

DEVELOPING DOL'S DATA QUALITY GUIDELINES

A STEP-BY-STEP GUIDE

1. INTRODUCTION

A. The Importance of Public Participation in Developing the Data Quality Guidelines

Congressional Instructions. Congress called for a strong public role in developing the Data Quality guidelines. Specifically, the statute [P.L. 106-554, §515] calls for "public and federal agency participation" in drafting the OMB guidelines. OMB, in fulfilling their Congressional mandate to provide "policy and procedural guidance to agencies" on implementing the Act, directed agencies to provide significant roles to public stakeholders in the development of the agency-specific implementing Data Quality guidelines.

OMB Instructions. The OMB guidelines require that agencies solicit public comment on their draft guidelines. Furthermore, DOL and other agencies are instructed to consult, during the drafting process, with scientific and technical communities on the key issue of selecting categories of original and supporting data to be subject to the guidelines' reproducibility requirement.

Early and substantive public participation during the drafting process can only speed and improve the overall development and approval processes.

B. Purpose of the CRE "Working Draft" White Paper

The purpose of this Working Draft paper is to facilitate discussions within the Department and between the Department and public stakeholders on key Data Quality issues.

For each major issue that DOL needs to address in developing their draft Data Quality guidelines, this document outlines:

- OMB Guidance. Discussion of the guidance provided by OMB in their final guidelines;
- Tasks DOL Needs to Perform. Discussion of the tasks DOL needs to perform to apply the OMB guidance to their own agency-specific Data Quality guidelines; and

- CRE Recommendations. Suggested approaches for DOL to take when addressing the major Data Quality Issues in their draft guidelines.

C. Objectives of the Data Quality Act

Key Objectives. The key goals of the Data Quality Act are to:

- Set enforceable standards for the quality of information disseminated by the federal government; and
- Provide recourse to affected parties who may be harmed by the dissemination of information not meeting the Data Quality standards.

More Important Information Requires Higher Quality Standards. In providing direction to agencies, OMB recognized that:

- There needs to be a minimum standard for quality, objectivity, utility and integrity that all information disseminated by the government must adhere to; and
- More important information needs to adhere to a higher quality standard.

"Influential" information is sufficiently important that OMB requires that the analytic results be capable of being substantially reproduced.

D. Need for DOL Conformity with the OMB Guidelines

OMB provided significant flexibility to DOL and other agencies in shaping their Data Quality guidelines so as to enable each agency to tailor their guidelines to best meet their specific Departmental missions and types of information dissemination. However, although DOL has substantial flexibility, the Department's Data Quality guidelines are required to adhere to the standards specified by OMB and are subject to OMB review and approval.

E. About CRE

The Center for Regulatory Effectiveness (CRE), established in 1996, is a nationally recognized clearinghouse for methods to improve the federal regulatory process.

The CRE has two paramount goals:

- To ensure that the public has access to data and information used to develop federal regulations, and
- To ensure that information which federal agencies disseminate to the public is of the highest quality.

CRE has long advocated the establishment of federal data quality standards and has actively participated in the public process. For more information about CRE and our participation in Data Quality issues, please see our website, www.theCRE.com.

2. PROCESS AND TIME FRAME FOR GUIDELINES DEVELOPMENT

Congress and OMB have specified a specific process and deadlines for the development and issuance of Data Quality guidelines. The following are the key steps and deadlines for promulgating Data Quality guidelines.

<u>Deadline</u>	<u>Task</u>	<u>Status</u>
9/30/01	OMB Issuance of Final Data Quality Guidelines	Met
4/1/02	Agencies provide draft guidelines to public and OMB for review and comment	
7/1/02	Agencies to submit revised guidelines to OMB for final review	

10/1/02

Federal Register and begin pre-dissemination Data Quality review process. The October 1, 2002 date for final publication of agency-specific Data Quality guidelines was set by Congress and is judicially enforceable. Compliance with dates set by OMB may also be subject to judicial review.

Data Quality: An Evolutionary Process. OMB's guidelines stressed that their guidelines were the start of an ongoing process that includes public participation, drafting

and finalization of agency-specific guidelines and that OMB and agency guidelines would be refined based on factors including experience.

