

#### Population Data

Despite significant improvements in recent years, large gaps remain in our ability to usefully measure the overall well-being of children, families, and communities. The deficiencies in our national poverty measure and the ways in which we collect critical demographic data through the decennial census are two key examples.

**A Dysfunctional Poverty Measure.** Perhaps the single most glaring shortfall comes in our efforts to measure poverty, the "key performance indicator" that rises above all others in its impact on children's futures. Overwhelming research finds that growing

up in poverty—especially deep and/or sustained poverty, particularly in the first years of life—has crippling and lifelong consequences. Childhood poverty is negatively correlated with school success, future earnings, and both physical and mental health. Children raised in poverty are far more likely than affluent or middle-class children to suffer abuse or neglect. They are many times more likely than other children to become ensnared in the justice system and less likely to find stable employment or form durable families.<sup>12</sup>

Yet, our system for defining and monitoring poverty is thoroughly outdated. Developed in the 1960s, the official U.S. poverty measure is calculated by summing the cost of a rudimentary grocery budget and multiplying the total by three—because food represented roughly one-third of a typical 1960s family budget. The poverty threshold has never been recalculated since that time—only adjusted for inflation—even though food now consumes about one-seventh of a typical family’s budget. The outdated formula takes no account of child care, transportation, health insurance, and other expenses that consume a far greater share of families’ incomes today, nor does it account for significant regional differences in the cost of living.

Perhaps even more important, poverty calculations exclude non-cash benefits, such as the earned-income and other refundable tax credits, housing assistance, and food stamps. All have grown rapidly and represent the bulk of government support to low-income families. In other words, our nation’s so-called poverty measure provides absolutely no gauge of the impact of our major anti-poverty programs on reducing poverty.<sup>13</sup>

**A Skewed Census.** Another critical gap comes in the decennial census, which consistently fails to count millions of U.S. residents—most often children and residents of low-income urban communities. The U.S. Census Bureau’s own analyses showed that as in prior decades, the 1990 Census involved a widespread undercount of less affluent minorities, coupled with an overcount of whites.<sup>14</sup> In 2000, the Census Bureau undertook new procedures, including engaging state, local, and community organizations as partners and investing in a public awareness campaign. These steps reduced the estimated number of undercounts and overcounts—but the final tally still missed millions of people and duplicated millions more. The Census Bureau analysis showed that minorities and young children continued to be missed at higher rates than others in the 2000 Census.<sup>15</sup>

Because the funding formulas for many federal programs are based on census population totals, undercounting low-income urban families means fewer services and less support in our most needy communities. Each undercounted resident means \$12,000 less in federal support to a community over 10 years.<sup>16</sup> Meanwhile, skewed census data for distressed communities undermine our understanding of the very neighborhoods where children face the longest odds of success.

Unfortunately, preparations for the 2010 Census have been riddled with difficulties. The Census Bureau cut short its scheduled “dress rehearsal” in 2008—a crucial step for ensuring a smooth count—due to glitches with new handheld technologies. In 2008, the Governmental Accountability Office, the investigative arm of Congress, added the 2010 Census to its list of 30 “high-risk

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areas” capable of undermining the effectiveness of the federal government and wasting taxpayer dollars.<sup>17</sup> As late as June 2009, the Census Bureau still lacked a director.

**Other Gaps in Well-Being Data.** Although issues around poverty measurement and the census are critical, there are also significant—and, in some cases, growing—problems that plague other federal data on child and family well-being. Consider the following examples.

- Nationally, we collect scant information on the circumstances of younger children (infancy through age 10) and on teen dropouts (since many youth surveys are school-based). Similarly, we collect less information about the positive development of young people—such as school engagement, civic engagement, and social competence—than we do on such problem-focused outcomes as delinquency, truancy, and substance abuse.<sup>18</sup>

- Due to budget shortfalls at the National Center for Health Statistics (NCHS) and recent changes to birth certificate forms, substantial gaps and delays have emerged in compiling data about teen and out-of-wedlock births, low-birthweight babies, infant mortality, and other critical indicators. Indeed, 5 of the 10 measures used to rank states in the *KIDS COUNT Data Book* rely on these vital statistics data. Budget woes have also led NCHS to decrease the sample sizes for national surveys related to children's health—reducing the accuracy of many measures.<sup>19</sup>

- Finally, despite growing recognition that what a family owns and how much it owes are at least as important as its annual income, data on family

financial assets are virtually uncollected. For example, with the exception of homeownership, the American Community Survey (ACS) doesn't include questions about assets or debts. Although some national surveys do offer information about family assets, they have far smaller sample sizes than the ACS—thereby providing no valid state- or local-level estimates. In sum, we have limited information on the assets, savings, and financial stability of less affluent families.<sup>20</sup>

#### **Government Performance Data**

Although attention to the performance of public systems that serve children and families has intensified in recent years, we still don't routinely collect crucial outcome information from some of our most important (and costly) public programs and services. In addition, we too often assess performance using measures that are incomplete, unclear, or otherwise problematic.

**Unmeasured Outcomes.** In some systems, especially those not subject to meaningful national reporting requirements, performance measurement is highly uneven and often weak. For instance, few state or local juvenile justice systems report (or even collect) data on the educational progress or labor market success of court-involved youth. Likewise, despite substantial federal funding, state children's mental health systems are not measured against any national performance indicators, and few states systematically monitor outcomes of children served by taxpayer-funded mental health providers.

In other systems, performance measurement is robust for some core goals, but lacking for others. In child welfare, for example, state and local agencies are held accountable for performance measures

related to children’s safety and well-being while in care and after their placement into permanent families. Few jurisdictions, however, collect or report data on the academic performance of these children. Likewise, few track the long-term outcomes of youth—college attendance, employment, parenting, or contact with the criminal justice system—after leaving care.

**Problematic Outcome Measures.** Even when human service agencies systematically collect outcome data, they may be of limited or no value if the performance measures employed are not clear and valid—and if they are not comparable against other jurisdictions or against the benchmarks of an agency’s own prior performance.

