How We Validate Our Data

Complete, accurate and reliable data are essential for effective decision-making. State and local educational agencies have historically provided education performance data that do not fully meet information quality standards. Given the requirements of *No Child Left Behind*, accuracy of state and local educational agency performance data is even more crucial, because funding decisions are made and management actions are taken on the basis of this performance information.

The Department is committed to improving the completeness, accuracy and reliability of data for *No Child Left Behind* reporting, integrated performance-based budgeting and general program management. In addition to completeness, accuracy and reliability, the Department has improved the timeliness of data reporting to the public by several months. Data time lags have been cut from up to 24 months for some performance data in FY 2006 to an average of 8.5 months in FY 2008. The implementation of ED*Facts*, an initiative designed to collect and use K–12 state performance data, will help to reduce the reporting burden on state and local educational agencies, resulting in further improvement in the timeliness of data submitted to the Department.

Performance Data

The Department is collaborating with state educational agencies and industry partners to provide a centralized tool for collection of, access to and use of timely and accurate performance data in support of *No Child Left Behind* and to minimize burden on state educational agencies.

Department data validation and verification focuses on two goals:

- External quality—Data collection at the school, district and state levels will be conducted using well-organized and methodologically rigorous techniques.
- Internal validity—Data files submitted by state educational agencies will be validated using a Departmentwide matrix and through expert reviews.

External Quality. Standardization of data collection by school districts—reported by local educational agencies to state educational agencies, aggregated by states and reported to the Department—is the first critical step in the collection and reporting of high-quality data.

- In 2008, the Department solicited applications for awards to fund the development or improvement of statewide longitudinal data systems, which are already under way in 27 states.
- In school year 2008-2009, state educational agencies are required to fully report
 educational data through the Department's EDFacts collection system. Transition
 agreements with the Department will ensure the smooth transitions to a single
 electronic system.

The Department is working with internal and external partners to help state educational agencies implement, by 2009, high-quality longitudinal data systems that include a state data audit system assessing data quality, validity and reliability.

The goal of the National Forum on Education Statistics, sponsored by the Department's National Center for Education Statistics, is to improve the quality, comparability and usefulness of elementary and secondary education data while remaining sensitive to data burden concerns. The forum plans, recommends and implements strategies for building an education data system that will support local, state and national efforts to improve public and private education throughout the United States. See more details at http://nces.ed.gov/forum/data_quality.asp.

Internal Validity. Verification and validation of performance data support the accuracy and reliability of performance information, reduce the risks of inaccurate performance data and provide a sufficient level of confidence to Congress and the public that performance data are credible.

OMB Circular A-11, Part 6, section 230.5, Assessing the completeness and reliability of performance data, requires each agency to design a procedure for verifying and validating data that it makes public in its annual performance plans and reports. Additionally, the Government Performance and Results Act of 1993 describes the means to be used to verify and validate measured values. Finally, the Reports Consolidation Act of 2000 requires that the transmittal letter included in annual performance reports contains an assessment by the agency head of the completeness and reliability of the performance data included in the reports.

In response, the Department has developed a matrix to guide principal offices responsible for reporting data in performance measures to address issues of data integrity and credibility. The matrix provides a framework for validating and verifying performance data before it is collected and reported and will be used to evaluate data prior to publication.

The Department's data validation criteria require that:

- The goal and measure are appropriate to the mission of the organization and measured performance has a direct relation to the goal.
- The goal and measure are realistic and measurable, achievable in the time frame established, and challenging in their targets.
- The goal and measure are understandable to the lay person, language is unambiguous, and terminology is adequately defined.
- The goal and measure are used in decision-making about the effectiveness of the program and its benefit to the public.

For more information on the matrix and its implementation, go to http://www.ed.gov/about/reports/annual/data-verfication.doc.

Data Management

Management Excellence. The Department develops and uses data to strengthen internal controls. One of the most visible areas in which this occurs is the annual budget development process. The Department uses program performance data to inform the formulation and execution of the Department's budget, fulfilling a governmentwide element of the *President's Management Agenda*.

Federal Student Aid. Federal Student Aid is improving information technology, data and management systems to yield reliable performance data with which to make informed budget and policy decisions. These systems will enhance the budget process and increase the accuracy and reliability of information received from outside sources.

Internal Control Measures. The Department also produces financial data for official submission to Congress, OMB and other federal authorities as mandated in the *Government Performance and Results Act of 1993.*

The data quality processes for financial data are reflected in the Department's audit report and in management's assurance of internal control over financial reporting assessment. The financial statements, associated notes and auditor's reports can be found on pages 127–190. The required Limitations of the Financial Statements can be found on page 34. Management's assurance of internal control can be found on page 41.