

OMB'S ROLE IN OVERSEEING INFORMATION QUALITY

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INTRODUCTION

The Office of Management and Budget (OMB) is well known for its role in budgetary matters and is becoming better known for its role in regulatory policy. Yet OMB's responsibilities in the field of

information policy are not widely recognized. Just as the importance of the word “M” in OMB is poorly appreciated, the importance of the word “T” in the title of my Office, the Office of Information and Regulatory Affairs (OIRA), is poorly appreciated. This morning I would like to provide an overview of the steps that OMB is taking to improve the quality of information that agencies disseminate to the public. We encourage participants in this workshop to evaluate what is happening, to identify unanticipated problems, and to suggest improvements and new directions.

Before discussing quality issues, I should note that both Congress and OMB have a longstanding interest in the field of information policy. OIRA was officially created by Congress in the Paperwork Reduction Act of 1980, the law that established the basic clearance processes for “information collections” now required for all federal agencies. In arguably obscure OMB Circular A-130 entitled, “Management of Federal Information Resources”, OMB stated its strong support for dissemination of information to the public. On a day-to-day basis, OIRA works with the Chief Information Officers (CIOs) in each of the agencies to improve the integrity, quality and utility of information for all users within and outside the government.

It is certainly true that Federal agencies have disseminated information to the public for decades. Until recently, that dissemination was accomplished principally by making paper copies of documents available to the public. With the advent of the Internet, there has obviously been a revolution in communications that has enabled agencies to disseminate an increasing volume of information to users throughout the world.

The question we are addressing today is what steps agencies should take to assure a basic level of quality in the information that agencies choose to disseminate to the public. A recent law passed by Congress gives urgency to finding answers to this question.

LEGISLATIVE HISTORY OF THE INFORMATION-QUALITY LAW

The story begins toward the end of the previous Administration, when Congress enacted a law requiring OMB to develop uniform guidelines establishing quality standards for information disseminated by federal agencies. The law was enacted as a rider to our appropriations bill without any hearings or extensive legislative history. I am told by my career staff that the quality of information disseminated via agency web sites was a particular concern at the time. Congresswoman Jo Ann Emerson of Missouri is recognized as the principal House sponsor of this new law.

The law under discussion is Section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001, sometimes called the “Information-Quality Act” for short. The original version of the rider called for adoption of a government-wide “rule” but, at the insistence of OMB, a requirement for government-wide guidelines was substituted for the rulemaking provision.

This information-quality law should not be confused with an earlier information-access law, sponsored by Senator Richard Shelby of Alabama, which amended the Freedom of Information Act to provide greater public access to research data generated under federal research grants. OMB believes that the

information-access and information-quality laws are compatible and in fact are mutually reinforcing in the way that they promote responsible public access to information used by government agencies.

RATIONALE FOR INFORMATION-QUALITY CONCERNS

Although the Information-Quality Act was adopted without specific hearings in Congress, there is plenty of evidence that the quality of the information advanced for use by government decision makers needs to be improved. In the scholarly literature on what is called “science-policy”, there are entire books of case studies demonstrating technical problems with the information collected, used and published by federal regulatory agencies.

As a former academic, I do not mean to suggest that governmental information has more quality problems than information generated at universities. For example, a disturbing example in academia was revealed last fall when the NIH Office of Research Integrity looked into a widely publicized finding in the reputable journal SCIENCE. The finding was that exposures to two or more chemicals widely used in commerce can have a synergistic, damaging effect on the endocrine system of the body. After an extensive investigation, the NIH Office concluded that the author had “committed scientific misconduct by intentionally falsifying the research results” and that there “is no original data or other corroborating evidence to support the research results and conclusions reported in the Science paper as a whole.” I would be interested to know whether any government agencies in the US or abroad cited this study in support of new environmental policies, without realizing the underlying quality problems in the work.

My field of science, cost-benefit analysis, certainly has its share of quality problems. An instructive example occurred in the late 1970's, when a contractor for EPA reported that the extra cost of controlling water pollution at municipal treatment plants was \$1.20 per pound. Analysts at the Regulatory Analysis Review Group in the White House – a precursor office to OIRA – found a technical error in the contractor's work and produced a corrected estimate of \$0.30 per pound. When EPA was informed of the error, they asked a Court to remand a pending case so that the cost estimate could be corrected and the relevant regulation re-issued in revised form. In this case, since the cost estimate was being used as a benchmark for controlling pollution at pulp and paper mills, the revised standard at paper mills became more cost-effective as a result of the correction.