One of the most glaring examples of this is in education. Under the No Child Left Behind Act, which governs federal support for elementary and secondary education, states develop their own assessment tests and set the “proficiency levels” required to earn a passing score. The result has been wide disparities in the rigor of the state tests that render cross-state comparisons meaningless,<sup>21</sup> since virtually every state’s proficiency levels are set well below those of the federal government’s National Assessment of Educational Progress.<sup>22</sup> Similarly, in juvenile justice, although more and more states now report on the recidivism of youthful offenders released from juvenile corrections facilities, the methodologies employed to calculate recidivism vary widely. Some states measure the percentage of rearrested youth, others the percentage found guilty of a new offense, and still others the percentage of youth who return to correctional custody. Such variables can significantly impact

the calculated recidivism rates, making cross-state comparisons difficult or impossible.

In other systems, performance measures have limited utility because they are not clear or easily understandable. For instance, the Child and Family Service Reviews process, which is used to evaluate state child welfare systems, employs complex, artificially constructed composite measures. One measure aggregates results from five goals related to duration in foster care and the timeliness of adoptions and reunifications. For a state to learn that its composite score is 101.7, versus a federal standard of 106.4, conveys much less meaning to policymakers or child welfare staff than direct performance scores showing that foster children are waiting too long for adoptions, or that too many are being placed into institutional group homes, rather than with foster families.

In some cases, poorly crafted performance measures can be counterproductive. The Child and Family Service Reviews (referenced above) emphasize *how quickly* children are reunified or adopted more than *how many* ever achieve these positive outcomes. Consequently, states where small numbers of children are adopted quickly will rank higher than those where overall adoption rates are higher, but placements take longer to complete.

#### **Problems in Managing, Analyzing, and Using Databases**

The continuing weaknesses in population and performance data described above are disappointing. However, just as important—perhaps even more so—is the failure of public systems to accumulate, maintain, and actually *use* data—even when such valuable information on their clientele, services, and other factors may influence success. Too often, criti-

cal data are not compiled electronically. When they are, this information is frequently inaccurate or unusable by frontline service providers. Sometimes, this occurs because data collection is a low priority for frontline workers, with little or no value in their day-to-day activities with children and families. Other times, it’s a function of outdated software systems that make entering and updating data tedious.

Even when detailed information on participants and programs is compiled and computerized, human service and education agencies will derive little benefit unless they put the data to productive use. Unfortunately, most public agencies have neither the inclination nor capacity to do so. Few states and local jurisdictions rigorously analyze their data to identify key performance indicators or critical success factors—and too few have forged ties with universities or other potential research partners to help analyze the data for them.

One of the most important benefits of strong data is the opportunity to track each child’s progress (or problems) over time—for example, from one level of school to the next, or from one instance of reported abuse to another, or from one delinquency arrest to the next. However, public agencies often lack this crucial capacity. In child welfare, not enough states track cases over multiple years, leaving them unable to capture the full range of experiences and outcomes for all children who pass through the foster care system. Instead, when child welfare agencies report on the average length of time in foster care, or the average time to adoption, they often base their figures on a point-in-time snapshot of children in care on a given date, or the subset of children who have exited care in the previous year—yielding a distorted portrait of their child welfare system’s actual performance.

Likewise, most systems and agencies lack the ability to access important data from multiple sources. As a result, frontline workers (or teachers) in one system typically can't obtain information on the full range of their clients' (and students') needs and circumstances: Child welfare workers don't have children's education data; juvenile justice workers don't have child welfare records, or health records, and so on. Only a handful of jurisdictions nationwide integrate administrative data sets from several systems, even though this is crucial for understanding the complex needs of children and families with multiple issues and those who are involved with two or more systems simultaneously.

Finally, our human service systems tend not to invest in emerging information technologies that have become the norm in other fields. Few public agencies routinely purchase laptops or handheld devices for frontline staff. Few have created data dashboards that allow administrators and frontline workers to track progress on key performance indicators and examine underlying trends. New technologies like these and others have the potential to vastly expand the information available to frontline workers, engage parents in efforts to boost their children's well-being, and accelerate the feedback loop by which workers and supervisors can assess their progress. Sadly, that potential remains largely unrealized.

### Counting What Counts: Essential Building Blocks for Data-Driven Progress

The data deficits described here are daunting, but not insurmountable. The formula for progress begins with two essential steps.

**First, we must compile better and more complete data.** If we are going to take results seriously

in our efforts to safeguard the well-being of children and families, then we must adopt and adhere to far more rigorous standards for the collection and utilization of data. Whether they're *population data* assessing the well-being of children and families, *performance data* measuring the outcomes of programs and systems, or *management databases* aggregating all relevant information about participants and services provided, we must upgrade all of our data collection efforts to meet four cross-cutting tests:

- **Are the data sufficient?** Are we collecting all of the necessary data to fully understand the needs of children and families, clearly assess the effectiveness of our efforts, and support creative problem-solving? Are we generating these data frequently enough and in sufficient detail to inform good policy and practice? And, are there enough data being collected to allow us to measure disparities in outcomes by income level, race, and other socioeconomic indicators?
- **Are the data clear and comparable?** Are we compiling these data using carefully defined and uniform measures that are clear, readily understandable, consistently applied, and comparable across jurisdictions?
- **Are the data accessible and easy to use?** Are the data readily available to all of the relevant audiences—policymakers, managers, supervisors, frontline staff, participants, advocates—both after the fact for evaluation and in real time to support wise decision-making and continuous improvement?
- **Are the data integrated?** Can data from one program or system be integrated with data from other

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sources to assess the full range of circumstances affecting children and families, as well as to identify opportunities for better coordinating services to those with multiple needs?

**Second, we must vastly improve our capacity to analyze and utilize data to improve outcomes for children and families.** Specifically, with federal support, states and localities should strengthen the analytic capacities of public agencies; develop constructive partnerships with universities and other freestanding centers to utilize data and conduct research; and incorporate information technologies that increase the information available to workers at every level.

However, simply combining these elements—better data, stronger data analysis, and greater use of information technology—is still not enough. We must also make a national commitment to counting what counts in our efforts to meet the needs and boost the outcomes of less fortunate children. As the following recommendations detail, this needed data revolution will require action at every level of government, as well as from those outside groups that share a common commitment to improving the lives of vulnerable children.

