

Harnessing Data Analytics to Improve the Lives of Individuals and Families
A National Strategy
July 12, 2020 Discussion Draft

Summary and Background

Fragmented federal program structures and laws create enormous barriers to effective coordination across government agencies and levels of government. The next administration can advance the nation's health and economic well-being and improve the effectiveness of taxpayer investments by creating the enabling conditions for federal, state, and local decision-makers and managers to adopt modern data analytics tools and practices.

For officials working inside government agencies, it's no secret that government programs continually underperform because they can't talk to one another. The COVID-19 crisis has exposed the larger public that governments at all levels are ill-equipped to integrate and analyze the wealth of data they hold on health, employment, food insecurity, housing, social services, education, criminal justice, business, and other government services.

Imagine if state and local agencies had been able to integrate data across separate systems when the pandemic began. They would have understood – much more quickly – the social and economic factors that put individuals at greatest risk for contracting COVID: low-income, Black and Hispanic, living in intergenerational homes, reliant on public transportation, and working in service industries. Looking ahead, integrated data and analytics could help state and local governments speed the nation's economic recovery by answering critical questions: Who's been hardest hit by the pandemic? What services and benefits are they receiving now, and what's the best mix of services and benefits to help them get back on their feet? What economic development strategies are best suited to the needs of particular communities facing different challenges?

These pandemic-related questions are not the only ones that governments at all levels must answer if they are to regain the public's trust. With integrated data and stronger analytics and evaluation, government agencies and their service delivery partners could be continuously learning: What populations are served by multiple programs? How could integrated enrollment and case management processes improve outcomes and improve efficiency? Who is receiving services and benefits they don't need or are not eligible for? What interventions and innovations are most effective? What prevention measures (e.g., housing the homeless) result in the highest return on investment by avoiding negative outcomes that have large downstream costs? What providers are achieving the best outcomes for at-risk populations? These are just a sampling of key questions every level of government should be seeking answers to.

It is currently no one's job in the federal government to understand the challenges that state and local governments face in harnessing data, analytics, and evaluation to improve the impact of funding they receive from hundreds of federal grant programs. Legislation is not needed to remedy this; it could begin to change with a stroke of the President's pen.

In early 2021, the President should issue a Presidential Memorandum, developed in collaboration with state and local partners and outside experts, to create the enabling conditions for rapid modernization of federal, state and local data, analytics and evaluation capacity. The President's memo would lay out national goals and a five-part implementation strategy:

- (1) Establish a White House Data and Analytics Working Group led by senior White House and OMB officials and supported by a task force. The working group and task force would include senior federal agency and state and local government officials as well as outside experts who understand the needs, challenges, and potential solutions to improving state and local capacity.
- (2) Set new expectations for data use and provide funding and incentives through regulatory and administrative reforms, starting with a new expectation that states and localities will use data and analytics to improve coordination and effectiveness of federal programs. Clarify that a portion of existing grant funding streams may be used for this purpose (absent a legal prohibition), and allow federal Medicaid funds to support integrated data and analytics to better serve vulnerable populations. Federal agencies would streamline and standardize reporting to reduce unnecessary burden. To create accelerators, data-focused state and local governments could participate in "Outcome-based Accountability Pilots" to help develop outcome-focused metrics and identify unnecessary compliance reporting.
- (3) Provide technical assistance on key data-related issues, such as best practices on how to share data while protecting privacy and how to utilize open source software that reduces reliance on costly vendor solutions.
- (4) Build expertise using personnel exchanges that bring essential state, local, academic and technology perspectives and skills into the federal government and creating opportunities for federal staff to strengthen their expertise by working in state and local government, academia, and the tech industry.
- (5) Develop legislative proposals based on an analysis of federal, state, and local barriers and capacity gaps that call for legislative action. The White House should work with Congress to devise coherent legislative policy and funding strategies, in place of the fragmented policies set by different committees that currently exacerbate federal, state and local data challenges.

