

UNITED STATES DEPARTMENT OF EDUCATION OFFICE OF INSPECTOR GENERAL

THE INSPECTOR GENERAL

November 14, 2016

The Honorable John B. King, Jr. Secretary of Education Washington, D.C. 20202

Dear Secretary King:

The enclosed report presents the results of the audit of the U.S. Department of Education's (Department) financial statements for fiscal years 2016 and 2015 to comply with the Chief Financial Officers Act of 1990, as amended. The report should be read in conjunction with the Department's financial statements and notes to fully understand the context of the information contained therein.

We contracted with the independent certified public accounting firm of CliftonLarsonAllen, LLP (CliftonLarsonAllen) to audit the financial statements of the Department as of September 30, 2016 and 2015, and for the years then ended. The contract requires that the audit be performed in accordance with U.S. generally accepted government auditing standards and Office of Management and Budget bulletin, *Audit Requirements for Federal Financial Statements*.

Results of the Independent Audit

CliftonLarsonAllen found:

- The fiscal years 2016 and 2015 financial statements are presented fairly, in all material respects, in accordance with accounting principles generally accepted in the United States of America;
- Two significant deficiencies in internal control over financial reporting:
 - Controls over the Department's Modeling Activities Need Improvement, and
 - Department and Federal Student Aid Management Need to Mitigate Persistent Information Technology Control Deficiencies; and
- One instance of reportable noncompliance with Federal law related to referring delinquent student loan debts to Treasury.

Evaluation and Monitoring of Audit Performance

The Inspector General Act of 1978 requires that the Inspector General take appropriate steps to assure that any work performed by non-Federal auditors complies with the audit standards

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 $Promoting\ the\ efficiency,\ effectiveness,\ and\ integrity\ of\ the\ Department's\ programs\ and\ operations.$

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established by the Comptroller General. In that regard, we evaluated the independence, objectivity, and qualifications of the auditors and specialists; reviewed the plan and approach of the audit; monitored the performance of the audit; reviewed CliftonLarsonAllen's reports and related audit documentation; and inquired of its representatives.

Our review was not intended to enable us to express, and we do not express, an opinion on the Department's financial statements, or conclusions about the effectiveness of internal control, whether the Department's financial management systems substantially comply with the Federal Financial Management Improvement Act of 1996, or on compliance with certain provisions of laws, regulations, contracts, and grant agreements.

CliftonLarsonAllen is responsible for the enclosed independent auditors' report and the conclusions expressed on internal control and compliance. Our review disclosed no instances where CliftonLarsonAllen did not comply, in all material respects, with U.S. generally accepted government auditing standards.

We appreciate the cooperation given CliftonLarsonAllen and my office during the audit. If you have any questions or would like to discuss the report, please contact me at (202) 245-6900.

Sincerely,

Kathleen S. Tighe
Inspector General

Enclosure



CliftonLarsonAllen LLP

INDEPENDENT AUDITORS' REPORT

Inspector General United States Department of Education

Secretary
United States Department of Education

Report on the Financial Statements

We have audited the accompanying consolidated financial statements of the United States Department of Education (Department), which comprise the consolidated balance sheets as of September 30, 2016 and 2015, and the related consolidated statements of net cost and changes in net position, and the combined statements of budgetary resources for the years then ended, and the related notes to the consolidated financial statements (financial statements).

Management's Responsibility for the Financial Statements

The Department's management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America (U.S.); this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the U.S.; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and Office of Management and Budget (OMB) Bulletin No. 15-02, *Audit Requirements for Federal Financial Statements* (OMB Bulletin 15-02). Those standards and OMB Bulletin 15-02 require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of



significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion on the Financial Statements

