



Geek Cities

How Smarter Use of Data and Evidence Can Improve Lives

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Forewords

Geek Cities Get the Job Done

Michele Jolin, Managing Partner, Results for America

Today, geeks are driving our nation's competitiveness and the dynamism of the global economy, creating new solutions and technologies, and using their combination of creativity and focus on hard data to transform society. Geeks have moved out of the back rooms of research departments and laboratories to be recognized as the innovators and trendsetters they are. Increasingly, they are the ones holding corner offices, seizing new opportunities to innovate and connect, to create solutions and get results. That's why *The Economist* magazine notes that "no serious organization can prosper without them." Geeks have evolved, and they are transforming our world.

So too our nation's cities are evolving. A data and results revolution is taking place in local governments across the country. This *Geek Cities* report highlights for us the extent to which city governments have become the incubators of innovation and the drivers of results in America. These cities are leading the way by investing in building evidence, using data, and monitoring performance. They are comparing the level of evidence behind different programs, setting priorities, and allocating funding based on that evidence. They are breaking down silos and experimenting and inventing their way out of problems. By relying on hard data and evidence to drive funding decisions and set priorities, these trailblazing cities are improving outcomes, delivering results to their citizens, and proving that geek cities can get the job done.

This report offers critical rays of hope about the potential for all levels of government to get things done in America. While the headlines, especially from Washington, are often about gridlock and hyperpartisanship, these geek cities are demonstrating that real progress is possible if decisions are made using what we know about what works in communities.

At [Results for America](#), our goal is to improve outcomes for young people, their families, and their communities by channeling public resources to solutions that use data and evidence to get better results. This *Geek Cities* report illustrates how innovative city leaders and their community and philanthropic partners are doing just that.

Why do these urban leaders care so much about data and evidence? Because they know that good intentions and conventional wisdom are not enough: that getting results in education, infant mortality, jobs, and other areas depends on figuring out what is working and what isn't, and then acting on that knowledge. Investing in what works can involve some very tough choices—and indeed some of these cities are demonstrating how government can use what it learns from

the data to defund programs that fail to achieve results. Just take a look at how these city leaders are advancing reforms:

- Baltimore completely upended its budgeting process to implement one that is outcomes-driven and focused on hard data. For instance, it is shifting resources towards evidence-based interventions to eliminate infant mortality.
- Denver embraced a data-driven approach to tracking and continuously improving its schools. And it is investing in an in-house “academy” to teach city employees how to innovate, measure performance, and continuously track their data and improve results.
- Miami revamped its education system by honing in on school performance data and regularly tracking that data on each child.
- New York City chose to invest in data—trying out new methods of serving critical populations, but carefully tracking the success rates of each method. New York then made the tough decisions to shift dollars away from programs that—according to evidence and data—were failing to get results, and towards programs with evidence of success.
- Providence brought together community leaders across the board for an evidence-driven, community-wide approach to helping children. Providence is also democratizing the data, making it accessible to the public.
- San Antonio used evidence to set city priorities and determine how best to invest limited public dollars in a way that would make the most difference for children and open up lifelong opportunities.

These geek cities are doing what we believe all cities should do: evaluate programs in order to understand what’s working and what’s not, and allocate precious funds to programs and practices that have the strongest evidence of positive, significant, and relevant impact.

And, the geek cities highlighted are doing what we believe the federal and state governments should be doing as well. While both President Bush and President Obama took critical steps to get the federal government to focus on performance and use evidence to make decisions—and Republican and Democratic governors across the country are beginning to make this a priority—more needs to be done. This will require a monumental shift in the *status quo*. The vast majority of policy-makers do not use rigorous evidence or credible, relevant data in making policy and funding decisions. Government dollars largely flow to those who have gotten funding in the past, regardless of impact.

But, these geek cities show that this shift is possible. In a time of tight government budgets at all levels, the examples of innovation and progress illustrated in this report can help move us beyond a sole focus on funding levels to a focus on how to get better results with existing resources. These cities have found creative and effective ways to use data and evidence to steer public dollars to address needs in their communities and get better results.

We Need More “Geek Cities”

Mayor Julián Castro, San Antonio, Texas

In May 2011, I assembled a committee of local business and education leaders—we called it the Brainpower Taskforce—to examine whether a targeted, significant financial investment could fundamentally improve San Antonio’s educational trajectory and help us build a globally competitive workforce that is prepared to take on the jobs of the 21st century. After more than a year of studying best practices and evidence-based outcomes in other American cities, the taskforce recommended that we focus on high-quality pre-kindergarten for four-year-olds. Voters approved a 1/8-cent sales tax increase to help fund the effort, and in late August I had the privilege of greeting parents and kids outside one of our new [Pre-K 4 SA](#) education centers on the first day of school.

The kids I saw that rainy but hopeful morning told me they were ready to learn. We in San Antonio are ready to help them learn. We have picked only the pre-K curricula with the best evidence for successful outcomes, and we’ll closely monitor results along the way. We’ll use what we find out from that data to bolster what works and discontinue any programs that aren’t measuring up.

I’m proud that Pre-K 4 SA is one of the innovative programs featured in this report because the evidence is clear: brainpower is the new currency of success in the 21st century global economy. The cities that cultivate it will thrive. The ones that don’t will fall further behind. But what really excites me about this report is to see that San Antonio is far from alone.

As state and federal budgets continue to shrink, cities and regions are playing an increasingly essential role in boosting educational achievement. All across the country, cities are using data and evidence—the authors of this report have taken to calling us “geek cities”—to get better results for our residents. As you’ll see, there are a lot of ways to do this: developing and evaluating your own programs, borrowing the best from across the country (as San Antonio has done), creating new budgeting and performance measurement systems, and much more. But whichever path we take, we all have the same goal in mind—getting beyond the rhetoric and ideology and really trying to understand what will achieve results in public education, preventing infant mortality, and other big social challenges. Knowing what gets results means we can invest our scarce public dollars in what works.

I hope every mayor in America reads this report and thinks about whether the ideas discussed here can be of benefit in his or her community. I also hope state and federal officials, nonprofit leaders, and philanthropists read it as well—because we can’t do this work alone.

Cities like the ones featured in this report are innovating their way into the future, creating models that can be adapted across the nation. If smarter use of data and evidence to improve lives makes us geek cities, then all I can say is: Join us! Because what we need is more geek cities in every corner of the country.

Philanthropy Can Help Cities Develop Results-Focused Initiatives

Patrick T. McCarthy, President and CEO, Annie E. Casey Foundation

This is an exciting paper about what some might consider a geeky or even boring topic. But that would be to miss the story of a fundamental transformation that is underway. This transformation is changing the conversation in American cities from “what are we doing?” to “what difference are we making?” It is a pivotal shift that puts the focus where it should be, on investing scarce public resources as effectively as possible to achieve the greatest results for children, families, and communities. This is an agenda that leaders across the ideological spectrum can and are embracing, as this report confirms.

At the [Annie E. Casey Foundation](#), we describe ourselves as results-focused and data-driven. We recognize kindred spirits throughout these pages. These leaders are bringing new rigor to the table and their constituents are the ultimate beneficiaries. From those that are disaggregating data and using it to pinpoint problems and track progress to those that are consulting the evidence base in making critical decisions, we are heartened by their efforts.

We are especially proud that Baltimore, our hometown, is at the forefront. [CitiStat](#) has moved from a boutique initiative to a frame of mind that has strengthened core processes of city government and given leaders a wealth of data to drive decisions. Baltimore also has shifted to outcomes-based budgeting starting with a fundamentally important step, identifying the outcomes the city seeks to impact. Applying this perspective to budget decisions directs more resources to the highest priority areas. And performance data helps distinguish programs that are effective.

As this report underscores, careful analysis of the right indicators can both illuminate important trends and galvanize action. New York City, which has inspired so many city leaders with its commitment to evidence and use of data, offers an excellent example in its work on chronic school absenteeism. They knew that average daily attendance, the conventional indicator, could mask students with patterns of chronic absenteeism, a significant risk factor for later school and behavioral problems. By disaggregating the data, the schools have been able to pinpoint problems and use real-time data to identify which interventions are most effective.

This paper also draws our attention to the importance of building and using evidence of what works in making smart decisions about investing public resources. Casey invests deeply in helping to build the evidence base and in helping decision makers to draw on it to inform their decisions. Our collaboration with leaders in Providence on [Evidence2Success](#) (E2S) is a good example. E2S aims to demonstrate that public systems, schools, and communities working together to guide public investment toward proven programs and services will have a big impact on children’s healthy growth and development.

[B'More for Healthy Babies](#) (BHB), another terrific Baltimore example, is highlighted here for the strides it has made combatting a tragically high rate of infant mortality. Like many of the initiatives outlined in this report, BHB began with a “data walk.” It has continued to delve deeply into data that illuminates not just the overall infant mortality rate but helps target efforts to individuals with the greatest need. Baltimore is taking this same smart approach as it implements a decision to shift all home visiting to evidence-based models. The city understands the importance of asking not only “does it work” but “for whom”? This approach allows the city to target effective but expensive interventions to the highest-risk families.

Taken together, the examples highlighted in these pages tell us a great deal about what municipal leaders can do and can achieve when they make greater use of evidence and more skillful use of data. But this is not government’s role alone. Those of us in philanthropy have a key role to play here. Our investments in promising innovations should carry through to testing, refining, and evidence-building on those that appear to be the most effective. This paper notes the capacities—both human and technical—needed by public leaders. We should be prepared to help build them. One of those capacities is to be able to access and interpret information about the evidence base behind various program options.

I can think of no more hopeful trend occurring in our nation’s cities than the efforts outlined in this paper. Decisions that are anchored in evidence and driven by data lead to smarter investments and, ultimately, to better outcomes for children, families, and communities. I encourage you to read and be inspired by these stories and the recommendations at the end of the report. Then share them with your colleagues.

Executive Summary

Across the country, more and more cities are using data and evidence to get better results for those they serve. To explore this promising trend, [Results for America](#), an initiative of the nonprofit [America Achieves](#), commissioned The Bridgespan Group to interview city leaders and urban experts.¹ We interviewed more than 45 people to better understand how some of America’s most innovative cities are using data and evidence to do more for their residents. This report reveals what we learned.

From dozens of significant innovations underway that make pioneering use of data and evidence, we chose initiatives in six US cities to feature here. Baltimore, Denver, Miami, New York, Providence, and San Antonio all offer examples worth emulating. We also feature one initiative from London. While these are hardly the only examples of innovative use of data and evidence we found in the cities we studied, these examples illustrate the major trends we saw in how leaders are embedding the use of data and evidence into practice. The examples discussed here encompass education, jobs, youth development, and preventing infant mortality—all areas in which data and evidence are being used not simply to increase efficiency but to help transform people’s lives.

Through our research, we identified four significant ways cities are using data and evidence to embrace what works and take advantage of opportunities provided by new technology. Specifically, we’re seeing cities:

1. **Measure what matters:** Miami, Denver, and New York showcase how data can be used to improve outcomes for kids and schools.
2. **Build the evidence base:** New York and London demonstrate how cities can pilot, evaluate, and expand interventions that work—and discontinue those that don’t.
3. **Invest in what works:** San Antonio, Providence, and Baltimore illustrate the value of being a “fast follower,” adopting interventions proven effective elsewhere to efficiently address local needs.

¹ This research was commissioned by Results for America, an initiative of the nonprofit, America Achieves. Results for America seeks to improve outcomes for young people and their families by helping ensure taxpayer dollars are invested strategically with a rigorous focus on data, evidence, and better results, and discouraging continued support of programs that consistently fail to achieve measurable outcomes.

4. **Budget for what works:** Baltimore highlights how one city redesigned its budget process to focus on the most important outcomes and fund programs that get results.

Based on lessons observed from these examples, we make recommendations for city leaders, as well as for federal, state, and philanthropic partners who want to increase the use of data and evidence to spur urban innovation.

Actions for city leaders

- City leaders should **prioritize outcomes** instead of just outputs. The leaders we profiled often started by focusing on results for one or a handful of issues, such as infant health, kindergarten readiness, or school attendance.
- **Build the capacity and culture** to sustain a focus on data and evidence. To get beyond business as usual, consistent pressure and clear communication are needed, not just by a city's chief executive but also at other levels. In addition, key staff must have the skills and commitment to use data and evidence more effectively.
- **Build the systems and processes** required to determine and invest in what works. This does not necessarily mean that cities need to invest substantial sums to build fancy data platforms. Most of the examples we highlight are innovative in process rather than platform. Cities can learn from and adopt existing standards and frameworks created elsewhere.
- **Find the right organizational structure** to sustain change, whether this means that the initiative is located in the Mayor's office, a city department, a cross-agency task force, or a public-private partnership.