#### Action Agenda: Intensify Federal Leadership

In the three decades since Ronald Reagan assumed the presidency, promoting a doctrine of “New Federalism,” our nation has seen a significant shift in responsibilities for social programs away from Washington and toward the states. When it comes to data, however, the federal government retains a clear leadership role. Through the census, the American Community Survey, and a host of more

targeted surveys, the federal government is the primary collector of data on the well-being of children and families nationwide. Washington also has the key role of defining and requiring performance accountability and data reporting from state and local human service systems and in bringing experts together to build consensus around uniform data standards and outcome measures. In all of these ways, the federal government plays a crucial role in shaping and subsidizing the development of high-quality data systems in state and local education and human service agencies.

Though federal officials have made progress in recent years toward increasing the availability of high-quality data, several additional steps are urgently needed to help reduce the data deficit. Many of them are now well within our grasp.

#### Better Information on Child and Family Well-Being

The first focus of federal authorities should be to further strengthen the availability of data on the well-being of children and families by ensuring a strong census, updating the poverty measure, expanding what is currently collected on children and families, and shoring up the vital records system.

**Fully Fund, Properly Manage, and Successfully Promote the Census.** Job number one is to ensure a complete count in the 2010 Census, which will be used in allocation formulas to distribute more than \$400 billion annually in federal funding throughout the next decade.<sup>23</sup> This will be especially challenging in 2010 because of difficulties in initial planning and the lack of a census director for many months, following the presidential transition. Housing dislocations caused by the foreclosure crisis and recession,

combined with an ever-increasing immigrant population (many with powerful fears of government), will further complicate census-taking in 2010.

Fortunately, the Obama administration has nominated a highly qualified statistician, Dr. Robert Groves, to head the Census Bureau, and Congress included \$1 billion in additional support for the 2010 Census in the American Recovery and Reinvestment Act of 2009—including \$250 million to support community partnerships and outreach efforts in minority communities. However, more funding may be needed in the Bureau’s 2010 budget to ensure that outreach efforts equal or surpass the intensity levels achieved in 2000, and strong leadership will be required from census administrators to solidify plans and streamline procedures before counting begins next April. Looking to the future, Congress and the president should ensure continuity in census planning by appointing the Bureau’s director to a fixed 5-year term.

**Update the Poverty Measure.** Equally crucial is to update the nation’s obsolete poverty measure. The new poverty measure should account for costs related to work, child care, taxes, and out-of-pocket medical expenses, and it should adjust for regional differences in the cost of living. It must also recognize non-cash benefits, such as earned-income tax credits, food stamps, and housing vouchers provided through federal and state anti-poverty programs. Fortunately, the National Academy of Sciences developed (in the 1990s) an excellent template for just such an improved poverty measure. The Measuring American Poverty Act of 2009, which is expected to be introduced in both the House and Senate this summer, would implement the National Academy of Sciences’ recommendation. In addition,

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Congress should enact legislation shifting responsibility for calculating poverty away from the Office of Management and Budget, where it has long been burdened by political cross-pressures, and place it instead in a non-partisan statistical agency like the Census Bureau, where it can be periodically refined and updated by qualified, non-political experts.

**Increase Data Collection on Child and Family Well-Being.** To fill gaps in information on basic well-being available to state and local policymakers, the federal government should initiate annual collection of detailed state-level data on aspects of children’s general condition and development, including mental health, socio-emotional development, peer influences, and neighborhood effects. The survey should pay special attention to children from infancy through age 10, as well as out-of-school adolescents, about whom we currently have inadequate information. For less than \$20 million per year, this survey could expand upon the existing National Survey of Children’s Health, which is administered every 4 years. Legislation has been introduced in the Senate, The State Child Well-Being Research Act of 2009 (S. 1151), and a companion bill has been introduced in the House (H.R. 2558) that would expand the current survey into a National Survey of Children’s Health and Well-Being to collect data annually on how children are faring, state by state. The proposals have strong, bipartisan support, and we anticipate that they will be adopted. Likewise, increasing the sample size of each year’s American Community Survey—for a relatively modest investment—would significantly enhance the accuracy of data available to policymakers and planners working in high-poverty urban neighborhoods and rural communities.

**Address Problems in the Vital Records System.** As noted earlier, budget cuts and problems associated with new reporting requirements have seriously undermined the integrity and timeliness of vital records data—a crucial source of information on infant mortality, prenatal health, low-birthweight babies, and other key indicators. To solve these problems, Congress should make a one-time appropriation of \$30 million to help states complete the transition to the new vital records forms and then provide \$8 million to \$10 million in additional annual funding to support this essential data stream.

**Stronger Leadership on Program Data Collection and Outcome Measurement**

Over the next 2 years, the pending reauthorization of several major programs serving children and families—including the Juvenile Justice and Delinquency Prevention Act, Temporary Assistance for Needy Families, the No Child Left Behind Act, and the Workforce Investment Act—provide important opportunities to strengthen data collection and utilization. So, too, do the new child welfare regulations that must be promulgated soon for implementation of the Fostering Connections to Success and Increasing Adoptions Act, which was signed into law in 2008.

Congress and the Obama administration should use these opportunities to address disappointing and persistent data limitations by developing or refining performance indicators and data collection/reporting requirements for public systems. Care must be taken to ensure that the data we collect accurately reflect these systems’ most important goals and that they capture the full range of program-related information needed to conduct meaningful research and support improved decision-making.

In **child welfare**, for instance, new regulations should correct flaws in the Child and Family Service Reviews process by requiring states to track and report data for all children who enter the foster care system in a given year, rather than just those who are in care at the end of the year. Also, new regulations should replace hard-to-understand composite scores with simple, easy-to-comprehend measures directly tied to child outcomes. Furthermore, they should ensure that scores reflect actual changes in system performance, rather than shifts in the population served. To shed light on racial disparities in these systems, states should be required to disaggregate key data by race and ethnicity. Finally, Congress should provide funding for states to implement recently released (but long-delayed) regulations requiring states to report services to and long-term outcomes for youth aging out of foster care.