3. TASKS DOL NEEDS TO PERFORM IN DEVELOPING DRAFT DATA QUALITY GUIDELINES

Key Functions DOL is to Perform in Developing Data Quality Guidelines. DOL has four basic duties in drafting their Data Quality guidelines:

- Applying OMB guidance to DOL's Data Quality definitions;
- Determining which agency information products are subject to the reproducibility standards;
- Developing a process for reviewing and substantiating the quality of information before it is disseminated; and
- Developing an administrative mechanism, including an appeals process, allowing affected parties to obtain correction of information not meeting the Department's Data Quality standards.

Annual Report. The OMB guidelines also require that DOL provide an annual report to OMB (starting January 1, 2004) on detailing the Department's handling of complaints concerning alleged violations of the Data Quality guidelines.

A. Applying OMB Guidance to DOL's Data Quality Definitions

The OMB guidelines provide clear definitions of key Data Quality terms. However, OMB left agencies flexibility in applying some of the OMB definitions to their specific programs.

i. Defining DOL-Sponsored Information Dissemination

Guidance Provided by OMB. The OMB guidelines defines information as "any communication or representation of knowledge, such as facts or data..." The guidelines go on to define dissemination as an "agency initiated or sponsored dissemination of information to the public." The guidelines provide information on what constitutes initiation of a dissemination as well as the circumstances which constitute and do not constitute sponsorship of a dissemination. Also included is a recommendation that agency-funded, but not sponsored, information disseminations include a disclaimer statement.

DOL Application of OMB Guidance. Due to the potential for public confusion over what constitutes agency-sponsored information versus independent research funded by an agency, OMB requests that agencies that fund scientific research, such as DOL, "clarify the applicability of these guidelines to the various types of information they and their employees and grantees disseminate." Thus, as part of their Data Quality guidelines, DOL needs to:

- Develop a policy concerning when DOL-funded research needs to carry a disclaimer statement indicating that views do not necessarily reflect those of the agency.

CRE Recommendations. DOL should develop:

- Specific objective criteria for determining when information dissemination that could be perceived as being associated with the Department, e.g. federally funded, DOL employee participation, etc., are independent of DOL sponsorship as defined by OMB.
- Disclaimer statements and a policy requiring their use on information associated with, but not sponsored, by DOL.

ii. Peer-Reviewed Information

Guidance Provided by OMB. OMB's final Data Quality guidelines include an extensive discussion of:

- The need for transparency in peer review;
- Standards for agency-sponsored peer review, based on recommendations by OMB to the President's Management Council;
- Limitations of journal peer-review, including the need for additional quality checks for important information; and
- The ability of a petitioner, based on persuasive information, to rebut the presumption of the objectivity of peer-reviewed information.

DOL Application of OMB Guidance. Based on the OMB guidelines, DOL will need to:

- Define the Department's peer review standards, consistent with the OMB guidelines; and
- Develop additional quality checks to ensure transparency and reproducibility for influential information (discussed below).

CRE Recommendations. DOL's peer-review standards should:

- Closely adhere to OMB's recommendation to the President's Management Council; and
- Include procedures and criteria for outside parties who seek to rebut the objectivity presumption of peer-reviewed information.

iii. Influential Information

Guidance Provided by OMB. OMB's final Data Quality guidelines define the key term "influential scientific, financial, or statistical information" as information that "will have or does have a clear and substantial impact on important public policies or private sector decisions." Although OMB has further clarified the definition from the language proposed in their interim final guidelines, some discretion is left to agencies in defining the term in their own guidelines due to the diverse nature and types of information disseminated by federal agencies.

DOL Application of OMB Guidance. DOL has two basic options with regard to defining influential information. The Department can either:

- Develop a definition of influential information, consistent with the OMB guidelines, for the entire Department; or
- Develop definitions of influential information, consistent with the OMB guidelines, specific to each major DOL program office, such as BLS and OSHA. In event of selecting this option, DOL would likely want to develop a Department-wide definition to serve as a template for the program offices and to cover other elements of the Department which do not develop their own specific language.