Actions for federal, state, and philanthropic partners to support cities

- **Fund local data infrastructure and know-how.** To make wiser decisions, cities need reliable access to data at a level granular enough that they can identify and prioritize needs and measure program effectiveness.
- **Continue to build the pipeline and support the replication of promising solutions.** For more cities to invest in what works, the menu of promising models must continue to expand.
- **Help leverage existing research and support evaluation.** While budget pressures may limit the ability of cities to conduct full-scale evaluations of their programs, the federal government and philanthropy can help to test and disseminate new methods of assessing more quickly and inexpensively when a program is working.
- **Fund critical technical assistance** for city government, helping cities to translate research findings and training city staff to use data and evaluation.

What if all cities worked with their residents to identify priorities, looked both internally and externally to understand what data and evidence existed regarding models to address these challenges, built and implemented interventions tailored

to their needs, engaged in a cycle of continuous improvement to understand what worked and what did not, and invested accordingly? The case studies presented here demonstrate that this is no longer a do-gooder's dream, but a real possibility. Cities can work smarter for their residents, and indeed, they must.

Geek Cities: How Smarter Use of Data and Evidence Improves Lives

Statistician and author Edwards Deming famously said, “In God we trust; all others bring data.”

Across the country, more and more cities are using data and evidence to get better results for those they serve. In New York City, the mayor’s Center for Economic Opportunity has used evidence from program evaluations to discontinue seven city programs because of poor performance, and increase support for others that have been shown to work. Miami-Dade County school administrators, principals, teachers, and students regularly engage in “data chats” to discuss individual and school-level progress and set strategies for improvement—helping to transform the school system into an example for other urban districts. In San Antonio, city leaders persuaded voters to approve \$28 million in new sales taxes for pre-kindergarten programs with the promise that evidence will determine the choice of program models and that data will be used to track performance and de-fund any programs that aren’t achieving good results. And in Baltimore, the city’s budgeting process has been reshaped to focus on outcomes that matter and programs that work.

This “data revolution” in local government can’t come soon enough. Facing rising demand for services at a time of shrinking budgets, government needs to demonstrate it can do more with less. To address the needs of young people, their families, and communities in this context of constrained resources and mounting demands, decision makers must spend taxpayer dollars more wisely. And leaders must be willing to buck political pressure to preserve the status quo and invest wisely using data and evidence on what works. In this paper, we look at how innovative city leaders are doing just that.

To explore this promising trend, [Results for America](#), an initiative of the nonprofit [America Achieves](#), commissioned The Bridgespan Group to interview city leaders and urban experts. We interviewed more than 45 people to uncover trends in the

Important terms used in this paper

- **Data:** Measurements or statistics that quantify an output or outcome
- **Evidence:** Research studies and evaluations that collect data in the context of a systematic and rigorous experimental design and draw conclusions regarding program effectiveness
- **Performance management:** The systematic collection of data regarding program performance, which may include data on beneficiaries, outputs, outcomes, staff, costs, revenues, or other metrics relevant to the operation of a program or service.

See the [Appendix](#) for a complete glossary of terms used in this paper.

way cities are using data and evidence to do more for their residents. This report reveals what we learned.²

From dozens of significant innovations underway that make revolutionary use of data and evidence, we chose initiatives in six US cities to feature here. Baltimore, Denver, Miami, New York, Providence, and San Antonio all offer examples worth emulating. We also feature one initiative from London. While these are hardly the only examples of innovative use of data and evidence in the cities we studied, these examples illustrate the major trends we saw in how leaders are embedding the use of data and evidence into practice.

Investing in “what works”

The movement toward using data and evidence to improve federal and state government has gained momentum in recent years, with champions on both sides of the aisle.

Federal progress

President George W. Bush and his Office of Management and Budget prioritized improving performance of federal programs and encouraged more rigorous evaluations to assess effectiveness. The Obama Administration built on this effort by creating more explicit guidelines for agencies to include evidence and evaluation in their budget proposals.¹ Several federal departments have created competitive grants for which evidence of impact, or commitment to building evidence, is the main criterion. One example of this is the Social Innovation Fund, which is a program of the Corporation for National and Community Service. In Congress, leaders on both sides of the aisle—especially Senators Landrieu, Portman, Harkin, Wyden, and Stabenow—are starting to require evidence in spending decisions.

State progress

In Washington State, legislators and executive agencies have begun to use a cutting-edge research model that identifies evidence-based policies that provide the best return on taxpayer dollars. Results First, an initiative of the Pew Center on the States and the John D. and Catherine T. MacArthur Foundation, is helping other states implement Washington’s model for use in criminal justice and, over time, in other policy areas. Other states, including Minnesota, Colorado, South Carolina, Ohio, Connecticut, Illinois, and New York, are working to develop pay-for-success contracts designed to incentivize providers to achieve better outcomes by tying funding to results.

1 Jeffrey D. Zients, “Use of Evidence and Evaluation in the 2014 Budget,” Office of Management and Budget, May 18, 2012, <http://www.whitehouse.gov/sites/default/files/omb/memoranda/2012/m-12-14.pdf>.

2 This research was commissioned by Results for America, an initiative of the nonprofit, America Achieves. Results for America seeks to improve outcomes for young people and their families by helping ensure taxpayer dollars are invested strategically with a rigorous focus on data, evidence and better results, and discouraging continued support of programs that consistently fail to achieve measurable outcomes.

While urban innovation is happening across a wide spectrum of city services, we focus on education, jobs, youth development, and preventing infant mortality—all areas in which data and evidence are being used not simply to increase efficiency but to help transform people’s lives.

Our hope is that these examples and the accompanying recommendations inspire and enlighten city leaders as they strive to better serve their residents.

Cities help shape the futures of children and families

All levels of government—federal, state, and local—play a role in providing people with basic services, protecting their safety, and supporting access to opportunity. The federal government has the most resources, the strongest voice, and a unique vantage point. Its policies and funding decisions can create ripple effects, fostering change at other levels of government. States, too, have considerable resources and power to tailor solutions to the needs and interests of their residents. States have long served as “laboratories of democracy” through their program and policy innovations.

While federal and state governments do, indeed, influence the lives of their citizens, they do so at a distance. Meanwhile, closest to people’s everyday concerns, cities and counties manage many of the day-to-day services on which we depend, and arguably can focus most directly on what it takes to transform lives. Municipal governments have a huge impact on education, housing, economic development, public health and safety, transportation, emergency services, and more. Collectively, US municipal governments are directly responsible for spending about \$1.6 trillion every year.³

Today more than ever, economic and political forces are inspiring local action. As Jeffrey Katz and Phillip Bradley write in their book, *The Metropolitan Revolution*, “In the face of federal gridlock, economic stagnation, and fiscal turmoil, power in the United States is shifting away from Washington and toward our major cities and metropolitan areas. Across the nation, these communities, and their resolutely pragmatic leaders, are taking on the big issues that Washington won’t. They are reshaping our economy and fixing our broken political system.”⁴

3 Jeffrey L. Barnett and Phillip M. Vidal, State and Local Government Finances Summary: 2011, (Washington, DC: US Census Bureau, 2013), http://www2.census.gov/govs/local/summary_report.pdf.

4 Bruce Katz and Jennifer Bradley, *The Metropolitan Revolution: How Cities and Metros are Fixing Our Broken Politics and Fragile Economy*, (Washington, DC: Brookings Institution Press, 2013).

Four exciting trends in local innovation

While cities may be responding to problems at the federal level, they are also being led by positive examples. For starters, the “what works” agenda⁵ at the national and state levels is stimulating local change. As detailed in the sidebar, “Investing in ‘what works’” on page 13, government leaders are increasing their efforts to find and fund what works. Philanthropy is playing a major part as well, with more foundations requiring outcomes and supporting efforts to develop, demonstrate, and scale programs with proven results.

Cities are also using technology to collect, understand, and act on data. This takes a range of forms, including more powerful computers, mobile apps to help residents request assistance with problems like filling a pothole, better methods for monitoring service delivery, and, of chief relevance to this discussion, new ways to use data to get a handle on what works and what doesn’t.

All of these influences are giving rise to a set of trends at the city level. We identified four significant ways cities are using data and evidence to embrace what works and take advantage of opportunities provided by new technology:

1. **Measure what matters:** Miami, Denver, and New York showcase how data can be used to improve outcomes for kids and schools.
2. **Build the evidence base:** New York and London demonstrate how cities can pilot, evaluate, and expand interventions that work—and discontinue those that don’t.
3. **Invest in what works:** San Antonio, Providence, and Baltimore illustrate the value of being a “fast follower,” adopting interventions proven effective elsewhere to efficiently address local needs.
4. **Budget for what works:** Baltimore highlights how one city redesigned its budget process to focus on the most important outcomes and fund programs that get results.

Let’s take a closer look at exactly how cities are pursuing these activities.

5 Proponents of the “what works” agenda seek to deepen investments in effective programs and practices that demonstrate results. Practically speaking, this means supporting efforts that show evidence of impact, as well as those committed to building an evidence base against which their impact can be assessed.

#1 Measure What Matters

The birth and rise of civic performance management

Ultimately, what we care about is outcomes—not only how many police patrols are conducted, or how much professional development a teacher gets every year (these are outputs) but whether these outputs are reducing crime and improving student achievement. Over the last several decades—and especially in the last few years—city governments have been using data in more sophisticated ways to monitor, manage, and improve their approaches, often focusing first on outputs but ultimately incorporating outcomes as well.

New York was a pioneer with its development in the mid-1990s of CompStat, the New York Police Department’s data-driven management model that began as a set of pushpins mapping transit crimes on a city map. Among its elements CompStat combines data on the locations of specific crime complaints and arrests by specific units, the time of day and week of crimes versus arrests, and the percentage of police officers actively making arrests. Law enforcement officials and precinct officers meet regularly to review data and plan improvements. While it is hard to demonstrate conclusively that changes in crime rates are the results of any specific police activities, CompStat is widely credited with a significant role in New York’s plummeting crime rates (significantly steeper than in the US as a whole) since the system’s adoption.⁶

Baltimore’s then-Mayor Martin O’Malley created CitiStat in 2000, modeling it after CompStat and extending it to the management of all municipal functions. CitiStat has improved the efficiency and cost-effectiveness of city services. For example, it has helped to reduce employee overtime costs, absenteeism among city employees, and the city’s response times for citizen service requests such as potholes and graffiti removal. Due to CitiStat’s success, representatives from other cities, states, and countries regularly visit the city to learn about the program and observe CitiStat in action. A number of states, federal agencies, and at least 11 US cities and two abroad have implemented Stat programs since CitiStat’s creation in 2000.⁷

Denver is taking a new approach to performance management, training and empowering front-line employees to innovate through its [Peak Performance](#)

6 Arthur Storch, *CompStat—The Start of a Revolution in Policing*, (New York: Worldwide Law Enforcement Consulting Group, Inc., 2006), <http://www.worldwidelawenforcement.com/docs/COMPSTAT%20article.pdf>.

7 These cities include Atlanta, Buffalo, Chattanooga, Cleveland, Pittsburgh, Providence, San Francisco, Somerville, St. Louis, Syracuse, Washington, DC, and the Serbian cities of Paraæin and Indjija. Teresita Perez and Reese Rushing, “The CitiStat Model: How Data-Driven Government Can Increase Efficiency and Effectiveness,” Center for American Progress, 2007, http://www.americanprogress.org/wp-content/uploads/issues/2007/04/pdf/citistat_report.pdf.

program, an initiative Mayor Hancock launched on his first day in office.⁸ Denver has embraced the Lean methodology, an approach derived from the Toyota manufacturing process, teaching city employees to listen to the “voice of the customer,” and take responsibility for continuously improving results. As a result, city workers have made some significant improvements. For example, the Family and Adult Assistance Division of Human Services identified and redesigned a case management process that reduced the wait time from five days to 85 minutes and increased the number of families served from 357 per day to 517 per day—without additional resources. Through process changes like these, the city of Denver has realized savings of an estimated \$9 million in just two years. Peak Performance staff estimate that every dollar invested in Peak Performance has yielded a return of \$3.20.⁹ Denver’s chief performance officer, David Edinger, explains that while decisions on how to reinvest these savings are currently being made at the department level, Denver’s goal is to realign dollars across city departments to increase funding for programs that provide a strong return on investment.