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the United States Department of Education as of September 30, 2016 and 2015, and its net costs, changes in net position, and budgetary resources for the years then ended, in accordance with accounting principles generally accepted in the U.S.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the U.S. require that the information in the Department's Management Discussion and Analysis (MD&A), other Required Supplementary Information (RSI), and Required Supplementary Stewardship Information (RSSI) included in the U.S. Department of Education FY 2016 Agency Financial Report, be presented to supplement the financial statements. Such information, although not a part of the financial statements, is required by the Federal Accounting Standards Advisory Board, who considers it to be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the MD&A, other RSI, and RSSI in accordance with auditing standards generally accepted in the U.S., which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the financial statements, and other knowledge we obtained during our audits of the financial statements. We do not express an opinion or provide any assurance on this information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audits were conducted for the purpose of forming an opinion on the financial statements as a whole. The Message from the Secretary, Message from the Chief Financial Officer, and the Other Information in the U. S. Department of Education FY2016 Agency Financial Report are presented for purposes of additional analysis and are not a required part of the financial statements or RSI. In addition, management has included references to information on websites or other data outside of the Agency Financial Report. This information has not been subjected to the auditing procedures applied in the audits of the financial statements, and accordingly, we do not express an opinion or provide any assurance on it.

Report on Internal Control over Financial Reporting and Report on Compliance Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*

Report on Internal Control over Financial Reporting

In planning and performing our audit of the consolidated financial statements, we considered the Department's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Department's internal control or on management's statement of assertion on internal control included in the MD&A. Accordingly, we do not express an opinion on the effectiveness of the Department's internal control or on management's assertion on internal control included in the MD&A.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the Department's financial statements will not be prevented, or detected and corrected on a timely basis. A significant deficiency is a deficiency, or combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that were not identified. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, we did identify certain deficiencies in internal control, described below and in more detail in Exhibit A, which we consider to be significant deficiencies.

Controls over the Department's Modeling Activities Need Improvement

The Department maintains various models that apply mathematical techniques or statistical methods to historical student loan event data to estimate future loan performance and calculate the cost or value of the various student loan programs on a present value basis. We identified deficiencies in the controls over the Department's processes for model design and development, risk assessment, model operation and validation, and oversight. The Department does not have a comprehensive framework for risk management and fully developed internal controls for its modeling activities, which could impact the reliability of its estimates used for financial reporting, budgetary formulation and management analysis.

Department and Federal Student Aid Management Need to Mitigate Persistent Information Technology Control Deficiencies

The Department oversees a large portfolio of Department and contractor-owned business systems and applications that requires an effective and comprehensive information system security program. Prior audits have identified numerous control deficiencies at the Department, Federal Student Aid (FSA), and application level. While the Department has made progress in some areas to address these issues in recent years, we continued to identify control deficiencies in the Department's information security program relating to policies and procedures, compliance monitoring, personnel management, and security incident response as well as the management of various application level security, configuration and access controls. These deficiencies increase the risk of unauthorized access to the Department's systems used to capture, process, and report financial transactions and balances, affecting the reliability and security of its data and information.

Report on Compliance

As part of obtaining reasonable assurance about whether the Department's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements consistent with our professional responsibilities discussed below.

The results of our tests, exclusive of those discussed below, disclosed one instance of noncompliance, described below and in Exhibit B, which is required to be reported in accordance with *Government Auditing Standards* and OMB Bulletin No. 15-02.

As of September 30, 2016, FSA is not in compliance with the legal requirement for referring 120 day delinquent student loan debts to Treasury. In 2014, Federal law¹ was amended² to require agencies to notify the Secretary of the Treasury of valid, delinquent nontax debts that are over 120 days delinquent – 60 days earlier than the previous 180 days requirement – for the purpose of administrative offset (i.e. collection through the reduction of future Federal payments). Due to the number of entities and systems involved in handling student loan debts, FSA is not yet capable of meeting this accelerated timeline.

We also performed tests of compliance with certain provisions of the Federal Financial Management Improvement Act (FFMIA). However, providing an opinion on compliance with FFMIA was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests of these provisions disclosed no instances in which the Department's financial management systems did not substantially comply with (1) Federal financial management systems requirements, (2) applicable Federal accounting standards, or (3) the USSGL at the transaction level.

¹ 31 U.S. Code Section 3716(c)(6)

² Public Law 113-101 (DATA Act) Section 5

Management's Responsibility for Internal Control and Compliance

Management is responsible for (1) evaluating the effectiveness of internal control over financial reporting based on criteria established under the Federal Managers' Financial Integrity Act (FMFIA), (2) providing a statement of assurance on the overall effectiveness on internal control over financial reporting, (3) ensuring the Department's financial management systems are in substantial compliance with FFMIA requirements, and (4) complying with other applicable laws, regulations, contracts, and grant agreements.