In **K–12 education**, the No Child Left Behind Act (NCLB) should be amended to promote adoption of meaningful, consistent academic proficiency standards in every state, as well as new standards for student attendance. NCLB should also require states to correct the common flaws and disparities in calculating graduation rates. There is also growing consensus that the definition of “adequate yearly progress” in schools should include not only the percentage of students achieving a passing rate on state assessment tests, but also a measurement of “value added” or “continuous progress” that captures students’ year-to-year improvement. Finally, given the compelling research showing how profoundly early reading affects future academic success, NCLB should be amended to add a new national goal on 3rd grade reading proficiency, the time when children make the crucial transition from “learning to read” to “reading to learn.”

In **juvenile justice**, the federal Office of Juvenile Justice and Delinquency Prevention should convene experts from across the country to develop a common set of performance measures, beginning with a uniform definition of recidivism for youth released from juvenile corrections facilities. Over time, common performance measures should be developed for community safety (helping all court-involved youth to avoid re-offending), and meaningful guidelines (with strict monitoring) should also be established for the safety and conditions of confinement for youth in custody.

In seeking to improve the quality and utilization of data in these and other systems, federal authorities should capitalize on their unique capacity to convene experts and to finance database development and research. They should play a catalytic role in forging consensus on high-priority performance indicators and crucial data collection needs. On issues of utmost importance, and for systems into which the federal government provides robust financial support, federal authorities should impose rules requiring stronger data collection and reporting, and they should insist that states employ common measures that allow for meaningful analysis and cross-state comparisons.

### Action Agenda: A Data Awakening in State and Local Systems

Ultimately, the job of compiling the needed program and performance data will fall to state and local agencies responsible for educating, protecting, treating, training, employing, and counseling vulnerable children and their families. If we hope to realize the full benefits of the data revolution for children and families, as well as taxpayers, these

systems—child welfare, public education, juvenile justice, welfare, job training, mental health—must acquire the tools and master the techniques of data-driven decision-making.

As we have observed, most systems still have a long road to travel. To complete the journey, the dedicated professionals who staff and supervise these agencies will need to fundamentally overhaul their approach. For decades, data collection has been widely viewed within these systems as an activity to satisfy reporting requirements. Data’s primary (or only) purpose has been to justify budgets, quantify processes, or measure work effort. For most direct service providers working with children and families on the front lines, data compilation has largely remained a burden, an extra chore, with little immediate value for improving the lives of their clients, students, patients, or wards.

What’s needed today, as the business sector learned a decade ago, is an awakening to the value of data. This will require a new commitment and capacity to make data a useful tool—not only for administrators, elected officials, the media, and other watchdogs, but also for workers up and down these organizations. While the need for this data awakening has gained adherents in many systems, real change remains slow. To accelerate the shift, state and local agencies must move aggressively to improve performance measurement, strengthen administrative databases, improve data analysis, promote data-driven practice improvements, and expand use of new information technologies.

### Improve Performance Measurement

Strong outcome measurement can focus an agency’s work and stimulate an ongoing stream of practice

**States and local jurisdictions must also build their capacity to integrate data sets and track the circumstances of youth involved in multiple systems. One option is to create virtual “data warehouses” with access to records from multiple state systems, as well as census, vital records, and other data streams.**

improvements, leading to better results. However, those benefits will accrue only when leaders define outcome measures that are clear, comparable to other jurisdictions, easy to understand, readily collectible, and crafted to avoid the all-too-real danger of creating counterproductive incentives. One state that is improving their odds of success by creating performance measures that accurately capture progress toward key goals is Utah.

In response to a class action suit over substandard care in the 1990s, Utah’s child welfare agency initiated a process of Quality Case Reviews to assess both the status of children and families served by the agency and caseworkers’ adherence to a new family-centered practice model. Every year, in each of the state’s six regions, state child welfare officials and professionals working in related fields review two dozen or more cases. Reviewers score each case against child and family status indicators, such as safety, stability, and physical and emotional health, and on case workers’ adherence to 11 core principles of the practice model. Since the first round of reviews in 2000, scores have improved dramatically. The share of Utah caseworkers achieving an acceptable rating for following the practice model rose from 42 percent in 2000 to 90 percent and 89 percent, respectively, over the past 2 years. Utah has also seen corresponding improvements in the status of children and families.<sup>24</sup>

#### **Strengthen Administrative Databases**

As we have noted, public systems cannot realize the full benefits of the information revolution until they build and maintain effective databases. Specifically, they must develop data systems with the capacity to track cases longitudinally, integrate with other data sets, and answer crucial questions of policy and practice.

Public education agencies should follow the lead of 6 states—Alabama, Arkansas, Delaware, Florida, Louisiana, and Utah—whose data systems possess all 10 elements considered essential for effective educational planning by the Data Quality Campaign. This national collaborative effort supports state policymakers to improve the availability and use of high-quality education data to boost student achievement.<sup>25</sup> Many states, however, still face considerable work bringing their educational data systems up to speed. For example, 8 states (and the District of Columbia) continue to lack the capacity to reliably calculate graduation rates.<sup>26</sup>

Child welfare agencies have several options to upgrade their data capabilities. They can contract with university-based researchers like the University of California’s Center for Social Services Research, which maintains a sophisticated longitudinal data system that provides detailed quarterly reports to child welfare authorities in every California county. They can also build data capacities internally or, as 23 states have, they can participate in the Chapin Hall Center for Children’s Multistate Foster Care Data Archive, which also tracks data longitudinally and conducts wide-ranging data analyses.

States and local jurisdictions must also build their capacity to integrate data sets and track the circumstances of youth involved in multiple systems. One option is to create virtual “data warehouses” with access to records from multiple state systems, as well as census, vital records, and other data streams. For instance, Florida has one data warehouse that combines pre-kindergarten through university-level education information and another that ties together a host of data sets related to employment and earnings. These two data warehouses can be linked and

connected to administrative data from other state systems.<sup>27</sup> South Carolina has used its extensive data warehouse to examine special health care needs facing children statewide, identify communities with large numbers of uninsured children, and profile the population of infants and toddlers at highest risk for school failure.<sup>28</sup>

### Improve Data Analysis

Some human service agencies have grown adept at compiling lots of data and generating required reports, but most remain weak in analyzing information and putting it to productive use. They have become data rich, but remain knowledge poor. Developing the capacity to analyze data effectively—identify key indicators, isolate critical success factors, or uncover the hidden dynamics underlying significant trends—is a pressing challenge throughout the field.