The challenge of shifting to outcome measurement

While initiatives like Baltimore’s CitiStat and Denver’s Peak Performance deliver value for city governments and residents, tailoring city management tools to improve social outcomes—not just outputs—is a significant

“Data by itself is no panacea. It is how cities organize themselves to act on the data that matters for kids and families.”

challenge. For example, a traditional city homeless services program likely already tracks the number of shelter guests it sees, the number of meals it serves, and other outputs. But if the ultimate outcome or goal of such programs is to help get homeless people off the streets and into their own homes, they must find ways to know if they are achieving this goal.

To measure and track outcomes, cities need to develop the basic infrastructure to collect and manage data and aggregate it across multiple departments. The investment in staff with the needed skills and capacity can be significant. Even more important, however, this type of focus requires agency heads to think beyond strictly their own departments’ activities, and mayors and city legislators to think beyond their terms of office.

Measuring social outcomes and establishing accountability mechanisms for these outcomes requires a new level of collaboration. Not only do various municipal entities—and often community partners as well—need to share information that

8 Peak Academy, the training program associated with Peak Performance, was identified by the NYU Wagner Center for an Urban Future as one of the 15 innovations that the next Mayor of New York should learn from, <http://nycfuture.org/research/publications/innovation-and-the-city/P1>.

9 Melissa Field, “Building a City Where Everyone Matters: Denver’s Peak Performance Initiative,” Fels Institute of Government, University of Pennsylvania, August 5, 2013, <http://www.fels.upenn.edu/news/building-city-where-everyone-matters-denvers-peak-performance-initiative>.

previously remained within individual administrative silos, but these entities also need to agree to share accountability. “Organizationally, it’s easy to hold a department of transportation responsible for potholes,” says Matt Gallagher, former director of CitiStat and current president and CEO of Baltimore’s Goldseker Foundation. “If your goal is a safe, healthy, happy child, you have a lot of entities participating in that outcome. It’s about getting them to pull in the same direction, adapting to the needs of the child or family. For complex outcomes with a lot of participants, it’s hard.”

Data by itself is no panacea. It is how cities organize themselves to act on the data that matters for kids and families. Miami, Denver, and New York offer examples of how to do this in education.

Miami-Dade County Public Schools uses data to boost student achievement

Serving nearly 350,000 students and encompassing over 2,000 square miles, Miami-Dade is the nation’s fourth-largest school district. Its students are 74 percent low-income and 90 percent black or Hispanic. A decade ago, [Miami-Dade County Public Schools](#) (M-DCPS) faced the same performance challenges as many urban districts, with years of stagnant and unacceptably low student achievement, resulting in a generation of urban youth unprepared for college or careers. It was operating without a strategic plan and without data to inform key decisions.

However, over the past decade, M-DCPS has emerged as a bright spot among its peers. Today, M-DCPS takes an entirely different approach, centering its strategy and decision making on what the data says. With this approach, it has made tremendous strides. Over the last several years, M-DCPS ranked among the top districts in the state of Florida in terms of increasing the percentage of Hispanic and black students scoring at the highest academic levels on standardized tests. Additionally, between 2006 and 2009, graduation rates for Hispanic and black students in the district increased more in M-DCPS—14 percentage points—than in comparable districts around the country.

In 2012, the district won the prestigious [Broad Prize for Urban Education](#), which recognized Miami for making the greatest progress in raising student achievement compared to all other large urban districts across the country. Secretary of Education Arne Duncan noted that this achievement reflected “a district-wide culture of results.”¹⁰ The question is, how did Miami-Dade achieve such a dramatic turnaround?

¹⁰ Laura Isensee, “Miami-Dade school district wins Broad Prize, top national education award,” *Miami Herald*, October 10, 2012, <http://www.miamiherald.com/2012/10/23/3062875/miami-dade-wins-top-education.html>.

Data as a management tool

Two superintendents have led Miami-Dade over the past decade: Rudolph “Rudy” Crew from 2004 to 2008, and Alberto Carvalho since 2008. While each leader brought his own plans and style to the role, both were big on using data to improve performance. Before Crew became superintendent, evaluations for central office staff were 35 pages long, yet included no data. Crew brought a performance management system to the district that included strategic plans for each department and scorecards for each administrator, district leader, and principal. The metrics on each scorecard, which included both operational and student achievement data, were linked to the one above it, and ultimately to the strategic plan for each school and for the district as a whole. For the first time, M-DCPS had a single coherent system for tracking goals and measuring progress.

But Crew knew that just tracking data was not enough. He made the scorecards the centerpiece of his cabinet meetings, taking red, yellow, and green highlighters to mark up the scorecards at the meetings. His team used these data to identify where things were off-track, diagnose possible causes, and come up with solutions.

Carvalho has continued and expanded the use of data as both a strategic and day-to-day management tool in M-DCPS. The district’s Data/COM process helps challenged schools improve their student performance. During Data/COM sessions, leaders of struggling schools meet with the superintendent and his cabinet to discuss the most recent student assessment data. Together they determine what the data reveals about the challenges and obstacles the schools must overcome and identify potential solutions, focusing on what has worked in other schools in the district and nation. The district, then, provides its highest need schools with resources to implement those solutions quickly.¹¹ For example, M-DCPS targeted its School Improvement Grant (SIG) to fund interventions such as math and literacy coaches and wraparound services from City Year in the places where the data indicated they were most needed. The success of this approach has motivated the district to become creative with its Title I dollars to continue funding many of these same services after the SIG sunset. “We really don’t make any decisions without looking at the data,” says Marie Izquierdo, an assistant superintendent.

Using data in schools and classrooms

It is not just Miami-Dade’s central office that uses data. District leaders have developed a strong data-driven performance culture within individual schools. Administrators and teachers are savvy at accessing, interpreting, and using student data to make instructional decisions.¹² In addition, administrators, principals, teachers, and students regularly engage in “data chats.” These occur at all levels. Administrators have data chats with principals, principals have them with teachers, and teachers with students. These conversations help to set goals

¹¹ “The 2012 Broad Prize.” Described as “exemplary practices relating to student achievement,” <http://www.broadprize.org/asset/1801-tbp%202012%20fact%20sheet%20mdcps.pdf>.

¹² Ibid.

and map strategies to get there. Ultimately, the objective is for each individual student or educator to understand his or her current performance and what to do to reach the next level of achievement.¹³

In Miami-Dade, data is for sharing, not hoarding. Teachers and administrators can view and analyze the latest data whenever they want. They receive training on how to use the district's comprehensive data warehouse, allowing them to run color-coded reports on such factors as grades, attendance, test scores, or community service hours for an individual, classroom, or school. Teachers and administrators say the data warehouse is easy to use and suits their needs. Parents and students can access relevant portions of the data through a web portal.¹⁴

A culture of results

In addition to a focus on results in the central office or at the superintendent level, district leaders are also working to create a culture focused on achieving results by modeling their management styles and strategies on other successful organizations, both public and private. For example, when new district initiatives are rolled out, staff now feel that district leaders communicate a clear and compelling vision, set high expectations, and require accountability for performance. Employees report that this has helped create a culture within the district that values student and programmatic results, as well as continuous improvement.

The hope is that this culture will help to sustain achievement gains. "What is encouraging about Miami-Dade is its sustainable improvement over time," says Eli Broad, founder of The Eli and Edythe Broad Foundation, which awards The Broad Prize. "Their gains are a testament to the hard-working teachers, administrators, and parents who have embraced innovative methods to modernize schools and ensure that students of all backgrounds get the support they need."¹⁵

Denver Public Schools uses data to drive continuous improvement

Denver Public Schools (DPS) provides another example of a district pursuing continuous improvement through a data-driven approach: the portfolio strategy. This approach began with former superintendent and now Senator Michael Bennet in 2005. Seeking to scale the district's most effective charter schools, Bennet launched what has evolved into a comprehensive approach to managing all schools in the district for higher performance. Today, under current Superintendent Tom Boasberg's leadership, the district gives schools significant autonomy to make decisions on staffing, curriculum, instructional methods, technology, and many other aspects of operations. With autonomy comes accountability. The district evaluates school performance to identify

¹³ Ibid.

¹⁴ Ibid.

¹⁵ Ibid.

the most successful approaches and provide funds to replicate the successful models while de-funding underperforming schools.

In Denver, the central office evaluates all schools on the district's [School Performance Framework](#).

"We are systematically looking at schools to first determine needed supports and interventions, and, if supports and interventions are unsuccessful, to decide whether to turn around, replace, phase out, or close down," explains Alyssa Whitehead-Bust, chief officer of innovation and reform, with the goal of creating high-quality options for all students within DPS' choice system.¹⁶ DPS offers struggling schools a set of supports that are backed by research showing they help to increase teacher effectiveness and student achievement.

Results from the School Performance Framework also provide a backdrop for the district's annual Call for New Quality Schools, a request for applications to open new district-run or charter schools. DPS specifically seeks to replicate the highest performing schools. "We make it easier for school operators with a track record of success," says Whitehead-Bust. "We intentionally cultivate a pipeline of these schools and give them priority access to facilities."

While a growing number of districts across the country are adopting a portfolio strategy, Denver's model is more rigorous than many others. The district manages the composition of the portfolio, based on performance, regardless of whether the highest achieving schools are district or charter operated.

DPS is also working to "facilitate learning among schools so that they can get supports from each other and not just from the central office," says Whitehead-Bust. For example, the highest performing charter schools train leaders for district schools, and peer-to-peer learning labs bring together high-performing charter schools and district schools to identify, pilot, and demonstrate the most effective practices. Denver is creating a laboratory for identifying best practices based on school performance data and facilitating transfer of those practices between schools.

In the face of flat test scores across Colorado, Denver's student achievement in recent years has been impressive.¹⁷ Since the launch of the portfolio strategy, DPS students have shown more academic growth on state assessments than their peers across the state, more than in any other large school district in Colorado. District proficiency rates have risen in reading (14 percent), writing (12 percent), math (23 percent), and science (14 percent). By comparison, statewide reading

“We are systematically looking at schools to first determine needed supports and interventions, and, if supports and interventions are unsuccessful, to decide whether to turn around, replace, phase out, or close down.”

ALYSSA WHITEHEAD-BUST, CHIEF OFFICER OF INNOVATION AND REFORM, DENVER PUBLIC SCHOOLS

16 Denver Public Schools Case Study, June 2012, http://www.msdf.org/assets/cs_dps_06_2010.pdf.

17 The October 2011 Denver Plan Progress Update reports that "DPS students have shown more academic growth on state assessments than their peers across the state and more than any other large school district in Colorado," http://2010denverplan.dpsk12.org/pdf/2010_DenverPlanProgressUpdate_HR.pdf.

scores increased just 2 percent and math scores 5 percent, while statewide writing and science scores each decreased by 1 percent.¹⁸ It is difficult to know how much credit the portfolio approach deserves for these results because the district is simultaneously pursuing a number of other initiatives. However, DPS feels it is an important piece of the story, and it is a good example of how districts can act on performance management data and invest in school models that work.

New York City uses data to tackle chronic absenteeism

“In order for kids to benefit from instruction, they have to be in class,” says Hedy Chang, director of [Attendance Works](#), a national- and state-level initiative aimed at advancing student success by addressing chronic absence. “What’s crazy is most schools don’t know how many and which students are missing school so often that they’re at risk of academic setbacks.”

Research has shown that students who are chronically absent—missing 10 percent or more of school days—are at a much higher risk of failing classes, dropping out, and ultimately ending up in the justice system. Across the nation, as many as 7.5 million students miss nearly a month of school each year, collectively losing 135 million days of instruction.¹⁹ But chronic absenteeism has multiple causes—unstable housing, lack of adequate food and nutrition, transportation problems, and family issues, among others—which can be difficult for school districts to address alone.