Sometimes poor interpretation of technical information can result in rules or standards that are not adequately protective of public health. The safe level of exposure to nitrates in drinking water, for example, is a case where scientific peer reviewers of a draft EPA document found that published studies may have been misinterpreted by EPA analysts. Peer reviewers persuaded the agency that, in order to provide an adequate margin of safety for infants, a key susceptible subgroup, the amount of allowable exposure to nitrates in water needed to be smaller than originally thought.

Information disseminated by EPA in support of its new air-quality standard for particulate matter has been widely criticized as erroneous or unreliable. Two studies by my faculty colleagues at the Harvard School of Public Health were especially controversial because the original data were not made available for public scrutiny. Yet an independent organization funded by the car companies and EPA, the Health Effects Institute in Cambridge, Massachusetts, did a major reanalysis of the two key studies and found

no significant mathematical errors. The HEI reanalysis did find that the quantified health risks of pollution changed significantly when alternative methods of analysis were employed. The HEI work also offers an intriguing model of how reproducibility of analytic results can be achieved without insisting on public access to original data. That model may prove to be useful under the OMB information-quality guidelines. The controversy surrounding these particular health studies continues and may not be dispelled until the ideal of public access to original data -- with identifiers removed to protect confidentiality of subjects -- is achieved.

In my own work as a scholar, I must confess to a quality problem here and there -- even in those papers published in good journals! For example, I projected that a policy of mandatory airbags would save 9,000 lives per year in this country. The best published estimates based on real-world crash data are now around 3,000 lives saved per year. I also did not predict the harmful effects of passenger airbags on young children. I have subsequently become aware of engineering analyses by Honda and General Motors that predicted and quantified these effects in the 1970s. Under the guidelines that we shall discuss today, this example raises the question of whether failure to consider or disseminate certain kinds of information is grounds for a challenge against an agency.

In citing these various examples of quality problems, I do not mean to suggest that the work of scientists can be perfect. Even the best of scientists are human. In addition, the scientific data may be ambiguous, allowing several equally plausible interpretations. Science is an evolutionary process where the work of one scientist is enhanced by the criticism of others. What we are discussing today is an organizational challenge motivated by the reality that scientists and analysts are not perfect. How can we

improve the quality of information disseminated by federal agencies, including disseminations that must convey scientific ambiguity?.

OMB'S 2002 GUIDELINES

The Bush Administration is committed to vigorous implementation of the new information-quality law. We believe it provides an excellent opportunity to enhance both the competence and accountability of government. Yet Section 515 charged OMB with a huge task: the development of government-wide guidelines to ensure and maximize the quality of information disseminated by agencies. The law covers both the independent agencies and the executive agencies but provides few limitations on the scope or types of information that are to be covered.

Given the ambitiousness of the task, we acknowledge that OMB is at the beginning of a long journey. OMB's initial steps in this arena may need to be revised and improved as agencies and the public grapple with the practical realities of ensuring quality information.

To make a long story short, OMB has now published -- after two rounds of public and interagency comment -- final guidelines in this area. These guidelines take effect October 1st of this year. They impose three core responsibilities upon all federal agencies.

First, agencies must commit to embrace a basic standard of quality as a performance goal and take appropriate steps to incorporate quality into their information dissemination practices. Obviously, the act

of dissemination is not readily separated from the processes of generation and use of information -- particularly given "sunshine" laws -- and thus the OMB guidelines have important ramifications for all aspects of information management at agencies.

Second, agencies are to develop information resource management procedures that are applied BEFORE information is disseminated. Although OMB provides agencies wide discretion in this arena, agencies are required to engage in prevention as well as cure -- if you think of poor quality information as a disease that requires a therapeutic response. The practice of scientific peer review plays an important role in the guidelines, particularly in establishing a presumption that peer-reviewed information is "objective". We recognize peer review at scientific journals as an acceptable form of peer review and offer some guidelines for assuring competent and credible peer review at agencies.