Challenge and Opportunity

The pandemic has exposed the dramatic, serious deficiencies in state and local data and analytics capacity that have life and death consequences and far-reaching economic impacts. These deficiencies are an outgrowth of Congress' decades long failure to prioritize data infrastructure modernization in many federal programs, and of the Executive Branch's failure to coordinate the administrative policy levers that would help states and localities modernize their data capacity using existing funding streams.

Obsolete data systems and lack of data, analytics, and evaluation capacity at the federal, state and local levels are major impediments to improving the nation's health and economic well-being. Through the Trump administration's Federal Data Strategy and the Foundations for Evidence-Based Policymaking Act of 2018, the federal government has barely scratched the

surface, focusing on programs operated directly by federal agencies. It has yet to focus on the challenges that state and local governments face when they administer federal programs. In 2019, the federal government allocated over \$750 billion to state and locally administered programs, primarily to serve vulnerable populations; that level will more than double in 2020 after including temporary COVID-related funding.

Separate federal programs have separate IT systems at the state and local level that can't talk with each other, due to both technological shortcomings and real or perceived barriers to data sharing. Many systems use obsolete code from the 1960s and cannot meet changing needs and volume surges. Despite technology advances that are pervasive in industry, few states and localities have built robust capacity to integrate and analyze data across programs. This capacity is essential to improve program coordination, more effectively target services to those in greatest need, weed out fraud and abuse, measure outcomes, evaluate what works, and create data tools to help service delivery partners and the public make better choices.

The federal government bears responsibility for many of the impediments to improving state and local data, analytics and evaluation capacity. These include:

- Lack of a senior executive branch official or a defined function that is responsible for understanding state and local challenges and coordinating the varied federal policy levers that would help states, localities and service providers strengthen their data and analytics capacity.
- Confusing statutes, regulations, and administrative requirements that deter data-sharing, particularly health data governed by the Health Insurance Portability and Accountability Act (HIPAA) and education data governed by the Family Educational Rights and Privacy Act;
- Budgetary and organizational structures that reinforce silos, undermine cross-program coordination, and stymie efforts to build common data and analytics infrastructure, as described in a recent [Brookings](#) article¹. For example, despite growing bipartisan interest in addressing social determinants of health for low-income populations, the federal government has not issued guidance to help states and localities integrate and analyze health and social services data.
- An over-emphasis on reporting procedural compliance rather than outcomes and evaluation findings that would help programs improve. This is a universal complaint from state, local, and non-profit grantees that could be addressed through customer-focused implementation of the Paperwork Reduction Act.
- Lack of clarity about ways that existing program funds may be used to build data and analytics capacity, including training for staff to increase data literacy.
- Uneven investment in modernized data capacity. (Only a few federal programs – such as Education's State Longitudinal Data Systems and HHS' health IT initiatives-- have provided significant funding and strong leadership.)

As part of the President's Management Agenda, the federal government is currently implementing a number of poorly coordinated efforts to improve the capacity of *federal* agencies to use data, analytics and evaluation to improve operations and evidence-based decision-making. (See Appendix A.) Very few of these efforts are designed to help *states and localities* strengthen their data integration, analytics and evaluation capacity. *None of these*

¹ Stuart Butler, Timothy Higashi, and Marcela Cabello (2020), [Budgeting to Promote Social Objectives](#) – A Primer on Braiding and Blending

existing initiatives is capable of having a significant national impact if it is not integrated into a coherent strategy that equips states, localities, and front-line providers to effectively address the needs of communities, families, and individuals.

As proof points for the types of state and local data and analytics capacity that should exist throughout the country, there are some state and local exemplars that now use sophisticated data infrastructure and analytics to improve their decision-making. Washington State, which was one of the first states to build integrated data capacity to support health and social services research, has been able to use its data to quickly understand and implement a strong response to the pandemic. South Carolina and Allegheny County, PA also have robust integrated data and analytics capacity that can address a broad range of policy-relevant questions. Other states, such as California and Rhode Island, are collaborating with policy labs at academic institutions that conduct evaluations and analyze sensitive government data to answer important questions identified by government policymakers. Many state and local governments are trying to learn from these examples, but most face challenges beyond their control, especially the *perceived* lack of funding and confusing restrictions on data-sharing.