Our third example of using performance measurement data to improve outcomes is based on the work of the [Mayor’s Interagency Task Force on Truancy, Chronic Absenteeism and School Engagement](#),²⁰ which was launched in 2010 by New York City Mayor Michael R. Bloomberg. This initiative to combat student chronic absenteeism brings together a dozen city agencies (such as homeless services, the Department of Youth and Community Development, and the Administration for Children Services), over 20 community-based and nonprofit organizations, and some public-private partnerships.

At the heart of the collaboration is a new approach to collecting and analyzing attendance data. Most schools and districts rely on the Average Daily Attendance (ADA) indicator, which reports the percentage of students at school on any given day. However, high levels of ADA can mask chronic absenteeism if the same handful of students is missing day after day. In New

¹⁸ Analysis conducted by DPS Assessment Research and Evaluation department, based on Colorado State Assessment Program and Colorado Transitional Assessment Program data.

¹⁹ Robert Balfanz and Vaughan Byrnes, *The Importance of Being in School: A Report on Absenteeism in the Nation’s Public Schools*, (Johns Hopkins University Center for Social Organization of Schools, 2012), https://getschooled.com/system/assets/assets/152/original/FINALChronicAbsenteeismReport_May16_executivesummary_withcover_20_1_.pdf?1337209810.

²⁰ The Mayor’s Interagency Task Force on Truancy, Chronic Absenteeism and School Engagement (2013), <http://www.nyc.gov/html/truancy/html/home/home.shtml>.

York, the Task Force pioneered a new approach to collect, analyze, and act on real-time attendance, behavior, and coursework data to help students come

“The district is crunching the numbers so it can let schools know who’s chronically absent, so that schools and their community partners can respond.”

HEDY CHANG, DIRECTOR, ATTENDANCE WORKS

to school every day and succeed. It also developed new confidentiality agreements that, for the first time, allow sharing of data between these critical stakeholders.

The Task Force is piloting a number of initiatives to tackle the complex causes and consequences of truancy and

absenteeism, including new models for connecting schools with local resources and strengthening parent and student engagement. Evaluation of several different interventions in 100 elementary, middle, and high schools across the five boroughs

Spotlight on New York City

New York City is truly a leader in this local government “data revolution.”

Two examples of how the city is using data to get better results are:

- **NYC Office of Policy and Strategic Planning** analyzes city data to increase efficiency and improve services. Each day, about one terabyte of data—which, if printed, would fill more than 140 million pages—enters the office’s data system. Armed with this data and a modest budget of \$1 million, the Office of Policy and Strategic Planning has had some significant accomplishments, including doubling the city’s “hit rate” in finding stores selling bootleg cigarettes; identifying inhabited apartment units in the chaotic aftermath of Hurricane Sandy; and enabling city inspectors to be 95 percent successful in tracking down restaurants illegally dumping grease down city sewers.¹
- New York City is also using data to get smarter about the way it treats juvenile offenders through its **Alternative to Detention (ATD) program**. In 2006, the New York City Office of the Criminal Justice Coordinator (CJC) began working with juvenile justice stakeholders to develop a new continuum of ATD programs for youth with cases pending in Family Court and who could be safely released to the community with appropriate supervision. As part of this initiative, CJC partnered with the Vera Institute of Justice to develop a first-of-its-kind Risk Assessment Instrument (RAI). Designed to help identify youth who would be most appropriate for ATD services, the RAI uses objective standards to guide juvenile detention decisions. While more high-risk kids are detained, mid-risk and low-risk kids are offered better services and stronger community supervision. This risk-based approach to juvenile justice has cut in half the rate at which juveniles are re-arrested while awaiting the outcomes of their cases, from 26 to 13 percent.²

1 Alan Feuer, “The Mayor’s Geek Squad,” *The New York Times*, March 23, 2013, http://www.nytimes.com/2013/03/24/nyregion/mayor-bloombergs-geek-squad.html?pagewanted=all&_r=1&.

2 NYC Criminal Justice Coordinator, “Risk Assessment Instrument and Alternative to Detention Programs,” 2013, <http://www.nyc.gov/html/cjc/html/youth/risk.shtml>.

of New York City shows that at least one approach, [Success Mentors](#), has resulted in mentored students gaining over 80,000 days of additional school during the 2012-2013 year, as compared to students who did not have a mentor. The NYC Success Mentor Corp. is now the largest in-school mentoring program in the country.

With New York's absenteeism initiative, says Chang, "The district is crunching the numbers so it can let schools know who's chronically absent, so that schools and their community partners can respond. They can assign mentors, or if a large number of students are absent, take steps to identify if there is a common issue, like inadequate transportation, or health issues."

It's worth noting, the mere collection of performance data was not sufficient to address deeply rooted problems like absenteeism in New York City. The data needed to be available quickly enough to identify specific problems. It also needed to be connected to a system of interventions with the potential to have an impact on those problems.

#2 Build the Evidence Base

To develop interventions that cities can be confident are improving lives, it is important to pilot and evaluate promising models, and then use the results to further support those that show evidence of effectiveness and fix—or cut—those that don't. This cycle of innovation requires a sophisticated application of data and evidence. Two cities—New York and London—are demonstrating what it takes.

New York City's Center for Economic Opportunity identifies and scales what works to fight poverty

In 2006, Mayor Bloomberg issued a call to action to reduce poverty in America's biggest city. A commission charged with studying the causes, scope, and consequences of poverty in New York responded with a bold report. They estimated that "official" statistics under-counted New York City's poor population by 214,000 because they ignored nuances in basic needs and the city's high cost of living. It was a moral imperative, they argued, for New York City to do more to help its working poor, youth, and families with children.

Mayor Bloomberg acted on the commission's recommendation by establishing a new unit in the mayor's office, the [Center for Economic Opportunity](#) (CEO), shortly after the report's release. While this was not the first time New York City had endeavored to reduce poverty, it was certainly the first time it had focused so intently on evaluation and evidence. The agency sought to upend the city's traditional anti-poverty approach, which tended to preserve longstanding programs even when they failed to demonstrate results. In its place was a structure to initiate and sustain a cycle of innovation. According to Deputy Mayor Linda Gibbs, CEO helped create "a new kind of capacity to identify and support the development of promising solutions, foster dialogue, and support agencies as they implement, hold the providers accountable for achieving results, and determine what approaches to scale up and, importantly, what to scale back."

Since its founding, CEO has developed, implemented, and evaluated more than 50 programs in partnership with 28 city agencies and nearly 200 community-based organizations. CEO receives over half of its \$100 million annual budget from city taxes, and raises the rest from a wide range of private sources, including both philanthropic and corporate sponsors.

More than 5 percent of CEO's budget is dedicated to vetting the results of its programs—which it does in partnership with a number of external evaluators, including MDRC, Urban Institute, Westat, the Vera Institute, university partners, and others. Maintaining this level of investment in evaluation has not always been easy, according to CEO's Executive Director Kristin Morse. "When we first started, there was a tension between how much money we put in evaluation and how much we put in direct services," she explains. Bit by bit, however, Morse believes that CEO has convinced New York City policymakers that program evaluation is a

good investment. “Over the last seven years we have had 12 different rounds of budget cuts, and over time, evaluation has stopped being a target,” she says. “The value of knowing what works at the time when we are all making these tough decisions has become accepted.”

Since 2007, CEO has had an impact on a lot of New Yorkers, facilitating more than 30,000 job placements and 10,000 paid internships, and supporting the enrollment of over 10,000 people in college or occupational training. It also has helped individuals access over \$100 million in additional tax credits. While New York City’s poverty rate went up between 2007 and 2011, as might be expected given the impact of the recession, CEO estimates that expanded participation in these social safety net programs mitigated this increase by as much as two percentage points.²¹

Incubating a program that works: The journey of Jobs-Plus

A good example of how CEO has used evidence to determine which programs to scale is [Jobs-Plus](#). Jobs-Plus was developed in the 1990s in response to the severe economic distress and disproportionately high unemployment rates of public housing residents.

MDRC, the nonprofit research organization, developed and tested the Jobs-Plus model through a major national demonstration project supported by three federal agencies and philanthropic donors, including The Rockefeller Foundation and the Annie E. Casey Foundation. The program combined three core elements: employment services, such as referrals to vocational training and job search help; financial incentives to work that allowed residents to increase their earnings without worrying about driving up their rents; and community support systems that facilitated the neighbor-to-neighbor sharing of employment information and advice.

MDRC conducted a randomized controlled trial of the Jobs-Plus pilots, which showed the program delivered substantial impact. Relative to a control group of public housing residents, residents of public housing complexes implementing Jobs-Plus enjoyed an annual earnings boost of over \$1,100. The cost of operating Jobs-Plus was approximately \$1,800 per person per year. But even after the program ended, individuals who had participated continued to earn significantly more each year than individuals from the control group, suggesting a positive return on investment from the program.

In spite of these impressive results, when the pilot officially ended in 2004, it looked like Jobs-Plus had reached its end as well. And it might have, if CEO didn’t have a partnership with MDRC. Gibbs explains, “MDRC brought forward the Jobs-Plus program and said, ‘This really works. Why don’t you give it another shot?’” And so, in 2009, CEO partnered with a local community college to replicate the program

²¹ This is the latest full year for which accurate data is available. The NYC Center for Economic Opportunity, *The CEO Poverty Measure, 2005-2011: An Annual Report by the Center for Economic Opportunity*, April 2013, http://www.nyc.gov/html/ceo/downloads/pdf/ceo_poverty_measure_2005_2011.pdf.

in the Jefferson Houses of East Harlem. In its first year, Jobs-Plus met its job placement targets in the midst of a devastating economic downturn, and generated strong community support. CEO is working to expand the Jobs-Plus model in New York City with support from the federal government and philanthropic funders.

Jobs-Plus suggests that while evidence of effectiveness is important, evidence alone can't preserve or expand an effective program. In this instance, CEO helped

Spotlight on two early-stage initiatives: Providence Talks and Propeller Health

In our scan across cities at the forefront of using data and evidence to improve results, we found several promising interventions that were being designed with evaluation at their core. While it is too early to say what their results are, they highlight the potential of this type of intervention to produce real-time data on what's working or not.

Funded by the Bloomberg Philanthropies' Mayors Challenge, **Providence Talks** will equip families eligible for home visitation services through Rhode Island's Universal Newborn Screening process with a small recording device that counts the number of words a child hears each day. This device, developed by the LENA Research Foundation, filters out television and background noise and develops a comprehensive picture of a child's daily auditory environment, including adult word count and the number of conversational interactions the child engages in over the course of the day. Families participating in Providence Talks will receive these data during monthly coaching visits along with targeted support, including information on existing community resources like read-aloud programs at neighborhood libraries or special events at local children's museums.¹ Researchers from Brown University will evaluate this initiative.²

The Louisville Metro government is partnering with private and philanthropic partners to launch **Propeller Health**, using real-time sensor data from inhalers to improve prevention and treatment of asthma in the city. Louisville, the first city in the country to pursue this type of project, hopes to improve both its health outcomes and economic competitiveness. The Propeller Health team is monitoring time- and location-specific usage of 500 rescue inhalers in addition to tracking ambient air quality readings from nine sensors around the city. Experts from IBM are helping to crunch the data, with the goal of predicting and avoiding environmental triggers of asthma.

Ted Smith, director of innovation for the Louisville Metro Government explains, there are simple ways to get started using data. "This kind of culture change doesn't happen unilaterally or simultaneously," he notes. "But there are things that people will be excited to get started on, because there is frustration about the status quo. And you can start there."

1 Bloomberg Philanthropies 2012 -2013 Mayors Challenge, "Winner: Providence Talks," <http://mayorchallenge.bloomberg.org/index.cfm?objectid=7E9F3B30-1A4F-11E3-8975000C29C7CA2F>.

2 Brown University, "Brown and city address word gap," 2013, <http://news.brown.edu/shorts/2013/03/brown-and-city-address-word-gap>.

Jobs-Plus get a second look and another chance to win the kind of broader-based support essential to scaling what works.

Evidence cuts both ways: Making tough choices to de-fund

One of the most striking aspects of CEO's approach is how it handles programs that don't make the grade. To make the most of its evaluation budget, the agency uses a combination of output-focused performance data and rigorous evaluation data collected through randomized controlled trials (RCTs). To avoid unnecessary expenditure on long and costly RCTs, CEO only initiates a rigorous evaluation if a program generally seems to be delivering on its expected outputs. "We generally don't need a formal evaluation to know that a program *isn't* working," says Morse.