As some states have seen, meeting that challenge can yield important rewards. In 2007, Virginia invited the Casey Strategic Consulting Group to study its child welfare system and identify opportunities to improve permanency outcomes. The resulting analysis revealed that nearly a quarter of Virginia's foster children were living in group placements, well above the national average, while the share of children living in foster homes was dwindling rapidly due to low rates paid to foster parents and a lack of financial incentives for counties to place children with families. Meanwhile, the share of foster children achieving permanence was far below the national average. These findings helped galvanize Virginia officials, and in 2008, the state's legislature passed a reform bill creating a new funding formula that reimburses counties at a higher rate for placements into foster families than for placements into congregate care.

Like a number of other cities, Chicago has revolutionized its dropout prevention efforts in recent years by employing data to develop early warning indicators that pinpoint the common pathways leading to school failure—particularly academic problems and absenteeism in 9th grade—and to identify students at extreme risk of dropping out. More than 80 percent of Chicago students who are on track at the end of 9th grade graduate within 4 years, compared to just 22 percent of students not on track.<sup>29</sup> Chicago has begun providing detailed spreadsheets for every public high school, showing grades, attendance, and other data about all incoming 9th graders, including a watch list of students at risk of failure. Summer enrichment classes are offered to incoming 9th graders, a range of credit-recovery courses are provided during the school year, and attendance intervention efforts assist students with a history of unexcused absences.<sup>30</sup> These actions are yielding promising results. Unlike many other big city school districts, Chicago has seen a steady rise in graduation rates in recent years.<sup>31</sup>

Racial disparities are another important focus for data analysis. In virtually all of our public systems, outcomes diverge for children and families of different races, with African Americans most often experiencing less favorable outcomes. Disaggregating outcomes by race at each decision point offers a valuable tool for determining the factors underlying these disparities and sparking the development of new strategies to reduce racial disparities.

### Promote Data-Driven Practice Improvements

Ultimately, the most important opportunities for program improvement will be realized when data become integral to the everyday work of frontline

staff. Although that remains far from the norm in most agencies today, some pioneering jurisdictions are increasingly putting data to use on the front line.

For example, as part of the Casey Foundation's Juvenile Detention Alternatives Initiative, juvenile justice leaders in Oregon's Multnomah County have long utilized a daily population report, summarizing the case details of each young person held in the detention center. The report enables staff to determine which youth may be appropriate for alternative supervision and ensure that youth do not languish unnecessarily in detention. More recently, Multnomah officials have developed a daily "Caseload Quick Facts" data printout, detailing whether each young person under probation supervision is on track for achieving key objectives in terms of school enrollment, contact with probation officers, and restitution activities. These reports help frontline staff organize their workloads, allow supervisors to monitor how well individual workers are meeting performance goals, and help administrators assess the effectiveness of the entire agency.

In California, the San Diego County Office of Education developed an Internet-based information system to track the educational progress of foster children enrolled in public schools. The service, known as the Foster Youth—Student Information System, stores detailed records on foster children's placement history, health, educational progress, and delinquency history. It can be accessed anytime by authorized users in the schools, child welfare system, and juvenile court, as well as by children's attorneys and foster families—though some information is restricted to protect privacy. The Web-based system has made it far easier for schools and child welfare staff to streamline new

school placements for foster children, offer needed support services, and ensure that credits from previous schools are transferred correctly.<sup>32</sup>

### **Expand Use of New Information Technologies**

New information technologies have become ubiquitous in the business world—BlackBerrys, laptops, and tablet PCs. Despite their obvious potential for the human services field, little has changed technologically for many or most frontline workers in recent years. Beyond the use of e-mail, few agencies have even begun to explore opportunities created by the Internet to disseminate information, network, and boost productivity. Closing this gap is critical—especially considering the positive results already being reaped by innovative agencies that have taken advantage of new technology.

- “Family Finding” is a program model that uses the search capabilities of the Internet to locate and engage relatives of longtime foster children—producing powerful results not just in identifying relatives, but also in nurturing strong relationships that lead to permanent family connections. In Tacoma, Washington, social workers found one or more relatives for all but 1 of 500 children. By engaging family members, developing case plans, and providing needed support, Tacoma social workers helped 85 percent of these children to reunify with their parents or move in with other relatives.<sup>33</sup>

- Since 2007, Oklahoma’s child welfare agency has distributed more than 3,000 tablet PCs to frontline child welfare workers. By recognizing and automatically entering workers’ handwritten notes into case files, the tablet technology eliminates the need for

workers to retype notes taken in meetings with children, families, and others in the community. The tablets are also Web-enabled, allowing workers to check their e-mail and work from any remote location.<sup>34</sup> Similarly, West Virginia’s child welfare agency has procured “digital pens” for its workers to automatically input handwritten notes into the state’s automated database.<sup>35</sup>

Beyond these isolated innovations, the human services field has the opportunity to transform practice more fundamentally by using new platforms that combine several modern information tools. Currently, the Annie E. Casey Foundation is developing such a platform—tentatively called Casebook—for use in child welfare. Like a social networking website, Casebook will be built around individualized online profiles that can be accessed only by authorized users. Each Casebook profile will encompass the entire family of any child involved in the child welfare system. Casebook will automatically create and update the case files for every family by linking electronically to the administrative data systems of multiple child service agencies—schools, foster care agencies, Medicaid, TANF, and others. Communicating online through Casebook, staff from these agencies will be able to discuss any case, and details from their conversations will be entered into the file to inform every authorized person working on the case. Casebook will issue alarms when any aspect of a case becomes problematic, and it will generate reminders to prompt needed action.

Finally, the Casebook system will employ digital dashboards, allowing supervisors and other staff to track progress on such key performance indicators as rapid responses to abuse reports, placement

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stability, and timely reunification. From these digital dashboards, users will be able to further explore the data to identify the factors that might influence success or failure on any of the indicators tracked. This Casebook approach represents a significant Foundation investment that is also designed to facilitate our commitment to securing permanence for the most challenged children and youth in the child welfare system. It will be beta tested later this year by Casey Family Services, the Foundation's direct services agency that has divisions in Connecticut, Maine, Maryland, Massachusetts, New Hampshire, Rhode Island, and Vermont.