Auditors' Responsibilities

We are responsible for: (1) obtaining a sufficient understanding of internal control over financial reporting to plan the audit, (2) testing whether the Department's financial management systems substantially comply with the FFMIA requirements referred to above, and (3) testing compliance with certain provisions of laws, regulations, contracts and grant agreements.

We did not evaluate all internal controls relevant to operating objectives as broadly established by the FMFIA, such as those controls relevant to preparing statistical reports and ensuring efficient operations. We limited our internal control testing to testing controls over financial reporting. Because of inherent limitations in internal control, misstatements due to error or fraud, losses or noncompliance may nevertheless occur and not be detected. We also caution that projecting our audit results to future periods is subject to risk that controls may become inadequate because of changes in conditions or that the degree of compliance with controls may deteriorate. In addition, we caution that our internal control testing may not be sufficient for other purposes.

We did not test compliance with all laws, regulations, contracts and grant agreements applicable to the Department. We limited our tests to certain provisions of laws, regulations, contracts and grant agreements noncompliance with which could have a direct effect on the determination of material financial statement amounts and disclosures. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. We caution that noncompliance may occur and not be detected by these tests and that such testing may not be sufficient for other purposes. Also, our work on FFMIA would not necessarily disclose all instances of noncompliance with FFMIA requirements.

Management's Response to Findings

Management's response to the findings identified in our report is presented in Exhibit C. We did not audit the Department's response and, accordingly, we express no opinion on it.

Status of Prior Year's Control Deficiency and Noncompliance Issue

We have reviewed the status of the Department's corrective actions with respect to the findings included in the prior year's Independent Auditors' Report, dated November 13, 2015. The status of prior year findings is presented in Exhibit D.

Purpose of the Report on Internal Control over Financial Reporting and the Report on Compliance

The purpose of the Report on Internal Control over Financial Reporting and the Report on Compliance sections of this report is solely to describe the scope of our testing of internal control and compliance and the result of that testing, and not to provide an opinion on the effectiveness of the Department's internal control or on compliance. These reports are an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Department's internal control and compliance. Accordingly, these reports are not suitable for any other purpose.

CliftonLarsonAllen LLP

Clifton Larson Allen LLP

Arlington, Virginia November 14, 2016

Controls over the Department's Modeling Activities Need Improvement

The Department does not have a comprehensive framework for risk management and fully developed internal controls over its critical modeling activities, including model development, risk assessment, operation, and validation.

The Cost Estimation and Analysis Division (CEAD) within the Office of Planning, Evaluation and Policy Development's Budget Service is responsible for developing estimates of the subsidy cost of the Department's direct and guaranteed loan programs. These estimates are used to support budget estimates, policy decisions and financial reporting. CEAD has developed a set of complex financial and economic models that apply mathematical techniques and statistical methods to historical loan level data to develop student loan program performance assumptions and estimate the value and cost of the Department's various loan programs. These models also support management's estimate of the net present value of cash flows related to nearly \$1.3 trillion in direct, defaulted, and guaranteed student loans as of September 30, 2016.

An effective controls structure is generally defined through appropriately documented, approved, and implemented policies and procedures that outline requirements for ensuring all modeling and related control activities are performed and documented in accordance with the intent of management. A proper governance structure involves input from program management and multiple layers of review, approval, and oversight from CEAD management, the Department and FSA Offices of the Chief Financial Officer, and senior agency management over modeling activities. Our audit identified the following:

Model development

The Department does not have a formalized process for managing critical model development activities, which should include documenting the objectives of the model, applicable program attributes and requirements affecting the planned model, evaluation of available data, proposed design, potential design alternatives, and model testing and approval.

Our audit found the Department maintained limited documentation supporting the initial design, evaluation, justification and testing of the model for:

- selecting a sample of borrowers from the National Student Loan Data System (NSLDS) used for calculating program performance assumptions
- estimating future incomes for borrowers under income-dependent repayment plans
- · projecting future cash flows for borrowers under income-dependent repayment plans
- calculating specific performance assumptions
- projecting overall program level cash flows (Student Loan Model)

During FY2016, the Department made concerted efforts to enhance the documentation of two models updated during the year, including the modeling of recoveries on defaulted loans and documentation related to the NSLDS sampling process. The revised documentation represented a substantial improvement in explaining the methodology and its basis but was not sufficiently detailed to be fully effective guide for an independent reviewer to follow the procedures performed.