While spotting underperforming programs may not be that difficult, cutting them almost always is. Yet CEO has remained committed to ending programs that fail to demonstrate results. Of the 62 programs piloted between 2006 and 2013, CEO has discontinued seven because of poor performance.²² This also frees up money and allows CEO to redirect resources from failing programs to those that do show evidence of success or to test a new innovation.

Says Morse, "Our premise has been that we will invest in new projects, encourage people to take risks to develop the strongest and best answers, and then we are going to measure them. If they don't work, we will cut funding and invest in other things."

Project Oracle establishes itself as London's "children's and youth evidence hub"

London is just getting started, but it is taking a different, more decentralized approach to the cycle of building and using evidence of what works. Led by the mayor's office, [Project Oracle](#), which calls itself the "London children's and youth evidence hub," works with children and youth providers to develop evaluation systems and a reliable evidence base for their projects. Project Oracle also seeks to increase demand for evidence-based solutions by training officials who make funding decisions in: 1) social sector research methods and 2) using evidence in contracting with providers. The goal is to create a virtuous cycle: as nonprofits build evidence, government officials provide more funding for these evidence-based programs, thus prompting nonprofits to keep focusing on evidence and improving their services and products.

London Mayor Boris Johnson launched Project Oracle in 2012 in response to a disturbing spike in youth violence and murders in London. Johnson promised to

²² In addition to these, CEO ended an additional five programs because they were "one-time investments," four because they were time-limited pilots, and two programs were ended because the "context had changed" so that the investment was no longer warranted. The NYC Center for Economic Opportunity, CEO Overview and Accountability, (July 2013). Presented at The Convening on Cities and Evidence-Based Government, New York City, July 25, 2013. Unpublished.

reduce youth crime and made a public call for better research and evidence to guide action. “Before that, we were still very much in the realm of case studies to understand programs. Those studies were gathering dust,” says Stephen Bediako, founder and managing director of The Social Innovation Partnership (TSIP), which supports Project Oracle. “It sparked a renewed interest in the whole evidence agenda.”

The Greater London Authority, the Mayor’s Office for Policing and Crime, the UK’s Economic and Social Research Council, and the nonprofit Nesta are providing funding and support for Project Oracle. London Metropolitan University contributed researchers, and The Social Innovation Partnership, a social sector enterprise, is providing ongoing support to the cross-sector partnership, alongside other agencies, that provide intensive evaluation training and services. In less than a year of full operation, 120 youth agencies have already either completed a self-assessment to determine the strength of their current evidence base (the Project Oracle Standards of Evidence) or been trained in strategies for determining whether their projects are achieving their intended positive outcomes for young people. Fifty-four agencies entered their current and completed evaluations in an “evidence competition” to gain recognition for their work by experts in

“Forward-thinking city leaders and funders understand the price of evaluation is cheap compared to the ongoing expense of investing in programs that don’t deliver their promised results.”

social research methods, and 10 winners were selected based on the rigor and effectiveness of their evaluation approach.

The project also functions as a bridge between research and practice, having so far placed 29 undergraduate and postgraduate researchers with youth organizations to work

on their evaluation plans, tools, and techniques. To date 17 leaders of government agencies have been trained by research experts to be “evidence champions.” “We want them to adopt a theory of change and link that to the evidence base,” says Bediako. But it is not as simple as just asking them to fund evidence-based programs. “You need to think about whether the evidence-based programs are right for your target population.” Adding to the challenge is the political inertia that tends to support the status quo in government. But Bediako is hopeful. With close to 10 agencies in London already trying this approach in contracting with service providers, he believes, “We are beginning to gain traction.”

Meanwhile, the project is taking a dose of its own medicine, undergoing its own evaluation to determine if it is achieving its desired results. The leaders of Project Oracle expect it will be several years before there is clear evidence of its impact, but they are excited about the progress they’ve made in their first year.

Building and maintaining Project Oracle’s children and youth evidence hub will require ongoing investment, as was the case with New York CEO’s evaluation function. While it may be difficult to justify these types of costs, especially during a time of fiscal austerity, forward-thinking city leaders and funders understand the price of evaluation is cheap compared to the ongoing expense of investing in programs that don’t deliver their promised results.

#3 Invest in What Works

In addition to creating and assessing new programs themselves, cities can benefit from adopting interventions shown to work elsewhere—allowing them to save money in development and evaluation costs and increase the odds of success. In New York City, CEO’s adoption and expansion of the [Jobs-Plus](#) program falls into this category. An increasing number of practices and programs—in areas such as education, workforce development, juvenile justice, health, and others—have demonstrated positive effects in rigorous research studies.

Selecting the right set of interventions for a particular city requires the ability to scan existing research, learn about the range of potential interventions available, understand the strength of the evidence behind them, and assess the best fit with the city’s own context and readiness to implement. And when total funding is stagnant, or even shrinking, adopting new practices from outside means shifting funds away from locally grown programs, likely incurring stiff resistance. Our first example, San Antonio, highlights a new initiative that seeks to improve educational outcomes by considering evidence every step of the way. Following this, Providence highlights how a city is adapting an evidence-based collaborative approach to improve outcomes for youth. Finally, Baltimore’s initiative to reduce infant mortality examines how a city has shifted funding toward evidence-based programs.

How much evidence do you need to know what works?

A fundamental challenge for those committed to using data and evidence to invest in what works is a lack of clarity and agreement about the level of evidence required for a program or practice to be deemed effective. Today, a number of efforts are underway to establish evidence frameworks that define what it means for a practice to be “proven” effective, so that providers can understand what is expected and so funders thoughtfully can apply criteria as they make investment decisions. Many of these tightly define tiers of evidence to clarify when programs and models are eligible for certain types of grants. For example, the Social Innovation Fund and the Investing in Innovation Fund both use three tiers: preliminary, moderate, and strong.

Preliminary evidence is evidence based on a reasonable hypothesis supported by research findings. Examples of research that meet the standards include outcome studies that track participants through a program and measure participants’ responses at the end of the program; and pre- and post-test research that determines whether participants have improved on an intended outcome.

Moderate evidence is evidence from previous studies that can support causal conclusions but have limited generalizability, or studies that are highly generalizable but that fall short of supporting causal conclusions.

Strong evidence is evidence from previous studies that can support causal conclusions, and studies that, in total, include enough of the range of participants and settings to support scaling up to the state, regional, or national level. An example might be a large, well-designed and -implemented multi-site randomized controlled trial that supports the effectiveness of the practice, strategy, or program.

San Antonio's new pre-K initiative seeks to use evidence every step of the way

In 2011, San Antonio Mayor Julián Castro convened a blue-ribbon group of business leaders, school superintendents, and other education professionals to identify the most effective method for improving the quality of education. Rebecca Flores, education policy administrator for San Antonio, described their process. “Initially the task force did look at all levels of education, studied research from around the country to look at what could help in those domains, and determined that, strategically, the most impact they could have with those dollars was in pre-K,” says Flores. So the group, known as the Brainpower Taskforce, recommended the city develop a program focused on high-quality pre-kindergarten for four-year-olds. In November 2012, San Antonio voters approved a \$28 million sales tax increase (spread over eight years) to fund the plan, known as [Pre-K 4 SA](#).

Pre-K 4 SA will establish four education centers with full-day pre-K instruction. These centers will serve 22,000 four-year-olds over an eight-year period. While far from universal pre-K, the initiative has the potential for significant impact. When all four education centers are operating, they will collectively have capacity to enroll about 30 percent of San Antonio's four-year-olds who are eligible for state-funded pre-K but not yet enrolled in a full-time program.

In the same way that evidence helped determine the focus on pre-K, the initiative is using evidence to determine the content of its program. San Antonio conducted a national competitive bidding process to choose curricula for the pre-K initiative. It received nine proposals, from which it chose two. “Almost half of our criteria were dedicated to evidence of success with populations similar to our student population in San Antonio,” says Flores. “We went through a lot of research and weeded out the ones that didn't have enough rigor.”

“If the data tells us something is not working, we need to have the political will to tell the public and make a change.”

REBECCA FLORES, EDUCATION POLICY ADMINISTRATOR, SAN ANTONIO

To ensure providers are implementing their models with fidelity and actually delivering impact, San Antonio will spend almost \$1 million to conduct ongoing evaluations over the next eight years. The city plans

to use the results to make funding decisions—deciding whether to continue programs on the basis of their outcomes. Pre-K 4 SA is establishing from the outset that subpar performance will not be rewarded with subsequent contracts.

The eight-year lifespan for the taxpayer-approved funding is keeping the initiative's leaders focused. “I think people are expecting us to make changes,” says Flores. “We don't have a long time to show that this is working. If we don't have the research and can't prove this is working, they won't vote for it again.”

Pre-K 4 SA has been structured in a way that promotes the use of evidence at every stage: in targeting four-year-olds, in choosing the program curricula based on a national competition and careful review of results, in spending a portion of

the funds on ongoing evaluation, and in publicly promising to use those evaluation results to determine funding decisions. This last aspect is unusual for any level of government, and it will not necessarily be an easy promise to keep. But, says Flores, “If the data tells us something is not working, we need to have the political will to tell the public and make a change.”

Providence intervenes at the community level to get better outcomes for youth

While Providence has been the home of civic investment in data innovation (ProvPlan, in the sidebar below, is one example of this), the initiative we highlight below is an example of how city leaders can effectively import and adapt practices from other communities.

Providence’s Children and Youth Cabinet (CYC) is a partnership of public agencies and community organizations that was founded by then-Mayor Cicilline to support the academic, social, and emotional development of Providence’s youth. CYC is one of a number of “collective impact” efforts that has sprung

Spotlight on ProvPlan

Making data more accessible and useable is core to the mission of **ProvPlan**, a nonprofit launched in 1992 as a joint effort of the City of Providence and the State of Rhode Island.

Early on, ProvPlan focused on analyzing neighborhood-level data to develop indicators of community well-being and to inform the work of local stakeholders. Today, ProvPlan maintains the largest data warehouse in the state and provides a range of data tools that help people access and make sense of this vast collection of information.

ProvPlan’s Executive Director Pat McGuigan explains, “We have a real commitment to democratizing the data. Our agenda is to put it out there and create users and use. If nothing happens with the data then we didn’t achieve our objective.” In this quest, ProvPlan linked city and state data, as well as data across fields like health and education, in a way that no one else in Rhode Island had yet done.

“We have also been big believers in data visualization and displaying data at the neighborhood and block level,” says McGuigan. In early 2013, for example, ProvPlan released a new web app that allows people to create and share maps that compare their neighborhoods with surrounding areas, or reveal changes in their own communities. “People share data with us because they get something of value back,” McGuigan says.

One essential element of ProvPlan’s DNA has been its reputation for neutrality. “People used to call us Data Switzerland,” says McGuigan. “Getting good information into the hands of policymakers and other key people is a value in itself, and you don’t have to have a particular point of view. People trusted that we were a good steward of information.”

up across the country, with the aim of bringing stakeholders together around a common vision, making better use of data, and aligning resources and support for investments that improve youth outcomes from cradle to career.²³

One of CYC's major initiatives CYC is called [Evidence2Success](#), which has been modeled, in part, on Communities That Care, a coalition-based strategy that helps community leaders identify problems within their community and prevent them by installing one or more proven practices. This approach has proven effective, based on rigorous evaluation and cost-benefit analyses.²⁴ The Annie E. Casey Foundation, a key funder of Evidence2Success in Providence, is testing the potential to scale the approach in additional cities.

Hand in hand with local officials, the leaders of Evidence2Success are currently in an 18-month planning process. "The best way to position an initiative for successful implementation is to do what Evidence2Success is doing: start by accessing local data to understand specific community risk factors, list available services, and highlight those that have no evidence of effectiveness," says Jennifer Mettrick, director of Implementation Services at the University of Maryland's Institute for Innovation & Implementation. "Then, using this data, they can begin gaining local community buy-in on the use of evidence-based practices to more effectively address their risk factors."

Use clearinghouses to identify interventions that work

Today, several clearinghouses provide critical information on proven interventions. Several are housed within federal agencies, such as the Department of Education's What Works Clearinghouse, the Department of Justice's CrimeSolutions.gov, the Substance Abuse and Mental Health Services Administration's National Registry of Evidence-based Programs and Practices, and the Department of Labor's new Clearinghouse of Labor Evaluation and Research.

