Executive summary, roadmap, and recommendations

October 25, 2022 Federal Committee on Statistical Methodology Ron Jarmin, U.S. Census Bureau



A Once-in-a-Generation Opportunity

American Rescue Plan (ARP) and Infrastructure Investment and Jobs Act (IIJA) provide unprecedented resources to improve America's infrastructure and support economic resilience and long-term growth

- We need to:
 - Ensure we're using taxpayer dollars wisely and effectively
 - Quickly and accurately aggregate data on program performance
 - Leverage data as a strategic asset
 - Enable evidence-based decision making
 - Advance data sharing and collaboration opportunities
 - Expand model beyond DOC and to future programs (such as CHIPS and Science Act of 2022)



Department of Commerce Data Governance Working Group (DGWG)

Purpose:

- To identify ways to collect incoming program performance information
- Minimize burden to aid recipients
- Maximize ability to report achievement of program goals and objectives
- Demonstrate lessons learned
- Improve program outcomes
- Foster adoption of promising practices



Participants

Members:

- Department of Commerce (DOC)
- U.S. Census Bureau (chair)
- Economic Development Administration (EDA)
- National Oceanic and Atmospheric Administration (NOAA)
- National Telecommunications and Information Administration (NTIA)
- National Institute of Standards and Technology (NIST)
- Bureau of Economic Analysis (BEA)

Advisors:

- Office of Management and Budget (OMB)
- Department of Transportation (DOT)
- Staff from the DGWG member agencies



Scope and phased deliverables

- Phase 1 (completed)
 - Develop shared data structure and data quality standards to facilitate data linkages and reduce reformatting complications
 - Describe strategies to ensure availability of high-quality data to support policy and program outcomes

• Phase 2 (started)

- Identify common metadata standards to ensure the DOC's data can be leveraged as strategic asset
- Phase 3 (coming soon)
 - Discuss strategies to address barriers to data collection/use
- Implement systems standards to ensure maximum interoperability at an enterprise level



DGWG Report

- "Best Practices for Monitoring and Evaluating the ARP, IIJA and other programs: Report of the Department of Commerce Data Governance Working Group"
- Available at: https://www.census.gov/about/what/evidence-act.html
- Report is the culmination of "phase 1" sprint, and:
 - Establishes goal for program monitoring and evaluation
 - Compares evaluations strategies
 - Identifies data resources and linkage strategies
 - Considers factors such as geographies, socioeconomic factors, equitable delivery, and environmental risk factors



- Agencies should follow all applicable standards issued by the Office of Management and Budget (OMB) for grant awardees to report on geographic locations of primary and secondary awardees, as well as the point of service delivery. The DGWG supports using census tracts as a standard reporting element.
- Agencies should continue to measure and monitor program operations (e.g., timeliness, compliance with regulations) following or exceeding guidance from OMB and their respective agencies.
- Agencies should **leverage existing impact projection models** from industry, academia, or government where possible.



- Agencies should implement a measurement and evaluation design that emphasizes credible results within resource, cost, and schedule constraints.
- Agencies should consider implementing large-scale observational studies that link program administrative data to previously collected data from censuses, surveys, administrative records, commercial vendors, and aggregated indices. The Census Bureau's Data Linkage Infrastructure may be particularly useful.
- Agencies should collect high-quality unique identifiers from aid awardees, including both primary and secondary awardees to enable linkage to other data sources.



- Agencies should evaluate programs based on the phase of program implementation, direct versus indirect program impacts, and projected versus observed program impacts
- Phases
 - Program Design/Stand Up
 - Pre-Award Program Implementation
 - Post-Award Program Implementation
 - Closeout



- Agencies should use metrics and available indices of economic and geographic vulnerability to determine the equity or bias in program delivery.
- Agencies should consider incorporating program impacts on the **environment and climate resilience** into their evaluation plans.
- Agencies should establish or participate in a working group to identify existing standards and best practices for managing program operations and evaluation data and develop guidance for use by data practitioners.
- Agencies should create a community of practice to share lessons learned from program implementation and foster collaboration.



Framework for program evaluation

	Direct program impacts (D)		Indirect program impacts (I)	
Phase	Projected	Observed	Projected	Observed
Program design/stand up	Identify direct impacts (<i>D</i>) and determine how to capture in NOFOs		Identify indirect impacts (I) and determine administrative/survey data to measure	
Pre-award program implementation	What is potential benefit of <i>D</i> ?	What is current (baseline) rate of <i>D</i> ?	What is potential benefit of <i>I</i> ?	Baseline: What is current rate of <i>I</i> ?
Post-award program implementation	Compare to initial projection of <i>D</i> ; update projection of D based on observed	Compare to baseline levels of <i>D</i>	Compare to initial projection of <i>I</i> ; update projection of <i>I</i> based on observed	Compare to baseline levels of <i>I</i>
Closeout	Compare to projected levels of <i>D</i> (from each phase)	Compare to baseline levels of <i>D</i> and implementation levels of <i>D</i>	Compare to projected levels of <i>I</i> (from each phase)	Compare to baseline levels of <i>I</i> and implementation levels of <i>I</i>

U.S. Census Bureau's response

- Create a Center of Excellence
- Develop budget initiative to support "Evidence Building, Evaluations, and Improving Underlying Race/Ethnicity Data" (FY23 DOC budget)



Center of Excellence model



Provision **central data management, enhancement service, and data products** for decision support and program evaluation.

Collaborate with implementing bureaus to understand how they "define success" and consult on **data tools** to support their efforts.

Evaluate **DOC-wide success metrics**, ensuring that the "whole" of DOC's efforts are measured, rather than relying on a "sum of the parts" approach.



Census Bureau support must be integrated at front end to coordinate data inputs supporting policy, implementation, compliance, and oversight decisions.

Data should be used across program lifecycle

Data provide insights across **lifecycle** of program implementation, not just in late-stage evaluation.

- Use data from past programs to establish goals, set
 baselines, and develop effective grant criteria to direct funds to intended recipients in early design phases
- Harness data throughout implementation phase to measure progress towards goals and possibly make changes to stay on track
- Evaluate data post-deployment to understand programmatic success and inform design of future programs