CEAD is comprised of a small team of experienced economists and analysts responsible for performing its modeling activities, but thoroughly documenting such design requirements may

be onerous for the current team. Given the size, growth and changes of the Direct Loan Program in recent years, ineffective controls over the design of new models can impact the reliability of their estimates, as noted in our review of the Department's modeling for income driven repayment (IDR) plans.

<u>IDR modeling:</u> The Department's model for estimating future cash flows from student loan borrowers with IDR plans was updated in 2015, following the announcement of the new incomedependent Pay As You Earn program. The previous update to the Department's IDR model was in 2004. Due to recent growth in the number of borrowers using IDR plans, this model now supports a significant portion of the Direct Loan Program's subsidy cash flow estimates.

The process used to estimate these cash flows is performed outside the Student Loan Model and requires the Department to estimate borrowers' future incomes in order to estimate the amount and timing of the principal the borrower will repay. The Department obtained "synthetic" income data from the Department of the Treasury's Office of Technical Assistance (OTA), which CEAD used to estimate future incomes and project the corresponding future income-based loan repayments. CEAD found the format and nature of the data provided by OTA was not well suited for their purposes, but was nevertheless used due to time limitations to complete the forecasts.

We found the methodology used for imputing borrower incomes was also not well suited based on the nature of the OTA data, and could result in unreliable or inappropriate income forecasts. The Department did not have a process to document and communicate their concerns and the risks to their estimates as a result of these limitations.

The Department did not have formalized documentation for their justification of the overall IDR modeling approach selected, potential alternatives and their evaluation, testing plans, and formal approval for the implementation of the new model. Further, the Department did not have formalized documentation describing the process for imputing borrowers incomes and calculating other IDR related assumptions.

We also found the current methodology did not take into account inflation or forecasted macroeconomic data such as found in the President's Economic Assumptions. We also found deficiencies in the methodology for forecasting defaults from IDR borrowers. Although management indicated it plans to enhance the model, the Department has not documented the basis for its conclusion to not update this model immediately once the risk to the estimates were identified

The Department is also currently developing a new model to be used for estimating the subsidy cost for the Direct Loan Program; however, there is limited documentation regarding the specifications, requirements, evaluation, or testing plan relating to the development of the model.

Model risk assessment

CEAD maintains over 18 different economic and financial modeled assumptions used within the calculation of the Allowance for Subsidy for the just the Direct Loan Program. Some of the assumptions are updated annually, while others are updated biannually. The Department does not have a formalized process for compiling and maintaining the Department's model inventory, assessing and documenting modeling risks, and monitoring the implementation of corrective

actions. This risk assessment process should be independent of the agency-level risk assessment process performed in connection with the agency level management controls review process required by OMB Circular A-123. The Department also does not have a documented risk-based process for obtaining an independent, external validation review of its models.

Model operation

The Department's documentation of the control activities performed for operating approved models is not formalized. We identified deficiencies in the documentation of control activities over the Department's model operations relating to data accumulation and validation, assumption development, and model execution. As a result we were unable to ensure certain control activities were performed. The Department has initiated the development of a number of policy manuals and desk guides to support the proper operation of current models but these manuals are incomplete and not readily used.

Model validation

Model validation refers to the initial and ongoing review and approval of the design of the model and its ability to properly correlate historical data into estimated future program performance. The Department performs a number of critical procedures to monitor the performance of its models and validate the overall reasonableness of its outputs, including backcasts, actuals to estimates review, cohort analysis, and sensitivity analysis. However, the Department does not have a process to comprehensively evaluate the results of these procedures and document their conclusion as to whether the models, in aggregate, continue to be adequate for forecasting the future performance of the student loan programs. Further, the Department's sensitivity analysis did not address key components of the program known to have a significant impact on its cost, including IDR plan participation rates, borrower incomes, or Public Service Loan Forgiveness participation rates.