Third, and here is perhaps the key provision, Congress required each agency to develop an administrative mechanism whereby affected parties can request that agencies correct poor quality information that has been or is being disseminated by agencies. The burden of proof is squarely on the affected parties: They must demonstrate that a specific dissemination does not meet the quality standards in the OMB guidelines or the agency-specific guidelines. It is this opportunity for complaint and prompt correction that begins in October of this year. The OMB guidelines stipulate that, if an agency denies a correction request, an opportunity for appeal must be provided. Needless to say, many procedural details need to be worked out and we are hopeful that this workshop will provide some useful directions in that regard.

CONCERNS ABOUT OMB'S GUIDELINES

A common concern that I hear expressed is that the OMB guidelines subject government information to a higher standard than information generated by industry, academics and public interest groups. Yet a close reading of the OMB guidelines should suggest a more nuanced conclusion. If a government agency wishes to rely upon and cite information from industry in support of a decision, that information must meet the same quality standard that information generated by the agency must meet. Thus, the OMB guidelines apply to any information disseminations by an agency, regardless of the original source of the information.

OMB recognizes that information quality is costly to achieve and thus a form of cost-benefit analysis must be applied to quality-control efforts. We encourage agencies to think of the social value of better information and how the need for quality may vary in different decision contexts. In economics, for example, there is a well-accepted difference in the quality of economic analysis that is required to support a multi-billion dollar decision compared to a multi-million dollar decision, even though both decisions will have important impacts on consumers, workers and investors.

In this regard, the OMB guidelines draw a conceptual distinction between “influential” information and ordinary information. We require agencies to subject “influential” information to higher standards of quality -- standards that presumably will be more costly for the agencies, analysts and researchers to achieve.

Concerns have been raised that the OMB guidelines are an unfunded mandate on agencies. (Indeed, the law passed by Congress could be so criticized). The OMB guidelines recognize that responding to information complaints will be costly and time consuming. We have provided agencies ample authority to reject complaints by affected parties that are groundless or made in bad faith. We also believe that better quality information may save agencies resources in the long run, as agencies experience less judicial and political opposition rooted in a perception that the agency has based important decisions on poor quality information.

With regard to “influential” technical information that is likely to impact important public policies, the OMB guidelines provide an initial framework for considering the quality of original data. Hearing practical and ethical concerns from the scientific community, OMB was reluctant to require that all original data meet a reproducibility test. There are many types of original data used by agencies and the requirements for specific data sources have been left to the discretion of agencies. In the case of “influential” analytical results, where OMB has more in-house expertise, we go further and insist that such results be reproducible by qualified third parties, barring exceptional circumstances. We see reproducibility as an essential feature of competent and accountable government: show me what numbers, assumptions and equations you used and then show me how they add up to what you say they add up to!

APPEALS PROCEDURES

I am frequently asked what will happen if an affected party’s complaint is rejected by the agency but the

affected party continues to believe that the agency's explanation is unpersuasive. The OMB guidelines do require agencies to develop an appeals mechanism and it is my hope that agencies will think hard about developing a truly objective appeals mechanism inside the agency. If agencies do not develop an objective appeals process, I predict that there will be efforts down the road to authorize appeals outside the agency. That is a step that should be taken only after careful consideration of experience with the guidelines.

As a practical matter, it is unlikely that OMB will play a major role in resolving information-quality disputes on a case-by-case basis. We do intend to oversee each agency's implementation of the OMB guidelines, using the periodic reports by agencies to OMB that are required in the law. Our focus will be on overseeing the design and implementation of agency procedures rather than serving as a general appeals board for individual disputes.

Lawsuits against agencies are certainly another possibility and, quite frankly, there are as many legal theories about how these issues can be litigated as there are lawyers. My personal hope is that the courts will stay out of the picture, except in cases of egregious agency mismanagement. Yet it will probably take a few critical court decisions before we know how this law and the associated guidelines will be interpreted by judges.

CONCLUSION

In conclusion, we recognize that OMB's guidelines have only scratched the surface of a complex area.

The importance of quality information to the conduct of government certainly justifies a major commitment to this activity. That is why OMB has organized several interagency panels to explore these subjects and has encouraged agencies to commission workshops here at the National Research Council, where the issues can be addressed in more depth with specialists and stakeholders.

I am very grateful for the many thoughtful suggestions that we have already received about how to transform this ambitious legislative mandate into a practical process for use by agencies and the public. Although federal agencies have the near-term challenge of developing appropriate guidelines, we also realize that OMB will need to revisit many of these critical issues in the years ahead.

Thank you very much for the opportunity to be with you today and I look forward to comments and questions.