Archived Information

Education Department's Draft Data Quality Standards

Standard 1: Validity

- 1. Do the objective, performance indicator, and data all describe the **same** phenomena of interest? Do they all align?
- 2. Is a realistic plan in place to improve data collection on all performance measures (especially to resolve any mismatches addressed in question #1)?
- 3. Do the indicators cover aspects of the program that are useful and important for policy decision making?
- **4.** Is way in which the data are being used to measure performance on the indicator appropriate given what is known about how it was collected?

Standard 2: Accurate Definitions

- **1.** Have clear written definitions of key terms (including exclusions/inclusions) been communicated to data providers?
- 2. Have definitions and time periods been followed or discrepancies clearly documented?
- **3.** Do reporting forms provide spaces for data providers to report deviations from definitions and uses of estimation at the time they provide the data?
- **4.** Have definitions been communicated in sufficient time for data providers to prepare their system to properly implement them?
- 5. Has feedback been invited from data providers about data collection issues and possible problems?
- **6.** Have respondents been involved in setting definitions for key terms?

Standard 3: Accurate Counts

- 1. Have entities for which counts have changed more than 10% since the previous report been double-checked?
- **2.** Have estimates been used for no more than 10% of the phenomena counted, and are estimates clearly differentiated from actual counts?
- 3. Have counts been tallied at least twice and totals agree?
- **4.** Are independent under and overcount checks in place for counts associated with major program funding?
- 5. Has sample been drawn from the most up-to-date population lists available?
- **6.** Have weights been properly applied?
- 7. Are data reported with weights properly applied?

Standard 4: Editing

- **1.** Have non-responses been followed up?
- 2. Have large changes or unusual findings been discussed with the primary data providers to see if they might be due to editing errors?
- 3. Have data errors been traced back to their original source and mistakes corrected?
- **4.** Have the data been "eyeballed" to see if it is reasonable given what is known about earlier years and other respondents?

- **5.** Have the data, after they were entered, been systematically reviewed by a different person who is familiar with the data?
- **6.** Has an electronic editing program been used to clean the data?

Standard 5: Calculation

- 1. Have procedures for dealing with missing data been correctly applied?
- 2. Have the "+ or -" confidence intervals been reported for sample data?
- **3.** Have systems been put in place to double-check all data?
- **4.** For sample data, has the data analysis plan been reviewed by outside experts to ensure that appropriate formulae and procedures are applied?

Standard 6: Timeliness

- 1. Are data from a time before the policy period of interest?
- 2. Is a regularized schedule of data collections in place to meet policy information needs?
- **3.** Are data reported as soon as possible after collection?
- **4.** Is the year of the data collection clearly identified in the report?
- **5.** Are the data entered and processed in electronic machine readable form?
- **6.** Are resources being invested in creating a modern automated electronic data system?
- 7. Are review processes designed to ensure that findings are made public in a timely fashion?
- **8.** Are respondents involved in setting time schedules?
- 9. Are time schedules for providing data enforced with clear and frequent reminders?

Standard 7: Reporting

- 1. Are data quality problems reported together with the findings?
- 2. Are data quality problems clearly described in reports?
- **3.** If there have been significant changes in program definitions that might break trend lines, have they been noted?
- 4. Is the data collection method and sample size mentioned at least briefly when findings are presented?
- **5.** Is the year that the data were collected clearly stated in the report?
- **6.** Are data collection, cleaning, and analysis procedures documented in writing?
- 7. Is each step in the data collection process required to report deviations and problems in data quality?
- **8.** Are good graphics techniques used (e.g., axes at 0)?
- **9.** Have the types of exclusions and amount of non-response been clearly described?
- **10.** Has the report of findings been edited by someone with expertise in data quality issues?
- 11. Are reports widely announced and effectively disseminated to intended users?

Standard 8: Burden Reduction

- 1. Is all the data that is requested actually used for either reporting to Congress, management improvements, or technical assistance within two years of collection?
- 2. Before requiring any data, was there a review of data already available being submitted by the same grantees through other federal programs?
- **3.** Is there on-going communication with offices providing similar services or targeting similar customers/grantees?
- **4.** Were grantees and other key stakeholders, such as states, included on the data collection decisions?