Governance and guidance

The Department does not have a formalized process for engaging and involving senior leadership from FSA and the Department in their governance capacity over critical decisions relating to various modeling activities, including model development, risk assessment, assumption development and review and model validation. Given the pervasive impact of the credit activities on the Department budget estimates, policy decisions, and financial reporting, estimation (or model) risk should be one of the key enterprise risks to be managed by the Department and its components, with a fully developed governance framework and control structure.

The Department does maintain a Credit Reform Working Group that brings together members of FSA and Department management periodically with CEAD staff to discuss estimation and modeling issues; however, the Department has not formally defined the roles and responsibilities of the members of this group within a comprehensive model risk management framework.

The Department has also not established a formalized structure or process for other critical model risk management activities, including maintaining the inventory of models with a corresponding assessment of risks, known deficiencies, and planned corrective actions, and performing or overseeing independent validations of the Department's models.

Summary

Without a fully effective risk management and control structure over its modeling activities, estimation errors or modeling risks may go undetected, increasing the potential for improper reporting and program decisions.

GAO's Standards for Internal Controls in the Federal Government requires that agencies:

- design controls activities in response to objectives and risks
- · define and delegate responsibilities
- · document internal controls and "all transactions and other significant events"
- evaluate and document the results of ongoing monitoring evaluations to identify internal control issues

OMB Circular A-123, Management's Responsibility for Enterprise Risk Management and Internal Control, updated in July 2016, requires agencies to take steps to integrate risk management into the internal controls over their business operations.

Industry specific guidance from federal regulators regarding model risk management, model governance and related controls is also provided by the Federal Reserve and the Office of the Comptroller of the Currency in SR 11-7 Supervisory Guidance on Model Risk Management, and by the Federal Housing Finance Agency in their AB 2013-07 Model Risk Management Guidance.

Recommendations:

We recommend the Deputy Secretary:

1a. Perform a comprehensive evaluation of the impact of the Department's modeling on the Department's mission in connection with the development of its enterprise risk management program.

We recommend the Department Chief Financial Officer, in conjunction with the Director, Budget Service:

- 1b. Document the Department's process, policies and procedures for the design, development, testing and authorization of new models.
- 1c. Compile an inventory of the Department's models, and regularly document management's assessment of risks related to each model and how that assessment impact's the Department's level of controls, validation and monitoring over each model.
- 1d. Document the Department's process, policies, procedures and related controls for the periodic review, validation and approval of the Department's models at the model and program level.
- 1e. Document the overall review and conclusions drawn related to the evaluation of the results of model performance reviews and validation procedures performed.

We recommend the Director, Budget Service and the Department and FSA Chief Financial Officers:

1f. Document the Department's process, policies, procedures and related controls for managing the operation and use of approved models.

1g. Design, document and implement a modeling governance structure that specifically and separately addresses the roles and responsibilities for the oversight of critical modeling activities, including model risk assessment, model development, model operation, and model validation activities, as well as defining standards for policies, procedures and internal controls for these activities.

We recommend the Department Chief Financial Officer:

1h. Ensure the agency's management controls program fully evaluates the Department's modeling activities commensurate with the materiality of the impact of the process to the agency's reporting activities.

Department and Federal Student Aid Management Need to Mitigate Persistent Information Technology Control Deficiencies

The Department oversees a large portfolio of Department and contractor-owned business systems and applications that requires an effective and comprehensive information system security and privacy program. According to OMB Circular A-130, *Managing Information as a Strategic Resource*, key elements of an effective security program include 1) agency-wide and system-level policies and procedures; 2) properly designed, implemented and monitored information system controls to protect Department information and information systems from unauthorized access, use, disclosure, disruption, modification or destruction; and 3) cost effective risk management.

Prior audits have identified numerous control deficiencies at the Department and application level. While the Department has made progress in some areas to address these issues in recent years, we continued to identify control deficiencies in the Department's information security program relating to policies and procedures, compliance monitoring, personnel management, security incident response and management of various application level security, configuration management, and access controls.

Effective system security starts with strong governance, including agency level oversight, policies and procedures, entity-wide controls, and controls monitoring. We have reported for several years that the Department's agency level information technology policies are outdated or did not fully address specific controls required by NIST Special Publication (SP) 800-53, revision 4, Recommended Security and Privacy Controls for Federal Information Systems and Organizations. Designing and implementing effective agency level policies is the responsibility of the Department's Chief Information Officer (CIO). While the CIO has revised the Office of Management. In addition, the associated guidance has not been completed, according to management, due to limited resources.

