

Appendix A: Data Validity and Verification Assurance

The *Government Performance and Results Act Modernization Act of 2010* requires agencies to describe the accuracy and reliability of data presented. During 2013, the Department significantly strengthened its approach to data verification and validation. This revised process applies to FY 2014 and will be used as the basis for reporting performance results going forward. The data presented in the Department's *FY 2014–18 Strategic Plan* and *FY 2015 Annual Performance Plan* are assessed for completeness and reliability differently depending on the type of data and its source:

- statistical data,
- program and enforcement data collections,
- monitoring and grant applications,
- management information systems/business operations, and
- external (nonstatistical) data sources.

Details of this process, along with descriptions of each data type and how the Department assesses its completeness and reliability, are presented as part of this appendix. The appendix also includes known limitations of the data and the Department's plans to address those limitations. Improvement efforts include revising program and enforcement data collections and improving grantee monitoring processes.

Because FY 2014 represents an overlap between two strategic plans, the Department is taking a forward-looking approach to reporting that emphasizes the continuity between the strategic plan that is being closed out this year and the plan that will be used to report in FY 2014 through FY 2018. I am confident that our data verification and validation process and the data sources used provide, to the extent possible, complete and reliable performance data pertaining to goals and objectives in our *FY 2014–18 Strategic Plan*, including those goals and objectives that are continuing from the *FY 2011–14 Strategic Plan*.

Through a process of continuous improvement, the Department continues to assess its validation process and welcomes input from stakeholders.

/s/

Arne Duncan
March 10, 2014

The *GPRA Modernization Act of 2010* requires agencies to prepare information on the reliability of data presented. OMB guidance indicates:

Agencies may develop a single data verification and validation appendix used to communicate the agency's approaches, and/or may also choose to provide information about data quality wherever the performance information is communicated (e.g., websites). Agencies should discuss their verification and validation techniques with their respective OMB Resource Management Office, if necessary. The transmittal letter included in Annual Performance Reports must contain an assessment by the agency head of the completeness and reliability of the performance data presented and a description of agency plans to improve completeness, reliability, and quality, where needed.²⁶

The data presented in the Department's *FY 2014–18 Strategic Plan* are obtained from five basic sources. The text below outlines these types of data and how the Department will assess their completeness and reliability:

- statistical data,
- program and enforcement data collections,
- monitoring and grant applications,
- management information systems/business operations, and
- external (nonstatistical) data sources.

Statistical data collections contain documented studies' methodologies that provide evidence of data completeness and reliability and identify data limitations that arise from a variety of sources, including sampling error. To identify their completeness and reliability, the Department will rely upon associated methodology reports developed by the National Center for Education Statistics (NCES), Census, and other statistical agencies as applicable.

Strategic Plan data obtained from **program data collections** are submitted by grantees to program offices, or from **program data submitted to the Department through the ED Facts Submission System**. The Department's ED Facts team works with ED program offices on protocols to assess the completeness, reliability, and overall quality of ED Facts data, identifying limitations specific to the data elements used to calculate public-facing metrics. Program offices were asked to identify procedures they follow to ensure the completeness and reliability of APR data, known limitations, and applicable plans for quality enhancement. To identify the completeness and reliability of **enforcement data collections** (such as the Civil Rights Data Collection), the Department will rely upon associated methodology notes.

Monitoring and grant applications data (such as Flex Applications) and **management information systems/business operations** (such as the Past Performance Information Retrieval System) are also used to calculate performance measures. Program offices were asked to identify the monitoring process, information system, or business operation that is the source of metric data; describe quality assurance of procedures in use; and identify data limitations.

Nonstatistical **data sources external to the Department** are used to support four public-facing performance indicators. The source for two metrics is the Department of Health and Human

²⁶ OMB Circular A-11, Preparation, Submission, and Execution of the Budget, Part 6, Section 260.9, July 2013.

Services (HHS). The Department will consult with HHS on the limitations of its data. The other external data providers were asked to provide evidence of data quality and known data limitations.

Below is a list of metrics with associated data sources and information on data quality, limitations, and improvements.