### Action Agenda: Engage Children's Advocates and Other Concerned Leaders

Most of the responsibility for collecting and using data falls to state and local service agencies, or to the federal government. There is also a crucial role for others with a stake in the well-being of vulnerable kids and families, including state and local elected officials, scholars, civic and religious leaders, foundation staff, and other children's advocates. By engaging in data-driven advocacy, identifying critical benchmarks, and using community mapping techniques, child advocates can build awareness and mobilize action to improve the lives of children and families.

**Data-Driven Advocacy.** As state-level KIDS COUNT grantees have been doing for years, advocates can mount data-driven advocacy campaigns to bring ignored data to public attention and to press for timely and commensurate responses. For instance, Kentucky Youth Advocates produced a report in 2003 trumpeting previously published, but little noticed, data showing that half of Ken-

tucky's 2- to 4-year-olds had untreated cavities and that two-thirds of children covered by government-funded health insurance were not receiving any dental care.<sup>36</sup> The report revealed that many areas in Kentucky had too few dentists, especially pediatric dentists, and that fewer than half of the dentists in the state participated in the Medicaid program. In response to the report, plus a follow-up publication in 2005, Kentucky's legislature approved a 30 percent increase in reimbursement rates for dentists serving low-income patients in 2006, and it expanded benefits to include two cleanings per year instead of one. In 2008, Kentucky's legislature began requiring dental screenings or exams for every child enrolling in public schools.<sup>37</sup>

**Leadership in Identifying Benchmarks.** On important emerging issues where no public system is well positioned to respond, advocates and scholars can provide leadership by documenting the problems and identifying benchmarks to monitor progress. Historically, the government has paid little attention to asset poverty. Nonprofit policy research organizations and university scholars reached a consensus on the importance of financial assets in the economic success of families and the well-being of children. The U.S. Department of Health and Human Services now funds a series of studies on this issue by researchers at the Urban Institute, New America Foundation, and the Center for Social Development at Washington University.<sup>38</sup>

In workforce development, where services are offered by myriad providers funded through multiple systems without any common performance indicators, the policy research firm Public/Private Ventures (P/PV) has developed benchmarks that can be applied to any training or employment

program. As of last year, P/PV was collecting and analyzing data from 129 organizations. By 2012, it plans to have 1,000 organizations submitting data and participating in a "learning community," where they will analyze their results, compare themselves with like organizations, and use the data to improve services and boost success.<sup>39</sup>

**Data-Focused Campaigns to Build Awareness and Mobilize Action.** Children's advocates can also employ data to raise public awareness of trends affecting children's well-being and then set goals and mobilize public opinion to address crucial needs and improve outcomes. As of 2008, 24 states had established permanent children's cabinets (or similar committees) to track and respond to the emerging needs of children. Typically comprising state agency heads, legislators, and community leaders, these bodies aim to coordinate strategies and programs, develop common goals, and set priorities for state efforts on behalf of children.<sup>40</sup> Often, they produce high-profile reports that track progress on key indicators of child and family well-being. Likewise, many communities now publish report cards—developed by local government or civic organizations—that educate residents about the needs of children and families, while garnering support for concerted action.

**Neighborhood Indicators and Community Mapping.** To capitalize on the growing wealth of local-area data on child and family well-being, many cities are mobilizing "neighborhood indicators projects" to clarify challenges and identify opportunities to improve results for children and families at the neighborhood, city, and county levels.

In Indianapolis, the Polis Center at Indiana-Purdue University examined childhood obesity

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in local neighborhoods using data on income, the prevalence of parks and recreation programs, crime rates, and other variables. The study found that children in neighborhoods with very low average incomes were far more likely than other children to be obese, and it led to a community-wide planning process to address the obesity problem.<sup>41</sup>

Likewise, the Greater New Orleans Data Center played a key role in planning recovery efforts following Hurricane Katrina. The Data Center has created detailed maps showing where child care programs are operating, how many residents have returned to city neighborhoods, and how much money will be required to repair storm damage in different wards in the city and in surrounding parishes.<sup>42</sup> A number of communities also employ community mapping to meet the challenge of reintegrating ex-offenders returning home from prison.

### Conclusion

In the 20 years since the Casey Foundation launched our annual, state-by-state collection of indicators and rankings on child well-being, the nation has indeed made important progress in efforts to gather, analyze, share, and utilize data to promote improved prospects for vulnerable children and families. We have seen an encouraging groundswell of support and actions that reinforce our core conviction that data-driven decision-making is critical to achieving real and lasting results for kids. Enabling and enhancing America's ability to count what counts is key to improving accountability for the programs and policies designed to work on their behalf.

However, the advances made at the federal, state, and community levels to effectively collect and use data to address challenges and create

meaningful opportunities continue to fall far short of what is possible, what is needed, and what is demanded by the current technology environment. Systems and organizations charged with helping disadvantaged families and communities succeed must capitalize on new opportunities afforded by today's information revolution to bolster their efforts to measure and improve outcomes.

This imperative comes at a time when our economy may seem least able to take on potentially costly reforms needed to build the technology infrastructure and human capacity required to achieve this goal. Despite budget shortfalls, now is the wrong time to scale back investments that will yield a long-range and long-lasting payoff in reduced waste and improved efficiency. In fact, it is more critical now than ever to have accurate data that show how American families are faring in the current economic downturn and have systems that are equipped to use this information to improve the well-being of those children and families most in need.

As we've shared in this essay, many promising efforts have already been demonstrated, and worthy proposals have been introduced that advance the merits of measuring progress and mastering the use of new technologies to sustain it. But there is still much work to be done. The Annie E. Casey Foundation plans to continue our commitment to data-based accountability by investing in the improvement and use of data by systems that serve vulnerable children. We call upon our partners and our leaders at all levels to do the same.