Managing the information and system security program across the Department is primarily the responsibility of the Department's Chief Information Security Officer (CISO), in conjunction with FSA's CISO. The Department and FSA CISOs have enhanced their efforts to monitor the system security control activities over their agency systems in recent years and have initiated several multi-year corrective actions that should aid in addressing many of the long standing weaknesses that affect the Department and FSA systems. For example, the FSA CISO has

implemented a security program based on continuous monitoring that includes regular updates to security documentation, routine security control assessments and vulnerability assessments, and risk analysis. The outcomes of these system security activities are reviewed and evaluated by the CISO in support of an ongoing authorization to operate. Monitoring of remediation activities associated with identified control deficiencies in FSA's systems is fostered by regular update meetings held with management within the Technology Office and Business Operations, the Office of Inspector General (OIG) and the financial statement auditors.

However, agency-level security controls also require the efforts of other offices across the Department, including the Office of Security, Facilities and Logistics Services. We continue to find a large number of Department employees and contractors with overdue reinvestigations, incorrect levels of background investigations for privileged users, and lack of investigation information. In addition, the CIO has not ensured Department system owners adopt the Office of Personnel Management Position Designation Tool in order to determine and document suitability and investigation requirements for each system's roles/responsibilities. Furthermore, the Office of the Chief Financial Officer has not implemented service level agreements for contractor employee clearance monitoring, as recommended last year.

We also found the CIO's centralized controls for responding to security incidents were not always in accordance with agency policy. The entire population of sixteen sampled security and privacy incidents did not have documentation of the remediation actions and closure date of the incidents.

The Department's agency-level information security controls are required to be evaluated annually by the OIG, in accordance with the Federal Information Security Modernization Act (FISMA). The FY2015 OIG review involved testing financial and non-financial systems' controls and identified control deficiencies in four of ten reporting areas related to configuration management, continuous monitoring, incident response and reporting, and remote access management. The review also determined that the Department's Identity and Access Management programs and practices would be generally effective if implemented properly.

Although FSA had implemented a governance structure for managing agency-level system security risk, the tactical execution of remediating system level control weaknesses and ensuring compliance with information security requirements still needs improvement.

Managing the system security controls at the application or system level is the responsibility of the system owners, in conjunction with system level information security officers. Our audit identified application, or system, specific control deficiencies in the areas of security management, access controls, and configuration management in one or more of the five financial systems we tested this year. We continued to identify configuration management issues with the Department's general support system, but noted substantial improvement in the remediation of information security control weaknesses for the Department's core financial management system.

At FSA, we tested four systems and our audit continued to identify control deficiencies in security management, access controls and configuration management across these systems. The agency is developing a new system for user access management to address various access control deficiencies, but this system will not be fully implemented until FY2017.

Specifically, we identified system specific issues in the following areas:

Security management

- · One system security plan was incomplete
- Plans of Action and Milestones (POA&Ms) missed estimated completion dates and were not always updated for three systems
- Security awareness training for new system users was not always completed
- Role based security awareness training for users with significant system security responsibilities was not always completed
- Authorization decision documents were not signed by the new Authorizing Official (AO)
- Interconnection agreements were not in place or current
- Evidence to validate Department assets were returned for separated employees was not always provided

Access controls

- User access was not always approved for all users or for all roles granted
- Termination of system access for separated employees and contractors was not always completed timely
- · Inactive accounts were not always disabled
- Certain users had access to directly implement system changes to the production environment
- User access was not always recertified and some user accounts that were recertified had either never used the system, or had not logged in for an extended period of time

Configuration management

- System configuration settings were not always compliant with Department policy
- Computer security configurations were inadequate and software was not patched or was unsupported
- · System security impact assessment was not always conducted

The combination of agency-level and system specific deficiencies can increase the risk of unauthorized access to the Department and FSA's systems used to capture, process, and report financial transactions and balances, affecting the reliability and security of the data and information. These findings are discussed in further detail below, and in a Limited Distribution Report to be provided to the Department and FSA management.