FY 2014–18 Strategic Plan Public-Facing Metrics

Statistical Collections

#	Metric (Statistical Collections)	Data Source	Data Quality, Limitations, and Improvements
1.1.A, 1.1.B	Rate of increase in net price of public two- and four-year institutions	Integrated Postsecondary Education Data System (IPEDS), NCES	Data quality and limitations identified in IPEDS First Look Publications, “Data Collection Procedures” and IPEDS methodology available at http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2012293 .
1.1.C	Percentage of high school seniors filing a FAFSA	Projections of Education Statistics to 2021 (Denominator)	The denominator is the projected number of graduating seniors according to Projections of Education Statistics to 2021. Data quality and limitations documented at http://nces.ed.gov/programs/projections/projections2021/app_a1.asp .
1.2.A	Number of low-performing institutions with high loan default rates and low graduation rates	IPEDS Graduation Rate Survey and FSA Three-Year Cohort Default Rate (NSLDS)	Graduation rate data quality and limitation identified in IPEDS First Look Publications, “Data Collection Procedures” and IPEDS methodology available at http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2012293 . CDR data quality and limitations are available at http://ifap.ed.gov/DefaultManagement/finalcdrg.html .
1.3.A	Degree attainment among 25–34-year-old age cohort	NCES tabulations of data from the Current Population Survey, Census	Data quality and limitations documented in http://www.census.gov/cps/files/Source%20and%20Accuracy.pdf .
1.3.B, 1.3.C	Retention rate of first-time degree-seeking undergraduates	IPEDS, NCES	Data quality and limitations identified in IPEDS First Look Publications, “Data Collection Procedures” and IPEDS methodology available at http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2012293 .
1.4.A	Number of STEM postsecondary credentials awarded	IPEDS, NCES	Data quality and limitations identified in IPEDS First Look Publications, “Data Collection Procedures” and IPEDS methodology available at http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2012293 .
2.5.A	Percentage of high school and middle school teachers who teach STEM as their main assignment who hold a corresponding undergraduate degree	Schools and Staffing Survey (SASS), NCES	The methods report for the 2011–12 SASS is not yet released. Study documentation from the 2007–08 survey is available at http://nces.ed.gov/surveys/sass/methods0708.asp .

Program and Enforcement Data Collections

#	Metric (Program and Enforcement Data Collections)	Data Source	Data Quality, Limitations, and Improvements
2.3.A, 2.3.B	Disparity in the rates of out-of-school suspensions for students with disabilities and youth of color	Civil Rights Data Collection, ED/OCR	Data quality and limitations for the 2011–12 CRDC data set are not yet available. Data quality and limitations for the 2009–10 CRDC data set are available at http://ocrdata.ed.gov/DataNotes .
2.4.A	Number of persistently low graduation rate high schools	EDFacts universe collection, annual reports	Adjusted cohort graduation rate (ACGR) data for 2011–12 are not available for three states. Two states will report ACGRs beginning with the 2012–13 school year and the third will report ACGRs beginning with the 2013–14 school year. Additionally, ACGR is a new data element and as schools, LEAs, and SEAs refine their measurement of ACGR, the number of persistently low graduation rate high schools could change purely as a result of better measurement.
2.4.B	Percentage of Cohort 1 priority schools that have met the state exit criteria and exited priority school status	EDFacts universe collection, annual reports	ESEA Flexibility plans do not allow for one standard methodology to determine whether or not a school “met the state exit criteria.” This will need to be looked at manually, state-by-state, once the list of schools exiting priority status has been identified.
2.4.C	Percentage of Cohort 1 focus schools that have met the state exit criteria and exited focus school status	EDFacts universe collection, annual reports	ESEA Flexibility plans do not allow for one standard methodology to determine whether or not a school “met the state exit criteria.” This will need to be looked at manually, state-by-state, once the list of schools exiting focus status has been identified.
4.1.A	National high school graduation rate	EDFacts universe collection, annual reports	Adjusted cohort graduation rate data for 2011–12 are not available for three states. Two states will report ACGRs beginning with the 2012–13 school year and the third will report ACGRs beginning with the 2013–14 school year. NCES imputed data for those states to derive a national total.