Technology solutions developed by academics and technology firms now make it possible to integrate data from multiple systems relatively quickly and affordably. The Coleridge Initiative's [Administrative Data Research Facility](#) provides a secure, privacy-protected platform for linking data for research and analytics, which is available to governments through licensing agreements. Sonoma County, California teamed up with IBM to launch the Accessing Coordinated Care and Empowering Self-Sufficiency ([ACCESS](#)) initiative, which created a data integration platform that three additional California counties are now using through licensing agreements. By integrating data across all safety net programs, the county can provide rapid, coordinated case management to address the complex needs of its most vulnerable populations.

During the Obama and Trump administrations, the federal government implemented innovative cross-agency data-sharing initiatives that could serve as blueprints for future efforts involving state and local governments. For example, the Obama administration launched the [College Scorecard](#), a ground-breaking data tool that shows policymakers and consumers the average earnings of students attending each federally supported higher education institution. The earnings outcomes were created by linking – in accordance with privacy requirements -- student-level data from Education's federal student aid database with taxpayer income data held by the Internal Revenue Service. Using cross-agency data-linkage techniques with similar privacy protections, consumer report cards could be developed for other government-funded services, such as vocational training and addiction treatment programs.

Philanthropy is actively supporting numerous non-federal data initiatives and affinity groups that a new federal initiative can leverage. These include a State Chief Data Officer Network at Georgetown's Beeck Center, Results for America, What Works Cities, the Data Coalition, the Center on Rural Innovation, the Coleridge Initiative, Actionable Intelligence for Social Policy, and NGA data initiatives. Some of the national foundations involved are Schmidt Futures, Gates, Ballmer, Markle, AE Casey, CZI, and Sloan.

Using the above as building blocks, the White House can kick-start a coordinated, supercharged, high-impact and bipartisan initiative in collaboration with federal agencies, state and local leaders, philanthropy, and experts from academia and industry. A well-managed initiative could lead to measurable results within the first year. For example, by proactively helping states, counties and cities utilize low-cost data integration and analytics platforms to get a clear picture of the pandemic's impact, state and local governments would be able to target services to speed economic recovery and protect the health of their most vulnerable residents. Within three to five years, this initiative could produce more dramatic improvements, since the same infrastructure and technology solutions developed to tackle near-term priorities can be used over and over to answer pressing questions across a broad range of government programs.

Plan of Action

To overcome longstanding bureaucratic obstacles and devise innovative approaches for working with state and local leaders across a range of programs, this initiative will require high level leadership from the White House and OMB. A Presidential memorandum, issued by March of 2021, can provide a clear charge to senior leadership in the White House, OMB, and federal agencies to develop and implement – in collaboration with state and local officials – a set of coordinated actions to strengthen government capacity at all levels to use data and analytics to improve effectiveness. The memo should outline the following key actions, which would utilize a range of policy and administrative levers:

(1) Establish a White House Data and Analytics Working Group, led by a high-profile White House office (OVP, DPC or NEC) and OMB. OSTP should contribute its expertise in data science, technology, and innovation. Membership should include senior officials from federal agencies as well as representatives from state and local government. The Working Group should be supported by a Task Force comprised primarily of seasoned career civil servants from OMB, federal agencies, and state and local governments, which can draw upon the best expertise in government, academia, and the private sector. Each federal agency should designate a lead attorney to coordinate and expedite actions requiring a legal review. The Working Group and Task Force should identify:

- Key questions, or *types* of questions, that federal, state, and local governments should be able to answer with high quality data, analytics and evaluation so that they have actionable information to improve government decision-making. (See Appendix B for illustrative questions.)
- Significant barriers -- particularly those stemming from federal policies and practices -- that impede adoption of modern approaches on data.
- Modern technologies, governance, and process reforms that will enable governments to quickly and efficiently answer these questions.
- Criteria for assessing the adequacy of government data and analytics capacity (e.g., data quality, processing time, privacy and security, interoperability, data accessibility, cost) which can be used to assess capacity and inform improvement strategies.
- Key federal policy levers that, if coordinated, can create the enabling conditions to modernize state and local data, analytics and evaluation capacity. These include program-specific and government-wide regulations, legislation, funding, and administrative

reforms affecting IT investments, privacy and data-sharing, paperwork reduction, grants and financial management, evaluation, budget, and staff training policies.

- Success measures for assessing the impact of this initiative, including its impact on the coordination and effectiveness of services and benefits to individuals and families.
- Actions, including #'s 2-5 below, to be implemented in close coordination with agency general counsels to create aligned policies and principles across federal agencies.

This initiative would be a central pillar of the President's Management Agenda to ensure federal management initiatives are fully aligned with programmatic priorities that involve state and local governments.

(2) Set new expectations for state and local data use and provide funding and incentives through regulatory and administrative reforms. The Working Group and Task Force should develop cross-agency strategies to:

- Require state and local government grantees to use data, analytics, and evaluation to strengthen results, improve program coordination, and learn what works best for their jurisdictions. Agency regulatory and non-regulatory guidance should make this a core requirement for federal grant programs, both formula and competitive. (Currently, most agency regulations require grantees to demonstrate compliance with the law, but fail to require grantees to use data to improve effectiveness.) Grantee applications and performance reports in both formula and competitive programs should incorporate results of data analyses and evaluations that inform their strategies and decisions, while minimizing burdensome reporting that is not useful for program improvement. Competitive grant programs should be updated to create even stronger financial incentives for applicants to incorporate evidence, data analytics, and evaluation into their program designs. (To ensure this new requirement is not an unfunded mandate, it should be accompanied by actions below that provide additional funding and reduce unnecessary and burdensome compliance reporting.)
- Provide flexibility and legal clarification that allows grantees to use existing funding streams to strengthen their data, analytics and evaluation capacity. Barring a legal prohibition, state and local grantees should be encouraged to redeploy a portion of their program funding to modernize data systems and build efficient analytical capacity that can support multiple programs supporting similar populations.
- Provide additional funding, using Medicaid and OMB waiver authorities that would allow federal Medicaid funds to finance the costs of integrated data and analytics platforms that serve vulnerable populations who are eligible for Medicaid (or have potential to become eligible.) This would be similar to the Obama administration's use of waivers to help states finance integrated enrollment systems for Medicaid, TANF, and SNAP. The new waivers should (1) incentivize data integration across a broader range of programs, including health, employment, education, nutrition, housing, criminal justice, and other social services; and (2) require integrated data to be used for robust analytics and evaluation activities that could potentially improve the health of vulnerable populations by addressing a broad range of health and social needs.
- Require federal agencies to engage state and local grantees in streamlining and standardizing data collections so that: (1) data reported to federal agencies is reliable and useful to states and localities, as well as evaluators; (2) unnecessary data collection is eliminated; and (3) high quality data reported to federal programs can be re-used by other programs and to produce insightful analyses or statistical products. In the GW Bush administration, the Education Department implemented this approach for dozens of K-12

education programs through [EDFacts](#), which replaced separate program reporting requirements with a streamlined set of measures that focused on student learning outcomes. The data are used federal, state, and local governments for program accountability and to produce high-quality research and statistical reports.

- Set standards for data quality, privacy and security, interoperability, accessibility, and cost -- in consultation with states, localities, and other outside experts. These standards should facilitate adoption of state-of-the-art technology and information management practices that are efficient, affordable and, when feasible, open source.
- Launch “outcome-focused accountability pilots” with a cohort of data-focused state and local governments that will inform implementation of the above strategies. Using administrative flexibility under current law, pilot sites and federal agencies should collaborate to create proof points to demonstrate:
 - Better metrics and reporting that help grantees and communities measure and improve results across multiple programs; and
 - How to streamline unnecessary compliance reporting that diverts time and resources away from improving outcomes.

