In times of both calm and crisis, the public looks to their government to keep them safe and secure — to provide for their health and well-being. The public expects that critical services are there for them when and how they need them.

Effective policymaking will determine our nation’s ability to deliver services for generations to come. While the act of making policy is complex and challenging, it can be done in a manner that strengthens the capacity of our federal government to effectively respond to citizens’ needs and our nation’s most critical challenges.

Policymakers and Congress have signaled a desire to bring more data and evidence to policymaking through the passage of the Evidence-Based Policy Act and the Office of Management and Budget’s (OMB) subsequent agency guidance. While this act focuses on creating, collecting and reporting data to inform policy with evidence from agencies, we believe the process of producing policy can be more data-centric, creating approaches where data and evidence is actively sought from a variety of diverse sources with different points of view. This is critical — this transparency and openly diverse process can uncover potential new impacts if addressed in the formulation of a policy as well as ensure greater equity and avoid unintended consequences of policy taken from one perspective.

To address this, we are introducing a framework for the development and implementation of data-driven, actionable, equitable policy. This framework proposes policy-planning principles, policy-development approaches, and policy-implementation actions that should be considered as policy is developed and implemented.

**Efforts to Improve the Policy Process**

There are many credible organizations, universities, and think tanks around the world that focus on understanding and addressing these complex policy topics. For example, the Organisation of Economic Co-operation and Development (OECD) is an international organization that works to build better policies. It has recently reported on the concerns with the gradual erosion of trust in public institutions and that rebuilding this is contingent on the capacity of government to perform and the quality of the services provided. Recent trends affecting policy include:

- The digital economy
- Slow adoption of technology with government
- Impacts of climate change
- Energy access
- Sudden flows of refugees and migrants
- Widening inequalities
- Shrinking civic space
- Tax-base erosion and aging populations
- Disinformation and fake news
OECD recommends designing and implementing strategic, evidence-based, and innovative policies to strengthen the capacity of governments to respond to citizen’s needs and help countries address economic, social, and environmental challenges effectively.

Another example comes from the Department of the Prime Minister and Cabinet of New Zealand and its policy project to build a high-performing policy system that supports and enables good government decision-making. This project has resulted in a policy toolkit and a series of frameworks, including a policy capability framework, a skills framework, and a quality framework, to drive better policy development and implementation. Agencies there are to use these frameworks to assess the quality of their policies.

Building on Existing Models

The policymaking process should be deliberate in its inclusion of each of the attributes we desire — objective, nonpartisan, data-driven, actionable, measurable, and equitable. One way to think about effective policy development and implementation is to break the process down into three stages: planning, development, and implementation. Below, we provide an overview of these three stages before introducing a framework for developing and implementing policy in a way that considers the appropriate attributes

Policy Planning Principles

Upfront planning for policy development cannot be understated. It starts with clearly understanding the issues needing action and the current environment. Addressing these policy issues requires data on precisely what needs to be fixed and having clear objectives among stakeholders, agencies, and policymakers. Who are the players, what needs to change, how much will it cost, how long is it expected to take, and what are potential unintended consequences are all foundational questions that need unbiased answers.

Assessing the capability to implement and knowing what success looks like both sound like simple principles to address, but often they are reasons why policies fail. Take, for example, the failed rollout of HealthCare.gov, the health insurance website associated with the Affordable Care Act. Despite the fact that eventually the site was fixed with significant cost overruns and a delayed rollout, the well-documented management missteps are a classic case study demonstrating that more could have been done in the planning phase to assess capabilities.

Identifying downstream effects of policy decisions is another principle that can be considered in the planning phase. For example, the use of foreign-made components in U.S. programs and systems may warrant a discussion of risk mitigation in the supply chain, depending on existing or anticipated policies.

Policy Development Approaches

Effective policy development starts with ensuring that the data and analysis driving policy are unbiased. It is aided by the use of modeling and simulation techniques with transparent assumptions gained from diverse perspectives. For example, forecasts of the trajectory of the COVID-19 pandemic varied widely based on the data used and the assumptions that fed the models. Knowledge of the underlying assumptions and methodology was key to determining the distribution of personal protective equipment, testing, and medical equipment.