CRE Recommendations. DOL should develop:

- A Department-wide definition of "influential" based on the input of program offices and stakeholders. DOL may want to consider allowing program office to develop specialized definitions of influential provided

that they are at least as stringent as the Department-wide definition. Key types of information which should be considered influential include:

- Statistical sampling and analysis methodologies;
- Testing protocols (and underlying scientific and technical documents)
- Reporting and recordkeeping requirements (which lead to information disseminations)
- Standards (including supporting scientific, technical and economic materials)
- Compliance and conformity assessment procedures (and supporting materials justifying selection of the specific compliance methodologies).

iv. Reproducibility/Capable of Being Substantially Reproduced

Guidance Provided by OMB. OMB's guidelines define a reproducibility standard for influential information. The standard requires that agencies provide sufficient transparency about data and analytic methodology as to enable qualified third parties to reproduce the influential information, including analytic results. Information which is not "capable of being substantially reproduced" would be in violation of the standard. The guidelines require that the amount of acceptable imprecision in reproducibility be set according to the importance of the information.

- Confidentiality Issues. In event that confidentiality restrictions prohibit providing sufficient transparency as to allow independent assessment of reproducibility, OMB requires that agencies apply "especially rigorous robustness checks" to influential analytic results and document the checks. These robustness checks are to be appropriate for the specific issues for which DOL is responsible. Furthermore, OMB requires agency guidelines to address the expected instances in which confidentiality requirements would limit transparency. An additional requirement for agency guidelines is that they require that specific data sources, assumptions and analytic methodologies be disclosed regardless of confidentiality restrictions.
- Subjecting Original and Supporting Data to the Reproducibility Requirement. In addition to defining a reproducibility standard for influential information, OMB also asks agencies to consider which types of original and supporting data should also be subject to the reproducibility standard, given any relevant ethical, feasibility and confidentiality constraints. Agencies are asked, during the drafting process, to consult with relevant scientific and technical communities in carefully addressing which types of original and supporting data should be subject to the reproducibility requirement. A description of the applicability of the reproducibility to original and supporting data, which reflects consultations with relevant outside parties, is to be included in the draft guidelines agencies submit to OMB.

DOL Application of OMB Guidance. Based on the OMB guidelines, DOL has several key reproducibility tasks in developing their draft Data Quality guidelines:

- Developing an agency-specific reproducibility standard, conforming to the OMB standard. The standards should specify:

- Acceptable levels of imprecision in reproducibility for influential information of various levels of importance.
 - The requirement for the agency to always disclose the specific data sources, assumptions and quantitative methodologies employed;
 - The anticipated instances when confidentiality restrictions on underlying data would impinge on transparency requirements;
 - The "especially rigorous" robustness checks that would be employed if confidentiality restrictions preclude full transparency; and
 - Documentation procedures for ensuring that the robustness checks were appropriate to assure information quality.
- Consulting with relevant scientific and technical communities about which types of original and supporting data should be subject to the reproducibility requirement; and
 - Based on the consultations and other considerations discussed by OMB, determine which categories of original and supporting data should be subject to the reproducibility requirement.

CRE Recommendations. DOL should undertake the above tasks through an open process. Public participation is particularly important with regard to:

- Consultations with stakeholders in determining which original and supporting data should be subject to the reproducibility standard; and
- Developing the "especially rigorous" robustness checks that DOL would employ in those instances where confidentiality restrictions preclude complete transparency.

CRE also recommends that DOL establish specific tests of robustness for all information subject to the reproducibility requirement to ensure that results are reliable and not dependent on a narrow set of assumptions or test conditions.

v. Application of Safe Drinking Water Act Language to DOL Programs

Guidance Provided by OMB. OMB's guidelines require that agencies adopt or adapt the quality standards contained in the 1996 amendments to Safe Drinking Water Act (SDWA) for analyses of risks to "human health, safety and the environment" which are disseminated or maintained by agencies. Included in the SDWA language and discussed by OMB is the requirement that agencies prepare a publicly available document for each regulation which specifies, to the extent practical:

- Each population addressed by any risk estimate;
- The expected risk or central estimate of risk for each population addressed;
- Each appropriate upper and lower bound of the risk estimate;
- Each significant uncertainty identified in the risk assessment process and studies which would assist in resolving the uncertainty; and
- Peer-review studies known to the agency which support, are directly relevant to or do not support any risk estimate and the methodology used to reconcile inconsistencies in the scientific data.