In addition, there are philanthropically funded clearinghouses, such as Blueprints for Healthy Youth Development (described on the next page) and Safe and Sound, which reviews evidence-based social and emotional learning programs.

23 The Providence Children and Youth Cabinet is a member of the national StriveTogether network. StriveTogether works with communities nationwide to help them create a civic infrastructure that unites stakeholders around shared goals, measures, and results in education, supporting the success of every child, cradle to career, <http://www.strivetgether.org/>.

24 Results from a seven-state experimental trial involving 24 communities showed that within four years of adoption, community coalitions reduced the incidence of delinquent behaviors and of alcohol, tobacco, and smokeless tobacco use. Cost-benefit analysis conducted by the Washington State Institute for Public Policy concluded that, very conservatively, it costs \$991 per young person to implement Communities That Care for five years and leads to \$5,250 in benefits for every young person involved, http://www.sdrp.org/ctcresource/CTC_Fact_Sheet.pdf and <http://www.childtrends.org/wp-content/uploads/2011/10/Mobilizing-Communities.pdf>.

After assessing community needs, Evidence2Success will draw on [Blueprints for Healthy Youth Development](#)—a national clearinghouse of proven programs shown to effectively improve developmental outcomes in the areas of behavior, education, emotional well-being, health, and positive relationships—and select the interventions with the greatest likelihood of delivering results.

Every community wants the best programs available for its kids. Providence is modeling a rigorous, collaborative way to make this aspiration a reality.

Baltimore’s B’More for Healthy Babies uses evidence-based programs to reduce infant mortality

When the Baltimore City Health Department studied the city’s health outcomes, two figures in particular stood out: in 2007, compared to cities of similar size, Baltimore had the fourth-highest infant mortality rate in the nation, and 95 percent of Baltimore babies who died before their first birthday were black. The mortality rate for the city’s blacks was 15.5 per 1,000 live births, a level roughly on par with the countries of Colombia and Armenia.²⁵ The Baltimore City Health Department knew it had to do more address this enormous disparity.

In 2009, [B’More for Healthy Babies](#) was launched as a comprehensive city program to improve long-term health outcomes for families, particularly pregnant and postpartum women, infants, and children. The Baltimore City Health Department co-led the effort with the Family League of Baltimore, a nonprofit that coordinates and funds programs to strengthen the lives of children and families in the city.

At the time, a variety of public and private funders were spending a significant amount of money on home visiting programs designed to reduce infant mortality. B’More for Healthy Babies began by taking stock of current providers and outcomes. High-quality home visiting programs have been proven to have a range of positive impacts: improving maternal health, improving children’s health and development, increasing children’s readiness for school, reducing child abuse and neglect, enhancing parenting practices, and improving families’ economic self-sufficiency.²⁶ But not all home visiting practices and programs are equally effective. Rebecca Dineen, assistant commissioner for Maternal and Child Health at the Baltimore City Health Department (BCHD), explains, “We analyzed the nine home visiting programs in the city to find out what curricula they used, how they served participants, and how long they worked with moms. We found a huge variation and only one evidence-based model.”

In 2012, Baltimore began its transition to evidence-based home visiting services. It currently uses two services, Nurse-Family Partnership and Healthy Families America.

²⁵ The World Bank, “Mortality rate: infant (per 1,000 live births),” 2013, http://data.worldbank.org/indicator/SP.DYN.IMRT.IN?order=wbapi_data_value_2011+wbapi_data_value+wbapi_data_value-last&sort=asc.

²⁶ Ibid.

It happened that Baltimore's push for evidence-based home visiting practices coincided with a recent federal effort to increase the use of such programs. The Affordable Care Act's creation of the Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV) provides \$1.5 billion over five years to support quality programming for pregnant women and young children. This funding stream requires that 75 percent of the money be used to support evidence-based programs.

The fact that the federal program came along right after B'More for Healthy Babies had decided to focus on evidence-based practices offered a distinct advantage. "It really helped us make the case with our programs in Baltimore," says Gena O'Keefe, director of Healthy Community Initiatives at the Family League and senior associate with the Annie E. Casey Foundation. "We could tell [providers], 'If you're going to continue to work with us and get federal money down the road, you'll need to transition to one of those [evidence-based] models.'"

The MIECHV funds have provided the bulk of the resources to support this transition to evidence-based home visiting practice in Baltimore. Better yet, the transition has happened with leadership and support from the local private funders that support the broader work of B'More for Healthy Babies, such as CareFirst BlueCross BlueShield, the Annie E. Casey Foundation, The Barbara Bush Foundation for Family Literacy, the Abell Foundation, the Blaustein Philanthropic Group, the Straus Foundation, and the Stulman Foundation.

The city has also used data to target interventions where they will have the most benefit. "We have 9,000 births every year in Baltimore, and 5,000 to 6,000 of them are to women who are covered by Medicaid," says BCHD's Dineen. "But we only have 1,300 to 1,500 home visiting slots, and we don't anticipate ever having enough funding to reach everyone." So B'More for Healthy Babies has implemented a vulnerability index and a triage system to serve the people for whom the program can make the most impact.

B'More for Healthy Babies has developed a comprehensive approach that goes beyond home visiting. It improves the quality of care provided by physicians, nurses, social workers, and others who work with pregnant and postpartum women. And it works with birthing hospitals to educate mothers on how to avoid sleep-related deaths and conduct community outreach.

The implementation of B'More for Healthy Babies has coincided with a sharp decrease in infant mortality in Baltimore City. In 2012, the city reached the lowest infant mortality rate the city has ever recorded. The disparity between white and black infant mortality rates has also decreased significantly. Despite this, Baltimore City's infant mortality rate remains about 70 percent higher than the national average, suggesting considerable work still lies ahead.

#4 Budget for What Works

In Baltimore, B'More for Healthy Babies has taken shape within the context of a much broader shift toward spending on programs that get results, using one of the primary tools available to city leaders: the budget process.

In most cities—as well as in states and the federal government—the budget is a relic that typically reflects last year's levels of funding. City leaders get pressured to preserve the status quo; doing differently requires strong leadership.

Baltimore is taking a fresh approach, budgeting around outcomes that matter and programs that work. This common-sense way of budgeting is still rare today, but Baltimore's story can be instructional for other cities looking to make the shift.

A new way of budgeting in Baltimore dramatically changes how funding decisions are made

When former Baltimore Mayor Sheila Dixon hired Budget Chief Andrew Kleine in 2008, she had big changes in mind. “She saw the budget as a black box,” Kleine says. “She didn't understand how decisions were being made.”

Inspired by the outcomes-oriented budgeting process in Washington State (see sidebar on page 13, “[Investing in 'what works'](#)”), Kleine began to design a similar process for Baltimore. When Baltimore's current mayor Stephanie Rawlings-Blake took the helm, the [Outcome Budgeting](#) process came to life. The city released its first Outcome Budget in March 2010.

Instead of deciding funding levels by taking last year's budget and adjusting amounts up or down, Outcome Budgeting starts by identifying the outcomes the city seeks. It then identifies the services that most effectively and efficiently meet what residents want, allocates funds to provide those services, and works with agencies to meet their goals. Through this process, Baltimore has been able to increase funding for proven programs even during times of serious budget shortfalls.

As a first step to put Outcome Budgeting in place, Mayor Rawlings-Blake and her senior staff established the outcomes and goals the city would seek, focusing on six priority outcomes. The mayor and her staff then created six Results Teams

“One of the advantages of this is that the mayor is getting information about every single service, hearing input from the teams about how the service is performing, and making decisions based on how services help to achieve priority outcomes.”

ANDREW KLEINE, BUDGET CHIEF, BALTIMORE

composed of deputy department heads, a budget analyst, people from different disciplines, and—in an innovative move—a citizen representative. “Citizen members have proven to be some of the best,” says Kleine. “No one is their boss, so they can feel free to ask questions.”

On an annual basis, the Budget Office allocates a piece of the city's general

fund to each Results Team. Agencies develop proposals for each of their services and submit them to the appropriate results team. It's possible one agency may send proposals to multiple teams. The teams then confer with the agencies and evaluate the proposals with the help of budget analysts and a rating rubric.

Once the teams have assessed the proposals, they make recommendations to the mayor, who ultimately decides funding levels. "One of the advantages of this is that the mayor is getting information about every single service, hearing input from the teams about how the service is performing, and making decisions based on how services help to achieve priority outcomes," says Kleine.

Even in times of serious budget shortfalls, Baltimore has resisted across-the-board reductions and managed to increase funding for programs that showed evidence of effectiveness in areas such as youth violence prevention, job training, pedestrian safety, and maternal and child health.

The city also has found funds to invest in innovation. "One of the outgrowths of Outcome Budgeting is our Innovation Fund," says Kleine. "[It's] a way to invest in projects that deliver. We are mostly focused on those that have a payback with cost savings or revenue. That has brought forward good ideas to improve business processes and automate our functions. . . . We have to be able to deliver services at lower cost and still achieve good results."

To carve out funds for innovation, the city took a common-sense step many of its peers around the country have struggled to take: it eliminated services that did not demonstrate value, such as a program designed to mentor children of prisoners and a program to help neighborhoods with development projects. While well-intentioned, these programs were not getting results.

A new tool for government to pay for performance: Social Impact Bonds

Social Impact Bonds (SIBs) turn the traditional government funding structure on its head. Instead of defining an activity and contracting with a vendor to execute it, a SIB promises compensation only when certain target outcomes are achieved that result in net cost-saving for the government.¹

The SIB process begins when the entity launching the bond (generally government and nonprofit providers) identifies a key problem and evidence-based methods of preventing the problem (SIBs are particularly suited for areas where there are known interventions with a high probability of success). The program raises launch funds from private and/or philanthropic investors. It then delivers services. Independent evaluators rigorously measure outcomes. Depending on the level of performance and the savings realized for the government by improving outcomes, investors receive a rate of return on top of the repayment of their principal.

Pioneered by Social Finance UK, Peterborough was the first city to test SIBs, using them to reduce prisoner recidivism. Now, many US cities and states are exploring their potential. Here are two notable efforts:

In 2012, **New York City** launched the first SIB in the US. This SIB will fund services to about 3,000 adolescent men (ages 16 to 18) who are jailed at Rikers Island. The goal of the initiative, which will run from 2012 to 2015, is to reduce recidivism and its related budgetary and social costs.²

In **Fresno**, the California Endowment, a private foundation, has funded a two-year demonstration project to improve the health of low-income children with asthma and reduce the costs that result from emergency treatments. The goal of the project is to reduce emergency room visits by 30 percent and hospitalizations by 50 percent, and to yield a net savings of \$5,000 per child per year.³ If proven effective, this will lay the groundwork for launching a SIB, which would allow the intervention to scale to serve more youth.

New York and Massachusetts are the only states in the country that have launched SIBs, but seven more are receiving technical assistance from the Social Impact Bond Lab initiative at the Harvard Kennedy School, including Colorado/Denver, Connecticut, Illinois, Michigan, New York, Ohio, and South Carolina.

Although SIBs come with many implementation challenges, they offer many potential advantages. SIBs transfer risk away from government and taxpayers, since government is not on the hook for the payment if the outside organization fails to achieve the outcome. SIBs are a way for government to overcome the problem of silos, since pools of resources are re-oriented towards a single outcome. SIBs are also a way to scale effective interventions because they tap into larger pools of financing than cash-strapped cities typically have available.

1 Social Finance, "What is a Social Impact Bond?," <http://www.socialfinanceus.org/social-impact-financing/social-impact-bonds/what-social-impact-bond>.

2 Andy Feldman's Gov Innovator, "New York City's Social Impact Bond, the first in the US: An Interview with Linda Gibbs, Deputy Mayor for Health and Human Services, New York City," August 12, 2013, http://govinnovator.com/linda_gibbs/.

3 Nonprofit Finance Fund, "Asthma Management Demonstration Project in Fresno, CA Paves Way for Social Impact Bond," September 5, 2013, <http://payforsuccess.org/resources/asthma-management-demonstration-project-fresno-ca-paves-way-social-impact-bond>.

Recommendations

The cities highlighted in this paper are among those leading the way in using data and evidence to deliver better results and transform the lives of residents. As is evident from the examples, there is no single method for using data and evidence and no one path to innovation. However, we found some common threads in how leaders have been able to overcome the inevitable barriers, and put in place structures and processes to embed using data and evidence in decision making. Below are our recommendations for how to create a focus on data and evidence. They are intended for mayors and other leaders in city government, as well as for leaders in federal and state government and philanthropy as they seek to support cities in this important work.