Policies should also be equitable for all affected individuals and communities. The current conversations
regarding ethical use of artificial intelligence and facial
recognition present major challenges for policymakers
today. Other best practices to consider when
developing policies requiring cultural or behavioral
change are to collaborate with external subject matter
experts to strengthen the policy recommendations and
validate the administrability of the proposed guidance
with those charged with its implementation.

Policy Implementation Actions

Measuring policy outcomes and results using metrics,
surveys, and other feedback mechanisms are actions
that ensure accountability and permit authorized
changes to address unintended consequences.
Data-centered practices would include documenting
quantitative and qualitative baselines from which to
measure progress and establishing feedback loops to
assess progress. Sometimes obtaining feedback would
be fairly simple, such as seeking feedback from federal
employees on policies that affect their retirement plans
and other benefits.

A recent successful policy implementation example
is the Congressional Federal Information Technology
Acquisition Reform Act (FITARA) scorecard. Congress
measured implementation by assigning grades to major
sections of the law and made these results transparent.
The grades and transparency resulted in better IT
management across the federal agencies.

Framework for Developing and Implementing
Data-Driven, Actionable, Equitable Policy
(version 1.0)

Developing and implementing effective policy
requires a disciplined approach that ensures
consideration of the elements presented here. This
framework suggests planning principles, development
approaches, and implementation actions to consider.
We will improve this initial version in collaboration with
the policy community. Our goal is to have even more
detailed and clear tenets that are widely accepted
and utilized.

Policy Planning Principles

- Define the problem trying to solve and the purpose,
  objectives, and metrics for success
- Establish a baseline and any organizations already
  implementing the policy and what currently exists
- Develop a logic model and assess the extent to
  which evidence supports the theory of change
- Identify downstream effects
- Assess capability to implement
- Identify systemic social inequities and root causes
- Have clear feedback mechanisms to ensure
  accountability
- Assess costs and benefits, and any tradeoffs
  (what could people stop doing)
- Consider human centered design
- Obtain stakeholder data driven input

Policy Development Approach

- Seek feedback from the public, those who are
  responsible for policy implementation, and others
  to seek supporting and dissenting views
- Utilize models and simulations when appropriate
- Ensure data and analysis is unbiased
- Ensure that the approach is equitable for all citizens
- Engage practitioners already implementing policy
  (inside or outside government) to be change agents
- Consider tradeoffs against competing solution sets

Policy Implementation Actions

- State who is responsible for what and when
  with clear timeline
- Publicize enforcement mechanisms
- Meet individually with each agency/recipient
  to discuss implementation
- Model behaviors you want others to adopt
- Focus on outcomes, results, changed behaviors
  using performance metrics, feedback, surveys
  including from front lines
- Summarize and report on results on a dashboard with disaggregated data that identifies positive/negative outliers
- Compare performance to expectations so future improvements can be made

Adopting and Enhancing the Framework

This framework can be used as a guide to develop and implement policies to respond to the public’s needs and to address the nation’s most pressing challenges. It is intended to ensure that policies are well thought-out and comprehensive, and that mechanisms are in place to drive and measure the intended outcomes.

The framework should not remain static, but continuously evolve with feedback from policymakers, influencers, and others. We also recommend that policymakers conduct pilots using this framework in a number of policy areas to evaluate its utility, usability, effect on stimulating change, gaps, and any unintended consequences. Feedback from these pilots will be important to improve the framework over time.

Conclusions

Addressing our nation’s most important challenges requires data-driven policy that is equitable, actionable, and measurable. Given the right information, policymakers can make informed policy decisions today and inform future decisions tomorrow. Implementing these policies in a more effective manner that results in the intended outcomes requires better measurement and transparency. This framework provides a much-needed, disciplined approach to achieve these objectives.

For more information about this paper or the Center for Data-Driven Policy, contact policy@mitre.org