The pilots should provide insights about barriers to better reporting that would require legislative remedies.

(3) Provide technical assistance on key data-related issues. The Working Group and Task Force would develop cross-agency technical assistance strategies to help states and localities effectively utilize data, analytics, and evaluation resources to improve results. Some of this assistance involves re-packaging best practices the federal government has already developed for its own operations as it implements the Foundations for Evidence-Based Policymaking Act and the Trump Administration’s Federal Data Strategy. Technical assistance should include:

- Guidance and best practices on how individual data can be shared across programs while protecting privacy (e.g., satisfying the requirements of HIPAA and FERPA).
- Cutting edge technology solutions that are continually improving, including: (1) open source tools that can be deployed at the state and local level; (2) secure data-linkage platforms that states and localities could use to link data across programs and levels of government for research purposes; (3) technology platforms developed through public-private partnerships that provide useful information to government, service providers, and consumers; and (4) emerging data science and research methodologies that can be employed by partnering with data and research experts in academia.
- Ways to recruit and reskill internal government technology and data expertise, and how to finance these activities with federal program funds.
- Procurement strategies -- including multi-state and regional procurements -- and sample RFPs to reduce costs and enhance performance of contracts with vendors.
- Cost-allocation tools and other financing strategies for building shared data and analytics capacity using multiple funding streams.
- Strategies to reduce bias and promote equity in data collection and analysis.

(4) Build expertise using personnel exchanges. The Working Group and Task Force should establish innovative personnel exchanges and collaborations that tap outside expertise for data and research initiatives that benefit federal, state, and local partners. This should include recruiting academic researchers through Intergovernmental Personnel Act (IPA) assignments and forming a network of academics embedded in federal and state agencies to help build data and analytics infrastructure while conducting high-quality research. A cross-agency,

intergovernmental network involving IPAs could launch important, low-cost studies that link data from multiple agencies and levels of government using secure technology platforms that protect privacy.

The Working Group and Task Force should also create opportunities for government employees to improve their data and evidence-building skills through sabbaticals and fellowships in academia, state and local government, the non-profit sector, or the tech industry. For example, IPA assignments could provide government employees with extraordinary professional development opportunities to conduct important research at a non-profit organization that is funded by philanthropy. Using IPA authority, federal staff could work side-by-side with state and local experts at major associations such as the National Governors Association or the National Association of Counties to build problem-solving networks or develop technical assistance resources.

(5) Develop legislative proposals based on an analysis of federal, state, and local barriers and capacity gaps that Congress should address. The Working Group and Task Force would:

- Identify barriers and capacity gaps by assessing: (1) federal, state and local capacity to answer priority questions, such as those in Appendix B, that would improve their effectiveness and efficiency *within* and *across* programs; and (2) the major barriers that are impeding federal, state and local capacity to modernize their use of data and analytics for decision-making.
- Based on this analysis, determine what actions Congress should take through appropriations or authorizing legislation. Legislative options for new legislation could include (1) creating a “National Secure Data Service” with a federal and a state component to facilitate research using data held at different levels of government (this is a variation of the NSDS recommendation of the bipartisan Commission on Evidence-Based Policymaking); (2) a dedicated fund for modernizing state unemployment insurance systems and creating capacity to link UI data with other state and federal systems; and (3) creating a long-term Technology Innovation Fund for competitive grants to states and localities for systems modernization that strengthens cross-program analytical capacity and meets the federally prescribed standards above. The Fund could prioritize investments in open-source solutions and best practices that can be widely shared and easily adopted by other state and local governments.