Actions for city leaders

Prioritize outcomes from the top

In collecting data, most cities get stuck on outputs, like the number of residents served through a program, the number of staff with a particular qualification level, or the total amount of money spent on a given service. These types of measures are important, but they are not sufficient for understanding whether programs are having their desired impact.

Shifting a city's focus from outputs to outcomes takes leadership. The leaders we profiled often started by focusing on results in one or a handful of issues. For example:

- Baltimore's Mayor Rawlings-Blake has zeroed in on infant health.
- San Antonio's Mayor Castro has championed kindergarten readiness.
- New York City Mayor Bloomberg has prioritized measuring and alleviating poverty.

While cities can use data and evidence to tackle nearly any issue, leaders must choose a focus.

Next, they sought to ensure that attention to outcomes became the new normal. In Baltimore, the Mayor's office wants to know about impact when considering funding requests. "Today, we can translate how many students are serviced by \$100,000 in investment, and measure their progress toward school readiness," says Jonathan Rondeau of the Family League of Baltimore City. "Having the capability to connect invested dollars to the reduction in the achievement gap is more compelling than simply providing nominal service data." Meanwhile, in New York City, Mayor Bloomberg has brought "a passion for ensuring there would be an improvement . . . and he makes us accountable for seeing these outcomes," says Linda Gibbs, deputy mayor for Health and Human Services.

Build the capacity and culture to sustain focus on data and evidence

Strong leadership from top city leaders alone is not sufficient to ensure that a results orientation will become the norm. To overcome inertia, consistent pressure and clear communication are needed, not just by a city's mayor or chief executive but at other levels as

well. Sophie Dagenais, director of the Annie E. Casey Foundation's Baltimore Civic Site, explains, "You have to have managers who are prepared to heed the call to action and do what it takes to implement new approaches that often require major changes and difficult choices. Staff need to be equipped with the tools and the authority to change both how they work and how they spend their scarce resources." In New York City, for example, Mayor Bloomberg has demanded that agency heads ensure a focus on data and evidence throughout the sprawling city bureaucracy. "You've got to say it, mean it, and follow up on it," says New York City's Gibbs.

“Staff need to be equipped with the tools and the authority to change both how they work and how they spend scarce resources.”

SOPHIE DAGENAIS, DIRECTOR, ANNIE E. CASEY FOUNDATION'S BALTIMORE CIVIC SITE

Holding agency leaders accountable for results is important, but not enough. According to CEO Executive Director Kristin, focusing on results "is increasingly becoming a part of the culture and expectations throughout government. But what more can be done to make sure that people have the capacity to do it?"

The answer, in Denver, New York, and in the other cities we studied, is investment in developing or hiring people with the requisite capacity, capabilities, and orientation to use data and evidence to get better results. To do deep data analysis and research, we found cities mostly relied on outside evaluators or universities. However, to fully develop and sustain their data orientation, cities need their own staff to understand and act on the findings of outside experts.

In Baltimore, CitiStat built a capable staff by recruiting recent graduates from business schools, law schools, and public policy programs, and incentivizing them with fast-track promotions if they performed well—leading some to view these analysts as what former CitiStat Director Matt Gallagher termed "the Jedi Knights of City Hall." Others have focused on improving the data analysis skills of existing staff. When Miami-Dade introduced "data chats," they also equipped school administrators and teachers with the knowledge and methods they needed to thrive in the new system. For its part, London's Project Oracle has focused on training government and nonprofit leaders on the value and use of data so that they can embed a consideration of evidence into their funding and program decisions.

Build the systems and processes required to determine and invest in what works

Motivated and talented people must go hand in hand with systems and processes that institutionalize use of data to steer improvement and inform decisions over time. This does not necessarily mean that cities need to invest substantial sums

to build fancy data platforms. Most of the examples we highlight are innovative in process rather than platform. For example:

- Leaders in Miami-Dade hold quarterly Data/COM conversations with principals of the district’s lower-performing schools to diagnose and discuss trends in the data.
- Baltimore’s CitiStat, which has been copied in many cities, still uses spreadsheets. One of its primary appeals, according to Gallagher, is its low-cost use of off-the-shelf software.
- Some cities have built open data portals in the last several years that aggregate a range of civic data sets and make them publicly available in a user-friendly format.

What’s critical is not merely that the data are available but that they are used. For some of the initiatives we highlight—such as New York’s effort to combat chronic school absenteeism and some of work by Family Services of Baltimore City to improve youth outcomes—that meant developing agreements that allowed data collected by one city agency to be shared with other departments or even with external partners.

To better understand what constitutes strong evidence and create consistency in the interpretation of data and evidence in funding decisions, cities can learn from and adopt existing standards and frameworks. Fortunately, clearinghouses exist that identify programs that have demonstrated results (see the sidebar [“Use clearinghouses to identify interventions that work”](#) on page 33). And frameworks have been developed to help leaders sort out this complicated question of what meaningful evidence is (see the sidebar [“How much evidence do you need to know what works?”](#) on page 30). These tools allow users to assess when a model’s evidence is at a promising but early stage, and when it has been tested more thoroughly and can be scaled with confidence.

Baltimore’s effort to transition to evidence-based home visiting programs demonstrates how a city can use such a framework to select the most effective providers. To inform its funding decisions, the city considered the strength of several evidence-based national models and looked at how different providers have been able to replicate their models with fidelity in other cities. Likewise, in San Antonio, Pre-K 4 SA is using rigorous evaluations conducted elsewhere to select local providers to deliver programs with the best chance of getting results.

Finally, cities should establish rules and processes that ensure high-performing programs will gain support while underperforming programs lose support. This means cities must be prepared to invest in program evaluation and set an expectation that funding could be terminated for programs that do not achieve their intended results. As we saw in the cases of New York’s CEO and San Antonio, leaders set aside significant funds for evaluation. What’s more, New York’s CEO has already defunded seven programs that did not meet performance standards. San Antonio has also established an expectation that underperforming Pre-K 4

SA providers will be defunded. And Baltimore has built a consideration of results into its budgeting process. Ultimately, shifting resources away from less-effective programs and toward more effective ones is essential to making progress on social challenges.

Find the right organizational structure to sustain change

Innovation needs a home. Almost all of the cities we highlighted have given careful thought about the right place to locate their innovative efforts in the use of data and evidence, coming to a range of different answers. In some instances, this involved cross-agency partnerships, such as the one between the Baltimore City Health Department and the Family League of Baltimore that jointly launched B'More for Healthy Babies, or ProvPlan, which functions as a public-private partnership. There can be advantages to locating a city's innovation initiatives outside city government itself, including better access to philanthropic funds, stronger interagency partnerships, and a better chance of sustaining the effort beyond the lifetime of the current administration.

Even when such efforts are within city government, it is vital they work across agency silos and effectively engage external partners. For example, in New York City's CEO, Mayor Bloomberg created a new unit to develop, test, and scale interventions that work. Its design involved partnering with strong external evaluators who brought objectivity and depth of expertise to the work. Reflecting on this structure, Deputy Mayor Gibbs says, "What's unique (about CEO's structure) is that it has created a new kind of capacity to identify and support the development of promising solutions, foster dialogue and support agencies as they implement, hold the providers accountable for achieving results, and determine what approaches to scale up and, importantly, what to scale back." She adds, it's an approach that could be used beyond poverty alleviation. Not surprisingly, cities across the country are starting to show interest in creating their own CEO-type function or agency.

Similarly, Project Oracle in London has involved a large-scale cross-sector partnership, including different government offices, universities, nonprofit providers, and consulting firms. Primary functions of its "youth evidence hub" are to help bridge research and practice by pairing researchers with nonprofit providers and providing training to government officials. Providence is another example of a city where public-private partnerships—from ProvPlan to the Children and Youth Cabinet—have helped sustain a focus on using data and evidence over multiple mayoral administrations.

Actions for federal, state, and philanthropic partners to support cities

The following recommendations are aimed at federal, state, and philanthropic leaders, all of whom can play a critical role in helping cities advance their use of data and evidence.

Fund local data infrastructure and know-how

To make wiser decisions, cities need to have reliable access to data at a granular enough level to identify and prioritize needs and measure program effectiveness. Building or buying the necessary data platforms and hiring people to use them can be costly, but some cities get started with their own seed funding. For example, Baltimore's CitiStat was established with an investment of just \$20,000 in computers and a room in City Hall.²⁷

While cities should be prepared to invest at least some of their own funds in such infrastructure, external resources may be necessary to fund data systems and hire expert analysts. In Providence, for example, Bloomberg Philanthropies is contributing \$5 million to fund the measurement and analysis of early language learning among toddlers in low-income families through the Providence Talks program. Bloomberg Philanthropies is also investing \$1 million to build an open-source predictive analytics platform for Chicago.²⁸

Federal and state money is also helping to build local data infrastructure. The US Department of Education's Race to the Top competition made data systems a key criterion for funding. And the American Recovery and Reinvestment Act awarded states over \$250 million to design and implement data systems to track students' progress from pre-kindergarten to the workforce.²⁹ Continued investment of this sort, not only in education but across all domains, will accelerate cities' ability to transform their programs and services through the use of data and evidence.

Continue to build the pipeline and support the replication of promising solutions

For more cities to invest in what works, the menu of promising models must continue to expand. A strong cadre of programs and practices with evidence behind them will make it increasingly feasible for cities to sell the idea of acting in a results-oriented way both inside city government and with residents. Federal and state governments and philanthropy have begun these efforts through initiatives such as the Social Innovation Fund (SIF), Investing in Innovation, state-level grants and programs to incentivize cities to invest in evidence-based programs and/or evaluation, and private foundation support of grantees.

The federal SIF grant to New York's CEO demonstrates how replication funding can spread results from city to city. In this instance, CEO, in partnership with the Mayor's Fund to Advance New York City, secured SIF grants of \$5.7 million per year for five years to replicate its most effective anti-poverty programs in eight urban areas across the country. In those locations, more than 30 local and national

27 Behn, Robert. "What All Mayors Would Like to Know About Baltimore's CitiStat Performance Strategy," (IBM Center for the Business of Government, 2007), <http://www.businessofgovernment.org/report/Behn-CitiStat>.

28 Bloomberg Philanthropies 2012 -2013 Mayors Challenge, <http://mayorchallenge.bloomberg.org/index.cfm?objectid=7E9F3B30-1A4F-11E3-8975000C29C7CA2F>.

29 Statewide Longitudinal Data Systems factsheet, 2009, <http://www2.ed.gov/programs/slds/factsheet.html>.

philanthropic funders have contributed more than \$50 million to bolster the SIF grants. MDRC supports the effort as the lead evaluation partner and as a provider of technical assistance on program implementation and financial management. This type of investment can catalyze city leaders to adopt and scale proven programs.

Help leverage existing research and support evaluation

As more cities engage in “horizon scanning” to see what models being used elsewhere may work for them, it is increasingly important for city leaders to have access to reliable sources of information on what works. Already, the What Works Clearinghouse and foundation-funded databases are providing this service in some areas. Expanding this work will enable more cities with limited time and resources to avoid reinventing the wheel.

Additional research and evaluation are also needed to address gaps in the evidence base, but the cost of evaluation is prohibitively high in too many cases. While it has been possible for New York’s CEO to set aside 5 percent of its budget for evaluation, and Pre-K 4 SA has set aside about 3 percent of its budget over the next eight years, many city leaders might balk at such expenditures, particularly in a time of budget cuts. It’s worth noting some promising efforts to find lower-cost ways to evaluate models using existing administrative data. The Coalition for Evidence-Based Policy in Washington, DC, is leading much of this work.³⁰ Government leaders and philanthropists can help this effort by supporting experiments to test new methods of assessing more quickly and inexpensively when a program is working.