DOL Application of OMB Guidance. DOL needs to:

- Adopt the SDWA language or develop comparable and consistent quality standards for the Department's health and safety risk information disseminations;
- Develop procedures for applying the SDWA or comparable language to the health/safety/environment risk information maintained by the agency; and
- Develop the SDWA-required risk documents specifying key risk information for each relevant DOL regulatory proceeding.

CRE Recommendations. DOL should:

- Adopt the SDWA language as these Congressionally-approved quality standards have demonstrated their ability to ensure quality data communications.

- Develop procedures and a timetable for applying the SDWA language to the health/safety/environment risk information maintained by DOL, including development of the publicly available documents describing
- Develop procedures for a DOL-initiated correction or withdrawal of health/safety/environment risk information that does not meet the standards set by the SDWA language.
 - In that the SDWA requirements apply to information "maintained" by the Department, a key initial step in the process should be for DOL to review the risk information underlying all ongoing safety, environmental and health regulatory proceedings for compliance with the SDWA standards.
- Consider how to apply the Data Quality principles contained in the SDWA language to economic and other non-health/safety/ environment scientific information disseminated and maintained by DOL.

vi. Definition of Affected Persons Eligible to Seek and Obtain Correction of Information

Guidance Provided by OMB. OMB's guidelines require that agencies establish administrative processes allowing "affected persons" to seek and obtain correction of information maintained by agencies not complying with the guidelines. However, OMB has not defined the term "affected person."

DOL Application of OMB Guidance. DOL has the option of developing their own definition of "affected person" consistent with the spirit of the guidelines and relevant case law.

CRE Recommendations. DOL should develop a definition of "affected person" consistent with the broad concept of standing espoused by the U.S. Court of Appeals for the District of Columbia in *Tozzi v. DHHS*.

B. *DOL Data Quality Assurance Procedures*

Guidance Provided by OMB. The OMB guidelines require DOL to:

- Designate the CIO or other official to be responsible for the Department's compliance with the guidelines;

- Develop a process for ensuring that information disseminated by the Department complies with the Data Quality guidelines before it is released;
- Apply Data Quality principles at every step of the information creation, collection, maintenance and dissemination process; and
- Substantiate the quality of information disseminated.

CRE Recommendations. CRE recommends:

- The CIO be designated as leader of DOL's Data Quality program;
- An appropriate official in each program office be given responsibility for carrying out that office's Data Quality assurance program;
- DOL establish a public docket, preferably online, providing documentation substantiating the adherence of all information disseminations with the Data Quality standards; and
- DOL review the influential information underlying all ongoing regulatory proceedings to ensure compliance with the Data Quality standards. Rapid implementation of this step, including correction of information not meeting the Data Quality standards will be necessary to ensure the Department's timetable for issuing regulations is not disrupted and to minimize the number of petitions for corrective action received by the Department.

C. *Correction Mechanism Procedures*

Guidance Provided by OMB. The Data Quality Act and OMB guidelines require agencies establish an administrative procedure allowing affected persons to seek and obtain correction of information maintained and disseminated by agencies which does not adhere to requirements of the Data Quality guidelines. Agencies are required to develop time periods for agency decisions on whether and how to correct the information. Also required is the establishment of an administrative process, and associated decisionmaking time frame, allowing persons to appeal an initial decision by an agency. The administrative correction mechanism applies to information, "regardless of when the agency first disseminated the information."

DOL Application of OMB Guidance. Based on the Act and OMB guidelines, DOL needs to:

- Develop a petition process allowing affected persons to seek and obtain correction of information;
- Designate a DOL official and staff responsible for administering the petition process;
- Designate a time period by which DOL must reach a decision on any petitions;
- Develop an appeals process, including a time period by which a decision must be reached; and
- Designate an official responsible for the appeals process.