Monitoring and Grant Applications

#	Metric (Monitoring and Grant Applications)	Data Source	Data Quality, Limitations, and Improvements
1.1.D	Index of national aggregate annual earnings of VR consumers (based on the number of competitive employment outcomes, hours worked, and hourly wages)	Rehabilitation Services Administration-911 (RSA-911)	All VR grantees submit a RSA-911, which includes information on employment outcomes. In addition to state VR agencies reviewing the data prior to submitting it to RSA, RSA reviews all submissions with a series of edit checks to identify suspect or potentially erroneous data. Every case from every agency for which RSA has a question is

#	Metric (Monitoring and Grant Applications)	Data Source	Data Quality, Limitations, and Improvements
1.1.E	Index of national aggregate annual earnings of Transition-Age Youth (based on the number of competitive employment outcomes, hours worked, and hourly wages)		returned to the agency for review and, following review and any needed correction, is resubmitted to RSA to start the process anew. Despite this process, some erroneous data likely exist in the database, due to the large quantity of data. However, because RSA is using only three data elements that are not subject to subjective interpretation, the likelihood of error is substantially reduced for these metrics. For FY 2014 and following years, RSA introduced a new RSA-911 data collection form with expanded definitions and, for guidance, issued a series of Questions and Answers to assist VR agencies in completing the new form. In addition to the new form, new instructions, and guidance, RSA is preparing a new edit program to review all new RSA-911 submissions that is more comprehensive than the prior edit program.
1.1.F	Number of peer-reviewed publications resulting from NIDRR-supported grantee projects	NIDRR-supported grantee Annual Performance Reports (APRs)	The main data limitation is that APR data are self-reported by grantees. To help ensure the reliability of the self-report data, an ED contractor conducts data quality checks and contacts grantees to resolve concerns with the data quality.
2.1.A	Number of states that have adopted college- and career-ready standards	ESEA Flexibility Monitoring	The Office of Elementary and Secondary Education's (OESE) Student Achievement and School Accountability (SASA) office will count the number of states that either (a) have a memorandum of understanding in place to implement the Common Core or (b) have a letter from an Institute for Higher Education in their state certifying that their state has college- and career-ready standards. There are no known data limitations.
2.1.B	Number of states that are implementing next-generation reading and mathematics assessments, aligned with college- and career-ready standards	ESEA Flexibility Monitoring	The Office of Elementary and Secondary Education's (OESE) Student Achievement and School Accountability (SASA) office monitors states that receive ESEA Flexibility waivers in three phases over the three-year waiver. Monitoring includes desk monitoring and on-site monitoring. SASA state leads use a monitoring protocol and rubric to ensure that monitoring is consistent across all states. SASA state leads work with their Group Leader to finalize monitoring reports. All reports are reviewed by both the Group Leader for Monitoring and Technical Assistance and the Director of SASA for consistencies across states. States have an opportunity to review the draft report before the final report is issued. There are no known data limitations.

#	Metric (Monitoring and Grant Applications)	Data Source	Data Quality, Limitations, and Improvements
2.2.A	Number of states that have fully implemented teacher and principal evaluation and support systems that consider multiple measures of effectiveness, with student growth as a significant factor	ESEA Flexibility Applications and Monitoring	ESEA Flexibility applications are signed and attested to by the Chief State School Officer. The Office of Elementary and Secondary Education's (OESE) Student Achievement and School Accountability (SASA) office monitors states that receive ESEA Flexibility waivers in three phases over the three-year waiver. Monitoring includes desk monitoring and on-site monitoring. SASA state leads use a monitoring protocol and rubric to ensure that monitoring is consistent across all states. SASA state leads work with their Group Leader to finalize monitoring reports. All reports are reviewed by both the Group Leader for Monitoring and Technical Assistance and the Director of SASA for consistencies across states. States have an opportunity to review the draft report before the final report is issued. There are no known data limitations.
5.1.B	Number of states linking K–12 and postsecondary data with workforce data	Grant Monitoring	SLDS grantee states submit annual progress reports and monthly update reports on system linkages, which are then validated by program staff through phone calls and site visits. Information is limited for non-grantee states, where program staff relies on information from technical assistance providers or state staff. NCES is moving to a survey on linkage status starting in FY 2015.
5.1.C	Number of states linking K–12 with early childhood data		

Department Management Information Systems/Business Processes

#	Metric (Department Management Information Systems/Business Processes)	Data Source	Data Quality, Limitations, and Improvements
1.1.C	Percentage of high school seniors filing a FAFSA	FSA's Central Processing System (Numerator)	The FAFSA does not ask filers for the year of high school graduation. As such, FSA creates a proxy for the numerator that includes number of applications during the first nine months of the application cycle that are complete (not rejected); first-time filers; incoming freshmen, with or without previous college attendance; age 18 or less as of April 30 of the first year of the application cycle; reporting high school diploma attainment; and attended a high school in the 50 states and DC. FSA improved how it captures the individuals who meet the specifications noted in the previous sentence in its FY 2014 collection.