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**The Annie E. Casey Foundation**

1. O'Hare, W., December 2008, "Measuring the Impact of Child Indicators," *Child Indicators Research*, Vol. 1, No. 4, pp. 387–396.
2. Ibid.
3. Ibid.
4. Federal Interagency Forum on Child and Family Statistics, 2008, *America's Children in Brief: Key National Indicators of Well-Being, 2008*, available at [www.childstats.gov/pdf/ac2008/ac\\_08.pdf](http://www.childstats.gov/pdf/ac2008/ac_08.pdf) (accessed 5/6/09).
5. Amarasingham, R., et al., 2009, "Clinical Information Technologies and Inpatient Outcomes: A Multiple Hospital Study," *Archives of Internal Medicine*, Vol. 169, No. 2, pp. 108–114.
6. Lewis, M., 2003, "Moneyball: The Art of Winning an Unfair Game," W.W. Norton & Co., New York, NY.
7. Rhode Island KIDS COUNT, February 1997, "Childhood Lead Poisoning," *Issue Brief No. 3*, available at [www.rikidscount.org/matriarch/documents/IssueBrief\\_3.pdf](http://www.rikidscount.org/matriarch/documents/IssueBrief_3.pdf) (accessed 5/18/09).
8. Ibid.
9. Rhode Island KIDS COUNT, February 2003, "Childhood Lead Poisoning," *Issue Brief No. 16*, available at [www.rikidscount.org/matriarch/documents/Lead%20Issue%20Brief.pdf](http://www.rikidscount.org/matriarch/documents/Lead%20Issue%20Brief.pdf) (accessed 5/18/09).
10. Rhode Island KIDS COUNT, April 2009, *2009 Rhode Island KIDS COUNT Factbook*, available at [www.rikidscount.org/matriarch/documents/2009\\_Rhode\\_Island\\_KIDS\\_COUNT\\_Factbook\\_Website\\_Version.pdf](http://www.rikidscount.org/matriarch/documents/2009_Rhode_Island_KIDS_COUNT_Factbook_Website_Version.pdf) (accessed 5/18/09).
11. Hoytt, E.H., Schiraldi, V., Smith, B.V., & Zeidenberg, J., 2002, "Reducing Racial Disparities in Juvenile Detention," *Pathways to Juvenile Detention Reform*, Vol. 8, Annie E. Casey Foundation, available at [www.aecf.org/upload/publicationfiles/reducing%20racial%20disparities.pdf](http://www.aecf.org/upload/publicationfiles/reducing%20racial%20disparities.pdf) (accessed 5/11/09).
12. Brooks-Gunn, J. & Duncan, G.J., Summer/Fall 1997, "The Effects of Poverty on Children," *The Future of Children*, available at [www.futureofchildren.org/pubs-info2825/pubs-info\\_show.htm?doc\\_id=72141](http://www.futureofchildren.org/pubs-info2825/pubs-info_show.htm?doc_id=72141) (accessed 5/11/09).
13. For an excellent review of problems with the current poverty measure, see Blank, R.M. & Greenberg, M.H., December 2008, "Improving the Measurement of Poverty," *Discussion Paper 2008-17*, The Hamilton Project, available at [www.brookings.edu/~media/Files/rc/papers/2008/12\\_poverty\\_measurement\\_blank/12\\_poverty\\_measurement\\_blank.pdf](http://www.brookings.edu/~media/Files/rc/papers/2008/12_poverty_measurement_blank/12_poverty_measurement_blank.pdf) (accessed 5/18/09).
14. Harrison, R., September 23, 2008, "Reducing the Undercount in the 2010 Census," Testimony before the Subcommittee on Federal Financial Management, Government Information, Federal Services, and International Security, Committee on Homeland Security and Governmental Affairs, U.S. Senate.
15. Ibid.
16. The Census Project, March 4, 2009, *Federal Domestic Assistance Allocated on the Basis of Statistics Based on the Decennial Census, U.S. and States, FY2007*, available at [www.thecensusproject.org/factsheets/brookings-factsheet-federaldomesticassistance.pdf](http://www.thecensusproject.org/factsheets/brookings-factsheet-federaldomesticassistance.pdf).
17. Government Accountability Office, March 5, 2008, *2010 Census: Automation Problems and Uncertain Costs and Plans May Jeopardize the Success of the Decennial and Warrant Immediate Attention*, available at [www.gao.gov/highlights/d08550thigh2\\_1.pdf](http://www.gao.gov/highlights/d08550thigh2_1.pdf) (accessed 5/11/09).
18. For more information on these problems, see Brown, B. & Moore, K.A., January 2009, *What Gets Measured Gets Done: High-Priority Opportunities to Improve Our Nation's Capacity to Monitor Child and Youth Well-Being*, Child Trends, available at [www.childtrends.org/Files//Child\\_Trends-2009\\_02\\_10\\_FR\\_WPaperChildWBeing.pdf](http://www.childtrends.org/Files//Child_Trends-2009_02_10_FR_WPaperChildWBeing.pdf) (accessed 5/18/09).
19. Ibid.
20. Ratcliffe, C., Chen, H., et al., September 2007, *Assessing Asset Data on Low-Income Households: Current Availability and Options for Improvement*, The Urban Institute and Center for Social Development, available at <http://aspe.hhs.gov/hsp/07/PoorFinances/data/report.pdf> (accessed 5/18/09).
21. Cronin, J., Dahlin, M., Xiang, Y., & McCahon, D., February 19, 2009, *The Accountability Illusion*, Thomas B. Fordham Institute and Kingsbury Center at Northwest Evaluation Association, available at [http://edexcellence.net/accountability\\_illusion/Executive%20Summary.pdf](http://edexcellence.net/accountability_illusion/Executive%20Summary.pdf) (accessed 5/11/09).
22. Hull, J., June 17, 2008, *At a Glance: The Proficiency Debate*, Center for Public Education, available at [www.centerforpubliceducation.org/site/c.kjJXJ5MP1wE/b.4177975/k.35A6/At\\_a\\_glance\\_The\\_proficiency\\_debate.htm](http://www.centerforpubliceducation.org/site/c.kjJXJ5MP1wE/b.4177975/k.35A6/At_a_glance_The_proficiency_debate.htm) (accessed 5/11/09).