Implementation Risks

Key implementation risks for this initiative are: (1) bureaucratic silos, including at OMB and the White House, that segregate *management* from *policy* functions and put a focus on individual *programs* rather than on the *individuals and families* the programs are intended to serve; (2) resistance to changing long-standing agency practices that emphasize producing and collecting data for compliance rather than using data to improve results; (3) the absence of institutionalized mechanisms involving cross-agency collaboration in partnership with state and local governments to tackle complex challenges; and (4) delaying the launch, losing valuable time and failing to harmonize the President’s policy and management priorities. These risks could be significantly mitigated through a strong charge from the President at the beginning of the next Presidential term. A draft of the Presidential memo to kickstart the effort could be

developed by December 2020 to provide a starting point for White House and OMB leadership in January.

The administration should also apply lessons from successful cross-agency initiatives launched by prior administrations to dramatically improve data and technology infrastructure in collaboration with states. These include:

- Beginning in 2011, the Obama administration used [waiver authority](#) to enable federal Medicaid funds to be the primary source of funding for states that wished to build integrated enrollment systems for Medicaid, SNAP, and TANF. (The waiver authority expired in 2018 and was not renewed.)
- Since 2005, the Education Department has provided over \$845 million in funding and set nationwide data standards for [State Longitudinal Data Systems](#) to track educational achievement of K-12 students. Under the 2009 Recovery Act, Education instituted financial incentives for states to link K-12 student data with pre-K, postsecondary, and workforce data to track student progress from pre-k to career.
- In the Clinton administration, OMB and Vice President Gore's office led the design and implementation of [Electronic Benefits Transfer](#), working closely with governors and the financial industry, to replace Food Stamps with electronic debit cards. A Task Force of career civil servants worked with OVP, OMB, federal agencies, and governors to implement EBT nationwide.

While political risks of taking administrative action are low, building support in Congress for legislation and new funding will be more challenging. If innovative state and local leaders from both parties are enlisted in the development of action plans and legislative proposals, the potential for bipartisan legislation will be greatly enhanced. The administration should also engage and leverage current and former legislators in both parties who championed the Foundations for Evidence-Based Policymaking Act (e.g., Senators Patty Murray and Todd Young, former Speaker Paul Ryan.)

Conclusion

Federal, state, and local governments are facing unprecedented challenges as a result of the current health crisis and its devastating economic and fiscal consequences. Their ability to understand and respond to the varied needs of individuals, families, and communities depends on having modern data tools, analytics, and evaluation capacity to make informed decisions. The Federal government has a critical role – not just in modernizing its *own* operations – but in creating the enabling conditions for state and local modernization. Taxpayer Investments in new data infrastructure can have a very high return on investment if governments utilize new, low-cost technology that is coupled with strong analytics and evaluation to generate actionable information for decision-makers.

Today, the federal government is not organized to help federal, state, and local government agencies put the wealth of useful data and funding they manage to its best use. Solving this challenge will require strong White House leadership and a mix of expertise that can work across programs, agencies, and levels of government and leverage state-of-the-art technology solutions. Significant progress can be made in 2021 through Executive Branch actions

designed to overcome fragmented bureaucracies and inconsistent, uncoordinated policies set by different federal agencies and Congressional committees. A well-managed intergovernmental initiative could also build bipartisan consensus for additional Congressional actions to modernize infrastructure to promote smarter state and local decision-making.

About the Author: Kathy Stack worked for five presidents over nearly three decades at the White House Office of Management at Budget, overseeing education, workforce, income security, national service, and other federal programs focused on vulnerable populations. She was instrumental in shaping the GW Bush and Obama administration initiatives to strengthen the use of evidence, evaluation, and data. These included tiered evidence grant designs, Pay for Success pilots, the White House Social and Behavioral Sciences Team, and other initiatives to build agency evaluation capacity. She was involved in planning or implementing many of the federal projects described above.