#	Metric (Department Management Information Systems/Business Processes)	Data Source	Data Quality, Limitations, and Improvements
1.1.G	Number of VR state directors and other state VR personnel who express knowledge of NIDRR grantee research	ED survey of VR state directors and staff	This is a new collection for ED. The Department will work with a contractor to develop a survey and a data quality plan that addresses the completeness and reliability of the data. In addition to the data being self-reported, the Department acknowledges that a key limitation to these data may be low response rates due, in part, to the significant turnover of VR directors and staff.
4.2.A	Percentage of proactive civil rights investigations launched annually that address areas of concentration in civil rights enforcement	Case Management System (CMS) and Document Management (DM) system	The Office for Civil Rights (OCR) captures up-to-date information related to launching and resolving proactive investigations (including compliance reviews and directed investigations) in its Case Management System (CMS) and Document Management (DM) systems. In order to facilitate the ability to access important case data and documents, the staff in OCR's 12 enforcement offices are responsible for ensuring (and are regularly reminded to ensure) that case-related information is entered into the CMS/DM within 5 working days after an action occurs. For compliance reviews and other high-profile cases, updates must be made within 24 hours of significant case developments. OCR's Information Technology Specialist checks these databases on a regular basis to ensure the completeness of the data provided. OCR understands the need to continually monitor and improve the overall consistency and reliability of the data and documents in the CMS and DM systems, and will ensure that all data related to key priority cases are accurate and up to date.
4.2.B	Percentage of proactive civil rights investigations resolved annually that address areas of concentration in civil rights enforcement		
5.1.A	Number of public data sets included in ED Data Inventory and thus linked to Data.gov or ED.gov websites	Count provided by Department staff, based upon the data sets on ed.gov, and public use data identified in the ED Data Inventory	This list is maintained manually and could be subject to minor clerical errors. There are plans to automate as Data.gov continues to upgrade and enhance its online catalog.

#	Metric (Department Management Information Systems/Business Processes)	Data Source	Data Quality, Limitations, and Improvements
5.2.A	Average time to close “cases” (PTAC + FPCO)	Case Tracking System (CTS)	Privacy, Information and Records Management Service (PIRMS) will use EnterpriseWizard case tracking software (i.e., Case Tracking System or CTS). The Case Tracking System has been customized by a contractor to accurately calculate the average time to close all cases. For the purpose of this metric, cases include all non-complaint related inquiries received via email, phone call, or written correspondence that do not require a formal written response with official signature. The CTS is user-driven, thus is subject to user error. To curb user error, policies and procedures are being developed to better assure that Family Policy Compliance Office (FPCO) and Privacy Technical Assistance Center (PTAC) staff input data into the CTS in a consistent and reliable manner. Staff responsible for entering data into the CTS will be trained on policies and procedures. Quarterly monitoring of data entered will be conducted to assure completeness and reliability of data and to recommend any improvements to the CTS or modifications to the standard operating procedures.
5.3.A	Percentage of select new (non-continuation) discretionary grant dollars that reward evidence	Department calculations based upon multiple Department-controlled data sources, including G5	After the end of each fiscal year, the total amount of new discretionary grant dollars for the select programs addressed by the metric (i.e., the denominator) can be determined using G5, the Department’s general grant management database. The specific grant awards that were awarded based on the existence of evidence (per EDGAR, evidence of promise, moderate evidence, or strong evidence) will be identified by each POC after such awards are made. Department senior leadership will ensure that the method and process of identifying specific eligible grant awards is reliable, consistent with existing practices, and not overly burdensome to Department staff.
5.3.B	Number of peer-reviewed, full-text resources in the Education Resources Information Center (ERIC)	Education Resources Information Center (ERIC)	For each reference included in the ERIC database, flags indicate whether the reference (1) is peer-reviewed and/or (2) provides the full text in ERIC. The ERIC contractor uses well-known resources in the library field to determine whether an article was published in a journal that used peer review. IES staff will filter on these two flags to determine the number of resources that meet this metric. There are no known data limitations.