Security management

An organization—wide information security program sets the framework for addressing risk through developing and implementing effective information security procedures, monitoring the effectiveness of those procedures, providing appropriate security training and remediating control weaknesses through the Plan of Action and Milestones (POA&M) process. Security policies and procedures also include employee hiring, transfer and termination practices. We

noted that the POA&Ms for three FSA systems had passed their scheduled dates of completion without updated milestone information.

Overall, we found improvement in the level of compliance with security awareness training requirements this year. For three of the four systems tested, we found system users did not always complete the required security awareness training. Also, contractors with significant system security responsibilities had not always completed role based training for two of the four FSA systems tested.

When the AO changed in FY2015 for all 4 systems tested, the new AO did not sign the new authorization decision documents to explicitly accept the risk and formally transfer responsibility and accountability for the information systems. Upon notification of this issue to management, the new AO signed new authorization decision documents in September 2016 to explicitly accept the risk and formally transfer responsible and accountability for the information systems.

In addition, a *Clearance of Personnel for Separation or Transfer Form* was not provided to validate that Department assets were returned for ten from a sample of twenty-one Department terminated employees. For one of five FSA terminated employees we tested, the form did not contain all required signatures validating that Department assets were returned.

Access Controls

Access controls limit or detect inappropriate access to systems, protecting the data within them from unauthorized modification, loss or disclosure. Standards require that entities use a properly executed Memorandum of Understanding (MOU) to document the terms and conditions for sharing data and information resources in a secure method. An Interconnection Security Agreement (ISA) identifies the technical and security requirements for establishing, operating, and maintaining the interconnection. Consistent with previous years, we identified expired MOUs, one MOU that was not reviewed in accordance with the requirements of the ISA, and instances in which interconnections were not detailed in the corresponding System Security Plan.

User authorization refers to the documentation of the granting of user access to only the elements of a system the user needs to perform his or her duties. To be an effective control, user access should be documented, approved and periodically reviewed. Accounts for users should be terminated when the user no longer needs access to the system. Based on our work, we found:

- Accounts for terminated Department, FSA, and/or loan servicer employees, were not disabled for the Department's general ledger system and three of the four FSA systems tested
- Inactive accounts were not disabled for one FSA system
- For one FSA system, eighteen from a sample of 25 new users did not have evidence that their access was approved and one individual was granted a role that was not approved
- For another FSA system, five from a sample of 25 new users had user roles that were
 modified from the original access level with no evidence that the modified role was
 approved

- User access was not always recertified, and some user accounts that were recertified had either never used the system, or had not logged in for an extended period of time
- One user had inappropriate access to directly implement changes to the production environment

Configuration Management

Configuration management ensures changes to systems are tested and approved, and systems are configured securely in accordance with policy. In our audit, we found one FSA system with configuration settings that did not adhere to Department policy. Additionally, we found security impact assessments were not conducted for one FSA system. Furthermore, our testing identified insecure configurations as well as unpatched and unsupported software in both the Department and FSA systems.

The 2015 FISMA review determined that the Department's and FSA's information technology security programs were generally effective in key aspects of three metric areas—Risk Management, Security Training, Contingency Planning—but further improvements were needed. For the Department and FSA's corrective action process, the review determined that, if implemented as intended, it should be effective. The review also found that the Department's controls over access to FSA's mainframe environment need improvement. Overall, eight of the ten reporting metrics contained repeat or modified repeat findings identified from 2011 through 2014.

According to NIST SP 800-39, *Managing Information Security Risk - Organization, Mission, and Information System View*, the information system owner, in coordination with the information system security officer, is responsible for ensuring compliance with information security requirements.

The information system security officer is an individual responsible for ensuring that the appropriate operational security posture is maintained for an information system and as such, works in close collaboration with the information system owner. The information system security officer also serves as a principal advisor on all matters, technical and otherwise, involving the security of an information system. The information system security officer has the detailed knowledge and expertise required to manage the security aspects of an information system and, in many organizations, is assigned responsibility for the day-to-day security operations of a system.

OMB Circular A-130, *Managing Information as a Strategic Resource*, July 28, 2016, Appendix 1 states agencies are to:

- Implement policies and procedures to ensure that all personnel are held accountable for complying with agency-wide information security and privacy requirements and policies.
- Implement security and privacy controls, and verify that they are operating as intended, and continuously monitored and assessed; put procedures in place so that security and privacy controls remain effective over time, and that steps are taken to maintain risk at an acceptable level within organizational risk tolerance.