Appendix A

There are numerous data and evaluation-focused activities underway at the federal level that are currently poorly coordinated. If synchronized, these could serve as building blocks for a national strategy that focuses on strengthening state and local capacity. These activities include:

- (1) Government-wide implementation of the 2018 [Foundations for Evidence-Based Policymaking Act](#), which requires federal agencies to strengthen their use of data and evaluation to improve decision-making;
- (2) The Trump administration's [Federal Data Strategy](#), a central pillar of the President's Management Agenda, which is implementing a government-wide action plan to improve utilization of federally held data;
- (3) The [Results-Oriented Accountability for Grants](#) initiative in the President's Management Agenda that has taken modest steps to shift the focus of federal grants administration from compliance to outcomes, including through OMB's proposed 2020 changes to government-wide grant regulations;
- (4) Outcome-focused grant designs, used by a small but growing number of social programs, which incentivize the use of evidence and evaluation (e.g., through [tiered evidence grants](#)) or tie payments to achievement of outcomes (e.g., [Pay for Success](#)).
- (5) Agency-led initiatives to encourage state and local data innovation for specific programs, such as the [TANF Data Initiative](#) run by the Administration for Children and Families and the [Medicaid Innovation Accelerator Program](#) run by the Center for Medicare and Medicaid Services (CMS).
- (6) Collaboration between HHS and USDA in reviewing and approving major state systems investments for Medicaid, TANF, SNAP and several other programs using the [Advanced Planning Document](#) review process. (From 2011 to 2018, these agencies collaborated to encourage states to build integrated enrollment systems for Medicaid, TANF, and SNAP that were financed primarily with federal Medicaid funds);
- (6) GSA's technology and evaluation services to agencies, including the [18F](#) team, which runs a set of human services projects helping federal agencies and states develop in-house technology solutions; and the [Office of Evaluation Sciences](#), which helps agencies design and conduct rigorous evaluations to build and use evidence;
- (7) Research programs run by federal science and statistical agencies (e.g., Census, NSF) that strengthen data infrastructure and research capacity that can assist states and localities address priority issues; and
- (8) Embedded data and research experts from academia and industry (e.g., using Intergovernmental Personnel Act assignments) that are helping some federal agencies develop data infrastructure and conduct useful research and analyses.

Appendix B

Key Questions that State and Local Jurisdictions Should Be Able to Answer to Improve Effectiveness and Efficiency in Federally Funded Programs

The following are illustrative types of questions that could be answered by state and local governments routinely if they had robust data and analytics capacity.

Generic:

- **Need:** What are the needs of the various population groups who are eligible for services, and how are they different or the same?
- **Resource and service allocation:** Who is receiving services and benefits, and who is eligible but not receiving them? Are services and benefits reaching those who need them most?
- **Mix of services and benefits:** Is the mix of services and benefits appropriate and effective for the different populations served? Are services effectively coordinated across programs?
- **Equity:** Do our analytical methods and algorithms reinforce bias in policy, resource allocation, and other decision-making? What safeguards would prevent this?
- **Outcomes:** What outcomes are we achieving? How do they compare with expected levels of performance?
- **Comparing alternative approaches:** What alternative approaches have the greatest positive impact? Which are most cost-effective?
- **Operational efficiency:** Are operations being conducted in the most efficient way? What changes improve the customer experience while reducing costs?
- **Return on investment from upstream prevention:** What preventive measures avoid negative outcomes and downstream costs (e.g., actions to reduce homelessness or address social determinants of health)? Which would have the highest return on investment?
- **Error, fraud and abuse:** What individuals or entities are receiving funds they are not entitled to, based on data available through a different program?

COVID-Specific Examples:

- **High-risk groups:** For specific communities, what are the key characteristics of people most susceptible to COVID-19, including race/ethnicity, age, underlying health conditions, reliance on public transportation, housing status, and types of employment?
- **Effective interventions:** What approaches and interventions (e.g., contact tracing, registration upon entering a business, temporary housing for members of a COVID-affected household) have a measurable effect on the rate of COVID-spread, or factors that contribute to spread?
- **Economic impacts:** Are individuals and businesses that were eligible for emergency assistance, and in greatest need, receiving assistance?
- **Program integrity:** What individuals and entities are receiving assistance from multiple emergency programs, at least one of which they are not eligible for?