Fund technical assistance in city government

As the layer of government closest to the everyday problems people face, city officials provide many of the services people rely on and expect. Embedded support, in the form of research experts, consultants, and dedicated fellowships, can help translate very complicated information and train city officials in the language of data and evaluation. One such initiative is IBM’s Smarter Cities Challenge, a \$50 million grant program that pairs the company’s top talent with city leaders to analyze a city’s data and systems and help officials make better choices. For example, IBM is supporting Louisville Metro Government’s effort to create a data-driven strategy to identify and reduce asthma risk in the city (see the sidebar “[Spotlight on two early-stage initiatives: Providence Talks and Propeller Health](#)” on page 27).³¹

Academia is also a great source for technical know-how. The Harvard Kennedy School recently established a Social Impact Bond Technical Assistance Lab to support cities and states interested in pursuing this approach (see the sidebar

30 Statement of Jon Baron before the House Committee on Ways and Means, Subcommittee on Human Resources, July 17, 2013, <http://coalition4evidence.org/wp-content/uploads/2013/07/Testimony-before-Ways-and-Means-HR-subcommittee-7.17.13-Jon-Baron.pdf>.

31 “Louisville, United States,” http://smartercitieschallenge.org/city_louisville_United_States.html.

[“A new tool for government to pay for performance: Social Impact Bonds”](#) on page 38). As part of its research efforts, the lab provides pro bono technical assistance to state and local governments considering the pay-for-success approach.

The Path Forward

In conducting this research, we had the opportunity to speak with dozens of people in cities around the country at the forefront of using data and evidence to improve performance and outcomes. We are inspired by the number and capacity of these leaders and the volume and variety of innovations underway. We are also impressed by the cities, such as Providence and Baltimore, where a focus and evolving approach to use data and evidence has persisted despite changes in city leadership.

Propelled by the two trends we discussed at the outset of this paper—increased government attention to finding and funding what works and the use of technology to collect, understand, and act on data—these examples of innovation from around the nation allow us to envision a broader shift in which more and more cities find ways to use data and evidence more effectively to get better outcomes for their residents.

What if all cities worked with their residents to identify priorities, looked both internally and externally to understand what data and evidence existed regarding models to address these challenges, built and implemented interventions tailored to their needs, engaged in a cycle of continuous improvement to understand what worked and what did not, and invested accordingly? The case studies presented here demonstrate that this is not a far-fetched dream, but a real possibility. Cities can work smarter for their residents, and indeed, they must.

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Acknowledgments

Results for America very much would like to thank everyone who participated in the development of this report: the thoughtful and insightful team from The Bridgespan Group who authored and edited the paper, especially Laura Lanzerotti, Jeff Bradach, Stephanie Sud, Henry Barmeier, and Bradley Seeman, as well as the many local government and nonprofit leaders who have contributed their experience and insights to the content of the report.

Results for America, an initiative of America Achieves, also wants to thank Bloomberg Philanthropies for its generous support for the research, production, and release of this paper.

Appendix

Glossary of Terms

Here are definitions for terms that are commonly used in everyday language, but have particular technical meaning in the context of this paper.

City: Primarily the municipal government of an urban area. This term may also include the municipal government's nonprofit and private partners in designing, funding, and implementing public services.

City leader: An elected official or appointed civil servant who works in a municipal government.

Data: Measurements or statistics that quantify an output or outcome.

Data-based: With reference to decision making, the condition of making judgments on the basis of systematically collected empirical facts or statistics rather than anecdotal stories or intuition.

Evaluation: The systematic assessment of how effectively a given program achieves its desired outcome, often conducted with a controlled experimental design.

Evidence: Research studies and evaluations that collect data in the context of a systematic and rigorous experimental design and draw conclusions regarding program effectiveness.

Evidence-based: With reference to social programs, the condition of having one or more rigorous evaluations verify that the program delivers a significant, positive, and lasting benefit for participants and that the results are attributable to the program itself rather than another factor.

Model: A detailed set of activities that follows and implements a specific intervention designed to improve one or more social outcomes.

Outcome: A measure of an enduring change in a program beneficiary or targeted area (e.g. a new attitude, improved knowledge, acquired skills, educational attainment, getting and holding employment).

Output: The products of an organization's efforts, often expressed in terms of the volume of participants served or activities completed.

Performance management: The systematic collection of data regarding program performance, which may include data on beneficiaries, outputs, outcomes, staff, costs, revenues, or other metrics relevant to the operation of a program or service.

Program: See Model.

Provider: The organization or agency that implements a social program.

Results: See Outcome.

Results orientation: An approach to operating social programs that prioritizes the use of data and evidence and continuous improvement of practice to demonstrably boost target outcomes.

What works: Refers to one or more (non-specific) programs that are evidence-based.

Overview of City Innovations Featured in This Report

#1 Measure What Matters

Miami-Dade County Public Schools uses data to improve academic performance and graduation rates

Key elements:

- Over the past decade, [Miami-Dade County Public Schools](#) (M-DCPS) has developed a single coherent system for tracking progress and investing in continuous improvement.
- Strategic plans at all levels (district, individual school, departments within each school) are linked to scorecards for each administrator, district leader, and principal. These scorecards, which summarize both academic and operational performance data, are the centerpiece of regular “data chats,” at which administrators, principals, teachers, and students set goals and map strategies to achieve them.
- To ensure data is shared and used, teachers and administrators receive training on how to use the district’s comprehensive data warehouse; parents and students can access relevant portions of the data through a web portal.

Results to date:

- Over the last several years, M-DCPS ranked among the top districts in Florida in improving test scores among Hispanic and black students.
- Graduation rates for Hispanic and black students increased faster in Miami-Dade than in other urban districts nationally, increasing 14 percentage points from 2006 to 2009.
- In 2012, the district won the prestigious Broad Prize for Urban Education, which recognized Miami-Dade as the largest urban area making the greatest progress in raising student achievement.

Denver Public Schools uses data to drive continuous improvement

Key elements:

- [Denver Public Schools](#) (DPS) implemented a portfolio strategy in 2005, creating a laboratory to intentionally test different models and spread best practices throughout the district.
- The district gives schools significant autonomy to make decisions on staffing, curriculum, instructional methods, technology, and many other aspects of operations.
- The district’s central office evaluates all schools on the district’s School Performance Framework to determine which models work best and when to turn around, replace, phase out, or close down models that are not getting results.

Results to date:

- Since the launch of the portfolio strategy, DPS students have shown more academic growth on state assessments than their peers across the state, more than in any other large school district in Colorado. District proficiency rates have risen in reading (14 percent), writing (12 percent), math (23 percent), and science (14 percent). By comparison, statewide reading scores increased just 2 percent and math scores 5 percent, while statewide writing and science scores each decreased by 1 percent.

New York City uses data to tackle chronic school absenteeism**Key elements:**

- Launched in 2010, the [Mayor's Interagency Task Force on Truancy, Chronic Absenteeism and School Engagement](#) brings together a dozen city agencies, over 20 community-based organizations, and several public-private partnerships.
- The Task Force aims to reduce chronic student absenteeism (missing 10 percent or more of school days), a key cause of poor academic performance and high drop-out rates.
- Innovative data sharing agreements have enabled the Task Force to collect, analyze, and act on real-time attendance, behavior, and coursework data, targeting interventions where they are needed most.
- The Task Force is piloting a number of initiatives, including new models for connecting schools to local resources and strengthening parent and student engagement.

Results to date:

- Early evaluation results are positive. For example, students who participated in one of the interventions, Success Mentors, gained over 80,000 days of additional school during the 2012-2013 year, as compared to students who did not participate.

#2 Build the Evidence Base**New York City's Center for Economic Opportunity identifies and scales what works to fight poverty****Key elements:**

- Launched by Mayor Bloomberg in 2006, the [Center for Economic Opportunity](#) (CEO) is a special unit within the Mayor's Office focusing on fighting the cycle of poverty and driving systemic change across city agencies toward better results.
- CEO designs, pilots, and oversees rigorous evaluations of each program to determine their effectiveness in reducing poverty, encouraging savings, and empowering low-income workers to advance in their careers. The unit has developed, implemented, and evaluated more than 50 programs in partnership with 28 city agencies and nearly 200 community-based organizations.

- CEO has dedicated more than 5 percent of its \$100 million budget to evaluation in order to understand and act on evidence of what works, selectively scaling programs with the strongest results and discontinuing programs that do not work.

Results to date:

- CEO has facilitated more than 30,000 job placements and 10,000 paid internships, and supported the enrollment of over 10,000 people in college or occupational training.
- CEO has helped individuals access over \$100 million in additional tax credits.
- Through the federal government’s Social Innovation Fund, CEO has also raised \$85 million from public and private sources to replicate five of its most successful programs around the country.

Project Oracle establishes itself as London’s “children’s and youth evidence hub”

Key elements:

- Launched in early 2013, this cross-sector partnership brings together a number of partners, including the Greater London Authority, the Mayor’s Office for Policing and Crime, the UK’s Economic and Social Research Council, the nonprofit Nesta, and London Metropolitan University. The Social Innovation Partnership, a social sector enterprise, coordinates the effort.
- [Project Oracle](#) provides research capacity and training to nonprofits to help them develop their evidence base, and synthesizes evaluation results across a range of organizations and interventions.
- Project Oracle trains public officials in the use of evidence in contracting for services.

Results to date:

- In less than a year of full operation, 120 youth agencies have self-assessed the strength of their evidence base or been trained in evaluating program impact. Fifty-four agencies have submitted completed evaluations in an “evidence competition” to gain recognition for their work.

#3 Invest in What Works

San Antonio’s new pre-K initiative seeks to use evidence every step of the way

Key elements:

- Convened by Mayor Julián Castro in 2011, a blue ribbon task force of business leaders, school superintendents, and other education professionals identified investment in high-quality pre-kindergarten as a key priority.
- Voters passed a \$28 million tax increase to fund the initiative over eight years.
- Initiative leaders conducted a national bidding process to choose curricula and selected two evidence-based models for implementation.

- To ensure providers implement their models with fidelity and deliver impact, San Antonio will spend almost \$1 million to conduct ongoing evaluations. The city plans to use the results to make funding decisions—deciding whether to continue programs on the basis of their outcomes.
- [The program](#) was launched in the fall of 2013; when fully implemented, 3,700 four-year-olds will be educated annually and 22,400 will be served over an eight-year period.

Results to date:

- Too early to be determined.

Providence intervenes at the community level to get better outcomes for youth

Key elements:

- Led by the [Providence Children and Youth Cabinet](#), with funding from the [Annie E. Casey Foundation](#), [Evidence2Success](#) is part of a larger effort to support healthy youth development from cradle to career.
- This effort is modeled after Communities That Care, a coalition-based intervention strategy that has proven highly effective in rigorous evaluations and cost-benefit analyses.
- Evidence2Success has started assessing local data to identify community risk factors and needs. The next step will be to use a national database of evidence-based programs—called Blueprints for Healthy Youth Development—to select and replicate programs proven to address these needs.

Results to date:

- Too early to be determined.

Baltimore's B'More for Healthy Babies uses evidence-based programs to reduce infant mortality

Key elements:

- The Baltimore City Health Department and the Family League of Baltimore, a nonprofit organization, launched [B'More for Healthy Babies](#) in 2009, offering a comprehensive range of services for pregnant and postpartum women, infants, and children to improve long-term health outcomes.
- In 2012, B'More for Healthy Babies led a citywide transition to evidence-based home visiting practices, becoming the first jurisdiction in the country to do so.
- Baltimore shifted funding from an array of home visiting providers and practices to two models with the most evidence of success, and implemented a triage index, targeting interventions where they are likely to have the most positive impact.
- The effort has been buoyed by federal funding through the Affordable Care Act's Maternal, Infant, and Early Childhood Home Visiting Program, which

has provided \$1.5 billion over five years to support quality programming for pregnant women and young children.

Results to date:

- The implementation of B'More for Healthy Babies has coincided with a sharp decrease in infant mortality in Baltimore City. In 2012, the city reached the lowest infant mortality rate the city has ever recorded. The disparity between white and black infant mortality rates also decreased significantly.

#4 Budget for What Works

A new way of budgeting in Baltimore dramatically changes how funding decisions are made

Key elements:

- Baltimore City launched its [Outcome Budgeting](#) process in 2009, budgeting by priority outcomes (like better schools and safer streets) rather than by departments.
- For each outcome, the city created Results Teams of department officials, technical experts, budget analysts, and residents.
- The goal is to strategically direct more resources to the programs and services that are most effective at achieving the city's outcome goals, and to de-fund programs that are underperforming.

Results to date:

- Even in a time of serious budget shortfalls, Baltimore has moved away from across-the-board reductions and has been able to increase funding for programs that have demonstrated results, eliminated services that did not, and allocated resources to an Innovation Fund.

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