23. Reamer, A., February 17, 2009, *Tempest Over the Census*, Brookings Institution, online commentary, available at [www.brookings.edu/opinions/2009/0217\\_census\\_reamer.aspx](http://www.brookings.edu/opinions/2009/0217_census_reamer.aspx) (accessed 5/18/09).
24. Office of Services Review, Utah Department of Human Services, August 2008, *Fiscal Year 2008: A System Review of the Division of Child and Family Services*, available at [www.hsosr.utah.gov/pdf/FY2008OSRAnnualReport.pdf](http://www.hsosr.utah.gov/pdf/FY2008OSRAnnualReport.pdf) (accessed 5/18/09).
25. Data Quality Campaign, 2008 State Survey, results available at [www.dataqualitycampaign.org/survey](http://www.dataqualitycampaign.org/survey) (accessed 5/18/09).
26. Data Quality Campaign, available at [www.dataqualitycampaign.org/survey/compare/elements](http://www.dataqualitycampaign.org/survey/compare/elements) (accessed 5/18/09).
27. Florida data warehouses are described in Kugle, C. & Smith, N., August 2006, *Florida Case Study: Building a Student-Level Longitudinal Data System*, Data Quality Campaign, available at <http://3d2know.cosn.org/2006FloridaSiteVisit.pdf> (accessed 5/18/09).
28. Bailey, W.P., September 2003, *Integrated State Data Systems*, Agency for Healthcare Research and Quality, U.S. Department of Health and Human Services, available at [www.ahrq.gov/data/safetynet/bailey.htm](http://www.ahrq.gov/data/safetynet/bailey.htm) (accessed 5/18/09).
29. Allensworth, E. & Easton, J.Q., July 2007, *What Matters for Staying on Track and Graduating in Chicago Public High Schools*, INPUI, available at [www.input.com/blogs/public/index.cfm/2008/6/13/Increasing-Worker-Productivity-with-Innovative-Technology](http://www.input.com/blogs/public/index.cfm/2008/6/13/Increasing-Worker-Productivity-with-Innovative-Technology) (accessed 5/6/09).
30. Gewertz, C., March 11, 2009, "9th Grade, By the Numbers," *Education Week*.
31. According to the Chicago Public Schools Office of Research, Evaluation, and Accountability, the city's 5-year graduation rate has improved in each of the past 5 years, climbing from 47.0 percent in 2002 to 55.1 percent in 2007. Data available at <http://research.cps.k12.il.us/cps/accountweb/Reports/citywide.html> (accessed 5/6/09).
32. Smith, S., Staub, D., Myslewicz, M., & Laird, E., October 2007, *Linking Education and Social Services Data to Improve Child Welfare*, Data Quality Campaign, available at [www.dataqualitycampaign.org/files/meetings-dqc\\_quarterly\\_issue\\_brief\\_091807.pdf](http://www.dataqualitycampaign.org/files/meetings-dqc_quarterly_issue_brief_091807.pdf) (accessed 5/18/09), and Legal Center for Foster Care & Education, 2008, *Solving the Data Puzzle: A How-To Guide on Collecting and Sharing Information to Improve Educational Outcomes for Children in Out-of-Home Care*, available at [www.abanet.org/child/education/publications/solvingthedatapuzzle.pdf](http://www.abanet.org/child/education/publications/solvingthedatapuzzle.pdf) (accessed 5/18/09).
33. Shirk, M., February 2006, "Hunting for Grandma: 'Family Finding' Strategy Connects Foster Kids With Relatives and Permanent Homes," *Youth Today*, available at [www.ussearch.com/others/consumer/reunion/youthtoday.html](http://www.ussearch.com/others/consumer/reunion/youthtoday.html).
34. Shakibai, S., June 13, 2008, "Increasing Worker Productivity With Innovative Technology," *INPUI*, available at [www.input.com/blogs/public/index.cfm/2008/6/13/Increasing-Worker-Productivity-with-Innovative-Technology](http://www.input.com/blogs/public/index.cfm/2008/6/13/Increasing-Worker-Productivity-with-Innovative-Technology) (accessed 5/18/09).
35. Ibid.
36. Kentucky Youth Advocates, December 2003, *Open Wide or Lock Jaw? Children's Dental Health Access in Kentucky*, available at [www.kyouth.org/Publications/documents/03pub\\_DentalAccessBrief.pdf](http://www.kyouth.org/Publications/documents/03pub_DentalAccessBrief.pdf) (accessed 5/6/09).
37. Kentucky Youth Advocates, 2008, *2008 Kentucky KIDS COUNT County Data Book*, available at [www.kyouth.org/documents/08pub\\_CountyDataBook.pdf](http://www.kyouth.org/documents/08pub_CountyDataBook.pdf) (accessed 5/6/09).
38. McKernan, S.-M. & Sheraden, M., September 2007, *Poor Finances: Assets and Low-Income Households*, The Urban Institute, available at <http://aspe.hhs.gov/hsp/07/PoorFinances/> (accessed 5/18/09).
39. Miles, M.A., July 2006, *Good Stories Aren't Enough: Becoming Outcomes-Driven in Workforce Development*, Public/Private Ventures, available at [www.ppv.org/ppv/publications/assets/203\\_publication.pdf](http://www.ppv.org/ppv/publications/assets/203_publication.pdf) (accessed 5/18/09).
40. Pittman, K., Gaines, E., & Faigley, I., December 2007, *State Children's Cabinets and Councils: Getting Results for Children and Youth*, The Forum for Youth Investment, available at [www.forumfyi.org/files/Getting%20Results%20Final.pdf](http://www.forumfyi.org/files/Getting%20Results%20Final.pdf) (accessed 5/18/09).
41. Guernsey, E.H. & Pettit, K.L.S., December 2007, *NNIP Data Inventory 2007: A Picture of Local Data Collection Across the Country*, National Neighborhood Indicators Partnership and The Urban Institute, available at [www2.urban.org/nnip/Inventory/Data\\_Inventory\\_Final\\_Report.pdf](http://www2.urban.org/nnip/Inventory/Data_Inventory_Final_Report.pdf) (accessed 5/18/09).
42. Ibid.