Ensuring the Quality of Information Upon Which Public Policy is Based

OIRA’s Statistical and Science Policy Function

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Office of Management and Budget

- Support
- Resource Management
- Statutory Offices
  - Financial Management
  - Procurement
  - E-Gov and IT
  - Information and Regulatory Affairs
OMB’s Office of Statistical and Science Policy

- Establishes and enforces statistical policies and standards, bringing methodological rigor and a cross-cutting perspective.
- Ensures that resources are proposed for priority statistical programs.
- Approves statistical surveys conducted by the Federal government (Information Collections) under the Paperwork Reduction Act.
A Long Tradition of Ensuring Information Quality

- Federal Reports Act of 1942
- Budget and Accounting Procedures Act of 1950
- Paperwork Reduction Act of 1980 and 1995
  - Most recently codifies the role of the U.S. Chief Statistician
  - Requires OMB to “develop and oversee the implementation of policies, principles, standards, and guidelines to...apply to Federal agency dissemination of public information”
  - Expresses the national commitment to minimizing paperwork burdens and improving the quality of information collected while ensuring the greatest possible benefit to the public.
- Information Quality Act of 2000
- Updated Principles for Risk Analysis, Joint OSTP/OMB Memorandum (2007)
Opportunities to Affect Information Quality in a Policy Context

(1 of 3)

• Oversight of the decentralized statistical system
  – The decentralized statistical system in the U.S. includes about 100 Federal agencies. A substantial portion of official statistics are produced by 10 Federal agencies.
  – The data produced by these Federal agencies form the basis of many seminal economic, demographic, sociological, epidemiological, and environmental analyses.
  – The Chief Statistician for the US Government provides oversight, coordination, and guidance for Federal statistical activities, working in collaboration with leaders of statistical agencies.
Opportunities to Affect Information Quality in a Policy Context

(2 of 3)

- Under the PRA, OMB must approve information "collections" at least every 3 years
  - Collections using statistical methods (esp. surveys) undergo additional review against standards (see Statistical Directives and Standards, below).
  - Collections that will form the underpinnings of important policy decisions undergo more rigorous review (see Information Quality Guidelines, below).
Opportunities to Affect Information Quality in a Policy Context

(3 of 3)

• During review of the proposed and final regulations under E.O. 12866 and E.O. 13563, OMB reviews whether the information upon which policies are based is consistent with agency IQG’s and consistent with the OSTP Memorandum on Scientific Integrity (2009).

  – Includes review of preambles to regulatory actions, risk assessments, and benefit-cost analyses.
Information Quality Continuum

- Concepts, Methods & Design
  - Scope
  - Choice of Methods
  - Sampling (inc Frame)
  - Questionnaire Design

- Data Collection
  - Response Rates
  - Response Modes
  - Incentives
  - Informed Consent
  - Confidentiality Assurances
  - Statistical Standards

- Data Processing & Editing
  - Response Rate Calculation
  - Nonresponse Analysis
  - Data Protection

- Analysis
  - Review
    - Peer Review Bulletin

- Dissemination, including policy decisions based on data or analysis
  - Statistical Standards
  - Information Quality Guidelines
  - Principles for Risk Analysis
What we mean by “Information Quality”

• OMB focuses on objectivity, utility, integrity and reproducibility of information.

• PRA and IQG emphasize the need to match the quality of the information with its significance for private and public sector policy.
  – There is not a “one size fits all” standard.

• Under the PRA and IQG, information dissemination covers “…documentary material regardless of physical form or characteristic.” Includes:
  – posting information on agency web pages
  – describing data or analytic findings that are not otherwise available publicly.
What we Mean by “Standards”
(1 of 2)

• Methodology standards for statistical surveys
  – Standards and Guidelines for Statistical Surveys
  – Questions and Answers When Designing Surveys for Information Collections

• Guidelines on protecting confidential statistical information
  – CIPSEA – Title V of the E-Gov Act

• Statistical classification standards
  – Standard Occupational Classification System
  – North American Industry Classification System
  – North American Product Classification System
  – Data on Race and Ethnicity

• Metropolitan and Micropolitan statistical areas
What we Mean by “Standards” (2 of 2)

• Data Release Standards

• Data Dissemination Standards
  – Guidance for conducting pre-dissemination review for scientific information
  – Guidance for risk analysis
  – Guidance for benefit cost analysis (Circular A-4)
OMB Process for Developing Standards & Guidance

- Always transparent and inclusive
- Includes interagency discussions and frequent use of interagency working groups
- Includes peer review (when applicable)
- Includes public comment opportunities
Information Quality Guidelines

• Pre-dissemination review is required of all information
  – Agencies must embrace a basic standard of quality as a performance goal for all disseminations.

• Level of review should be matched with the significance of the information for private and public sector policy.

• Agencies all have in place mechanisms that allow the public to request correction of information that does not comply with IQGs.
  – Burden is on requestor to show that information is non-compliant.
Bulletin on Peer Review

- Defines government-wide expectations for the peer review of significant scientific information.
  - Goal is to enhance the quality and credibility of the government’s scientific information, with a focus on pre-dissemination procedures.

- Addresses concepts of expertise, balance of perspectives, independence of reviewers, minimizing conflicts of interest.
  - Requires the most rigorous form of peer review for the most important (highly influential) scientific assessments.

- Established a transparent process for the disclosure of agency peer review plans and peer reviewer comments.
Additional Tools for Ensuring Quality

• OMB/OSTP Updated Principles for Risk Analysis
  – Recognizing that many Federal actions to improve public health, safety and the environment rely upon risk analysis, the goal of this memorandum is to enhance the scientific quality, objectivity, and utility of these analyses.

• Recent OSTP Memorandum on Scientific Integrity
  – In the context of fostering a culture of scientific integrity, the memorandum stresses that the “accurate presentation of scientific and technological information is critical to informed decisions.” Agencies are tasked to: “Communicate scientific findings by including:
    • a clear explication of underlying assumptions;
    • accurate contextualization of uncertainties; and
    • a description of the probabilities associated with both optimistic and pessimistic projections, including best-case and worst-case scenarios where appropriate.”
Additional Information Resources

• Statistical Directives and Standards
  – http://www.whitehouse.gov/omb/inforeg_statpolicy

• Government-wide Information Quality initiatives
  – http://www.whitehouse.gov/omb/inforeg_infopoltech#iq

• Paperwork Reduction Act
  – http://www.whitehouse.gov/omb/inforeg_infocoll#PRA

• Regulatory Review
  – http://www.whitehouse.gov/omb/inforeg_regmatters#rr