#	Metric (Department Management Information Systems/Business Processes)	Data Source	Data Quality, Limitations, and Improvements
5.3.C	Number of reviewed studies in the What Works Clearinghouse (WWC) database	What Works Clearinghouse (WWC)	Without exception, any study reviewed by the What Works Clearinghouse (WWC) is included in the WWC database, which is publicly available on the Internet. Institute of Education Sciences staff will count the number of reviewed studies that are in the WWC database. There are no known data limitations.
6.1.A	Staffing gaps percentage	Mission Critical Occupation (MCO) Staffing Gap Report	The Department's Budget Service obtains the staffing gap data from the Department's Federal Personnel and Payroll System (FPPS) Datamart roster and separations reports. As FPPS is a user-driven system, the data used for the Mission Critical Occupation (MCO) Staffing Gap Report are only as reliable as the data that are entered into FPPS. Human Capital and Client Services (HCCS) intends to improve data in FPPS by updating standard operating procedures, implementing process maps, and training customers and HCCS staff to follow these new processes when entering data into the system.
6.1.B	EVS Engagement Index	Employee Viewpoint Survey (EVS)	The Federal Employee Viewpoint Survey (EVS) is conducted annually, government-wide, under the direction and oversight of the Office of Personnel Management (OPM) using rigorous, validated statistical survey methods. There are no known data limitations with respect to calculating the EVS indices. The Engagement Index is produced and provided by OPM. As the participation rate for the EVS in 2013 was 68.9%, the Department will work to increase the participation rate to reduce non-response bias in the data. All other aspects of the EVS are sound with regard to completeness, reliability, and quality.
6.1.C	Time to hire	Workforce Transformation Tracking System (WTTS) and Entrance on Duty System (EOS)	A Time to Hire report is generated by the Department's Workforce Transformation Tracking System (WTTS)/Entrance on Duty System (EOS). This report relies heavily on the data that are entered into the system by Department customers and Human Capital and Client Services (HCCS) staff, so quality of data is only as reliable as the information entered into the system. The Department does not have a standardized Workforce Planning Model in place, so there is little strategic planning when Principal Offices input their hiring action plan into WTTS at the beginning of the fiscal year, nor has it been strongly enforced for Principal Offices to plan for succession, attrition, and staff planning. HCCS intends to improve Time to Hire data by implementing a Workforce Planning Model that will allow Principal Offices to anticipate and integrate the human capital response into the Department's <i>Strategic Plan</i> .

#	Metric (Department Management Information Systems/Business Processes)	Data Source	Data Quality, Limitations, and Improvements
6.1.D	Effective Communication Index	Employee Viewpoint Survey (EVS)	The Federal Employee Viewpoint Survey (EVS) is conducted annually, government-wide, under the direction and oversight of the Office of Personnel Management using rigorous, validated statistical survey methods. There are no known data limitations with respect to calculating the EVS indices. The Effective Communication Index uses a consistent subset of EVS questions that allows for tracking trends and making comparisons across agencies and within ED. As the participation rate for the EVS in 2013 was 68.9%, the Department will work to increase the participation rate to reduce non-response bias in the data. All other aspects of the EVS are sound with regard to completeness, reliability, and quality.
6.2.A	Percentage of A-133 Single Audits Overdue for resolution	OCFO's Audit Accountability & Resolution Tracking System (AARTS)	A Quality Control reviewer initiates a weekly upload of A-133 audit data to OCFO's Audit Accountability & Resolution Tracking System (AARTS) through a file submission directly from the Federal Audit Clearinghouse (FAC). An AARTS administrator (separate from the Quality Control reviewer) must verify the uploaded data with the actual audits. Data from Office of Inspector General (OIG) audits are automatically loaded into the AARTS system through a feed directly from the Audit Tracking System (ATS), which is an OIG-owned system. Similar to the A-133 process, these data are also verified by a system administrator once uploaded. The AARTS system is regularly reviewed for updates and improvements to incorporate changed or streamlined processes and to take advantage of advances in technology. There are no current upgrades in development pertinent to the performance management process. There are no known data limitations that would impact this metric.