CRE Recommendations. CRE recommends that DOL:

- Establish Departmental policies to ensure that appropriate technical, scientific and other DOL personnel are able to fully cooperate in resolving any complaints from affected persons regarding data quality;
- Ensure that the officials responsible for the administrative corrections process have sufficient resources to appropriately carry out their duties;
- Set a time period of 90 days for resolving original complaints regarding Data Quality in order to prevent additional harm from occurring to an affected person from information which does not meet the Data Quality standards and to prevent a needless backlog of cases to be resolved.
- Set a time period of 60 days for resolving appeals of Data Quality complaints;
- Allow a short period of time (10 days) for public comment on the complaint and/or appeal of the complaint;
- Ensure that the officials who decide appeals are independent of DOL persons acting on the original complaint; and
- Create a public docket of all complaints, appeals and DOL decisions, including either:

- Substantiation of the quality the information which was subject of the complain; or
- Steps taken to correct the information.

D. Reports to OMB

Guidance Provided by OMB. The OMB guidelines specify four reports that DOL is required to prepare, three of these documents are one-time reports used in developing the Department's guidelines and one requirement is for an annual report to OMB on the Data Quality complaints received by the Department and their resolution.

DOL Application of OMB Guidance. DOL needs to:

- Prepare a draft report by April 1, 2002 including the Department's Data Quality guidelines and administrative correction mechanism and provide it to OMB and the public for comment;
- Based on public comment, prepare a revised draft report to OMB no later than July 1, 2002.
- Publish the final form of the report no later than October 1, 2002, the deadline specified by Congress.
- Prepare fiscal year annual reports to the Director of OMB beginning January 1, 2004 concerning Data Quality complaints received by the Department. The reports are to describe, quantitatively and qualitatively, the complaints the Department receives from the public regarding compliance with the Data Quality guidelines. Data to be contained in the annual report from DOL to OMB includes:
 - Number of complaints received during the previous fiscal year;
 - Nature of complaints; and
 - Resolution of complaints.

CRE Recommendations. CRE recommends that DOL:

- Take all necessary steps to ensure that the April 1st deadline for the first draft report on the Department's Data Quality is met; and

- With regard to the annual reports on the Data Quality complaints, generate the needed information and store it in a public docket on an ongoing basis so that the annual reports can be generated with little additional work.

5. SUMMARY OF RECOMMENDATIONS

A. *Defining DOL-Sponsored Information Dissemination*

- Develop objective criteria for determining which information disseminations are Department-sponsored.

B. *Peer-Reviewed Information*

- Closely adhere to OMB's recommendations.

C. *Influential Information*

- Develop a Department-wide definition of "influential" based on the input of program offices and stakeholders.

D. *Reproducibility/Capable of Being Substantially Reproduced*

- Institute an open process for following OMB guidelines.

E. *Application of Safe Drinking Water Act Language to DOL Programs*

- Adopt the SDWA language.
- Develop procedures and a timetable for applying the SDWA language to the risk information maintained by DOL.

F. *Definition of Affected Persons Eligible to Seek and Obtain Correction of Information*

- Use a definition of "affected person" consistent with the decision of the U.S. Court of Appeals for the District of Columbia in *Tozzi v. DHHS*.

G. *DOL Data Quality Assurance Procedures*

- The CIO be designated as leader of DOL's Data Quality program.
- Appropriate officials in each program office be given responsibility for carrying out Data Quality assurance activities.
- DOL establish a public docket, substantiating the adherence of all information disseminations with the Data Quality standards.

H. Correction Mechanism Procedures

- Ensure that appropriate DOL personnel are able to fully cooperate in resolving any complaints regarding data quality.
- Set a time period of 90 days for resolving original complaints and 60 days for resolving appeals of Data Quality complaints.
- Allow for public comment on the complaint and/or appeal of the complaint.
- Create a public docket of all complaints, appeals and DOL decisions.

I. Reports to OMB

- Take all necessary steps to ensure that the April 1st deadline for the first draft report on the Department's Data Quality is met; and

6. NEXT STEP

- Provide a point of contact for ongoing discussions between DOL, CRE and other stakeholders.