#	Metric (Department Management Information Systems/Business Processes)	Data Source	Data Quality, Limitations, and Improvements
6.2.B	Compliance rate of contractor evaluation performance reports	Past Performance Information Retrieval System (PPIRS) Compliance Metric Report	The Department conducts an analysis of the completed and pending past performance evaluations on a regular basis. The data used to conduct the analyses are extracted from the Contractor Performance Assessment Reporting System (CPARS), which is used government-wide to track and collect past performance evaluations for all awards that are in excess of the simplified acquisition threshold (SAT). Immediately following the issuance of an award that is in excess of the SAT, which is identified by means of the Federal Procurement Data System - Next Generation (FPDS-NG), the relevant award information is loaded into CPARS. Due to the direct linkage between FPDS-NG, CPARS, and PPIRS, as well as the detailed event tracking feature contained within CPARS, there are no known data limitations.
6.3.A	Percentage of states who annually rate the Department's technical assistance as helping build state capacity to implement education reforms	Annual Grantee Satisfaction Survey	The Grantee Satisfaction Survey will ask project directors a question on their opinion on the extent to which the Department's technical assistance helps build capacity around education reform. The Department will define key terms, such as "capacity" and "education reform," but respondents may interpret this question differently. In order to get as complete data as possible, a contractor initiates the survey, Program Offices send out reminders encouraging the target groups to complete the survey, and the contractor then follows up with calls. Data for state grant programs are based on a census, and missing responses do limit our level of confidence that the data are fully reliable and valid; but for customer satisfaction purposes, this is a tradeoff the Department has been willing to accept. The metric will require the Department to aggregate data, which may result in additional limitations.
6.4.A	Number of ED IT security incidents	Operational Vulnerability Management Solution (OVMS) system	The Office of the Chief Information Officer (OCIO), Information Assurance Services (IAS) Division is responsible for the Independent Verification and Validation (IV&V) of data entered in the Operational Vulnerability Management Solution (OVMS) system. IT security incidents are entered by Information System Security Officers (ISSO) in each principal office. The IV&V process is an internal review that validates the data in OVMS. There are no known limitations to data in the OVMS system.

#	Metric (Department Management Information Systems/Business Processes)	Data Source	Data Quality, Limitations, and Improvements
6.4.B	EVS Results-Based Performance Culture Index	Employee Viewpoint Survey (EVS)	The Federal Employee Viewpoint Survey (EVS) is conducted annually, government-wide, under the direction and oversight of the Office of Personnel Management (OPM) using rigorous, validated statistical survey methods. There are no known data limitations with respect to calculating the EVS indices. The Engagement and Results-Based Performance Culture Index is produced and provided by OPM. As the participation rate for the EVS in 2013 was 68.9%, the Department will work to increase the participation rate to reduce non-response bias in the data. All other aspects of the EVS are sound with regard to completeness, reliability, and quality.
6.4.C	EVS Leadership and Knowledge Management Index	Employee Viewpoint Survey (EVS)	The Federal Employee Viewpoint Survey (EVS) is conducted annually, government-wide, under the direction and oversight of the Office of Personnel Management using rigorous, validated statistical survey methods. There are no known data limitations with respect to calculating the EVS indices. As the participation rate for the EVS in 2013 was 68.9%, the Department will work to increase the participation rate to reduce non-response bias in the data. All other aspects of the EVS are sound with regard to completeness, reliability, and quality.

#	Metric (Department Management Information Systems/Business Processes)	Data Source	Data Quality, Limitations, and Improvements
6.4.D	Total usable square footage	Department's Master Space Management Plan	<p>The data are derived from historic examples and relevant experience. Department leadership has agreed to a set of assumptions by which the data are based. Leadership has reached out to subject matter experts to broaden the scope of the data set, and lower risks of missing contingencies that may affect the data. At each step, the data are reviewed independently to double check the work of each team member and provide quality control. These processes help ensure the data's completeness and reliability. For the baseline data, the Department made the following assumptions:</p> <ol style="list-style-type: none"> 1) All leased buildings: 2% is applied for anticipation of CPI (Consumer Price Index) annual increases on the anniversary date of the active lease/occupancy agreement (OA); and 2.5% is applied for anticipation of annual tax increases. 2) All federal buildings: 2.5% is applied for operating cost escalations on the anniversary date of the active OA. 3) 20% is applied to all federal buildings after an OA has expired and a new OA is unavailable. (Projected increase on the appraisal) 4) 40% is applied to all leased buildings after an OA has expired and a new OA is unavailable. (Projected increase on the market rent) 5) If a new OA is unavailable, 3 months early rent is applied to all buildings that are relocating due to possible Department delays. Example: Changes made to the designs after Scope of Work (SOW) is completed. 6) 3 months late rent is applied to all buildings that are relocating due to possible Department delays. For example, delays in returning space back to a rentable condition. <p><i>(continued on next page)</i></p>

#	Metric (Department Management Information Systems/Business Processes)	Data Source	Data Quality, Limitations, and Improvements
6.4.E	Rent cost	Department's Master Space Management Plan	<p><i>(continued from previous page)</i></p> <p>The rent is based on the above assumptions. The actual rent may vary significantly if the Department relocates to a new leased building and/or signs short lease extensions. While the Department is leveraging the examples and experience of the mobility labs and building consolidations programs at General Services Administration, U.S. Agency for International Development, and U.S. Patent and Trade Office, little is known here about the cost and timing implications of the new space saving techniques planned for the Department of Education. Because the data are derived from historic examples and current experience, the Department recognizes the need to regularly update and adjust the data as the pool of examples and recent experience expands.</p> <p>Every six months, leadership will re-evaluate the data, the assumptions on which it is based, and incorporate actual costs and project schedules. These steps will become part of our quality assurance program and procedures. Leadership looks to improve completeness, reliability, and quality of the data at these milestones.</p>

External (nonstatistical) Data Sources

#	Metric (External Data Sources)	Data Source	Data Quality, Limitations, and Improvements
2.5.B	Number of public high school graduates who have taken at least one STEM AP exam	College Board/AP administrative records	The College Board does not collect or report race/ethnicity based on the federal guidelines. Examinees are asked to select one of the options noted in the data. The College Board Public School List is updated annually by state DOEs; thus small changes to the list over time are to be expected as schools open, close, and/or merge. Students are assigned to graduating cohorts based on self-reported information (i.e., grade level and/or graduation year) provided at the time of registration (in the case of SAT) or test administration (in the case of AP and PSAT). The College Board matches students' data across programs to identify the most recent valid value when assigning students to cohorts.

#	Metric (External Data Sources)	Data Source	Data Quality, Limitations, and Improvements
3.1.A	Number of states with Quality Rating and Improvement Systems (QRIS) that meet high-quality benchmarks for child care and other early childhood programs	Biennial Child Care Development Fund (CCDF) Report of States Plans with annual updates from states and territories (HHS, Office of Childcare)	The CCDF State Plan preprint requires states to provide information about their progress in implementing the program components related to quality rating and improvement systems (QRIS). CCDF State Plans are submitted on a biennial basis. In order to collect data on years when CCDF State Plans are not submitted, updates are provided by states and territories using the same questions as included in the CCDF State Plan to ensure data consistency.
3.2.A	Number of states and territories with professional development systems that include core knowledge and competencies, career pathways, professional development capacity assessments, accessible professional development opportunities, and financial supports for child care providers	Biennial Child Care Development Fund (CCDF) Report of State Plans (HHS, Office of Childcare)	The CCDF State Plan preprint requires states to provide information about their progress in implementing the program components related to professional development and early learning. On a biennial basis, the information for this measure will be available through state plans.
3.3.A	Number of states collecting and reporting disaggregated data on the status of children at kindergarten entry using a common measure	Childtrends report, <i>A Review of School Readiness Practices in the States: Early Learning Guidelines and Assessments</i>	Department staff reviewed the Childtrends report to determine the number of states that collect and report disaggregated data on the status of children when they enter kindergarten using a statewide Kindergarten Entry Assessment across all the essential domains of school readiness. The report and its limitations is available at http://www.childtrends.org/Files/Child_Trends-2010_06_18_ECH_SchoolReadiness.pdf . To improve data quality, beginning in 2014, the Department will develop a rubric for a contractor to use to determine whether a state meets this metric. At this time, the data limitations of this process are not known.

#	Metric (External Data Sources)	Data Source	Data Quality, Limitations, and Improvements
5.4.A	Percentage of schools in the country that have actual Internet bandwidth speeds of at least 100 Mbps	Education SuperHighway	Education SuperHighway measures the bandwidth available in schools using a widely accepted speed test methodology. Tests measure bandwidth availability at a moment in time and can be impacted by both the school's infrastructure, contemporaneous usage of the bandwidth by other users, and any latency in the connection to the test server. Tests are currently run on a voluntary basis by anyone connected to a school network. Each test session asks the user for positive confirmation that they are connected to the selected school's network, and Education SuperHighway also uses IP address filtering to eliminate suspect tests. Multiple tests are run during each test session in order to ensure data quality and batch data cleanup procedures are run to eliminate failed tests. Education SuperHighway plans to develop an automated speed test application that will eliminate the need for user intervention, and anticipates that the use of such an application will be mandated as part of the FCC's E-Rate program.