 Correct deficiencies that are identified through information security and privacy assessments, information system continuous monitoring and privacy continuous monitoring programs, or internal or external audits and reviews, to include OMB reviews.

In order to appropriately manage risk from an organization-wide structure, individuals with responsibility for information system security need clear expectations in the form of agency level information security policies and procedures that address all NIST and OMB requirements. Therefore, it is essential that the Department complete, approve and disseminate the Information Assurance/Cybersecurity Policy and associated guidance. In addition, due to the continuance of persistent IT control deficiencies across multiple systems, the CISOs need to hold accountable those individuals responsible for ensuring that persistent IT control deficiencies are remediated and the appropriate security posture is maintained for Department and FSA information systems.

Recommendations:

We recommend the Department CIO:

- 2a. Ensure the update, review, approval and dissemination of the Information Assurance/ Cybersecurity Policy and associated guidance is completed in order to comply with NIST standards and OMB guidance.
- 2b. Design and implement controls over the handling of Department security and privacy incidents to ensure their resolution is properly documented.

We recommend the Principal Deputy Assistant Secretary, Office of Management:

2c. Implement a monitoring process over the personnel security activities to ensure investigations and reinvestigations are prioritized for personnel with sensitive system access within the Department.

We recommend the Department CISO work with the FSA CISO to:

2d. Strengthen and refine the process for holding system owners and information system security officers accountable for remediation of control deficiencies and ensuring that the appropriate security posture is maintained for Department and FSA information systems.

INDEPENDENT AUDITORS' REPORT (Continued) EXHIBIT B Instance of Noncompliance

Requirement for Referring Delinquent Student Loan Debts to Treasury

In 2014, Federal law³ was amended⁴ to require agencies to notify the Secretary of the Treasury of valid, delinquent nontax debts that are over 120 days delinquent – 60 days earlier than the previous 180 days requirement – for the purpose of administrative offset (i.e. collection through the reduction of future Federal payments). Due to the number of entities and systems involved in handling student loan debts, FSA is not yet capable of meeting this accelerated timeline. Accordingly, as of September 30, 2016, the Department and FSA are not in compliance with the new timing requirement for referring delinquent student loan debts to Treasury.

To meet this requirement, the Department has been able to obtain legal clarification of how certain specific requirements of the amended law apply to the Direct Loan Program and other Department programs, improve delinquent debt reporting procedures, increase the frequency of some debt referrals and modify its defaulted loan management system to accommodate this change. The Department is also evaluating the impact of defining defaulted loans earlier on schools' performance reporting and has developed a long-term project plan to incorporate the new referral requirements into various servicer contracts and guaranty agency agreements, so they can initiate the required system programming changes. FSA is also working with the Department in evaluating certain options for other requirements needed to achieve compliance.

Recommendation:

We recommend that the Secretary of Education work with the Federal Student Aid Chief Operating Officer to:

Continue to execute the corrective actions as outlined in FSA's project plan to comply with the timing requirement for the referral of delinquent non-tax debts.

³ 31 U.S. Code Section 3716(c)(6)

⁴ Public Law 113-101 (DATA Act) Section 5

INDEPENDENT AUDITORS' REPORT (Continued) **EXHIBIT C** Management's Response



UNITED STATES DEPARTMENT OF EDUCATION

WASHINGTON, D.C. 20202-__

MEMORANDUM

TO:

Kathleen S. Tighe Inspector General

FROM:

Tim Sollis Sm Delegated the Duties of Chief Financial Officer

Jason Gray Chief Information Officer,

SUBJECT:

DRAFT INDEPENDENT AUDITORS' REPORT

Fiscal Years 2016 and 2015 Financial Statements

U.S. Department of Education ED-OIG/A17Q0001

Please convey the Department's sincere thanks to everyone on your staff who worked diligently on this financial statement audit. We extend our appreciation for the professionalism and commitment by all parties, including the Office of the Inspector General and CliftonLarsonAllen, throughout the audit process.

We have reviewed, and concur and agree with, the draft Independent Auditors' Report. We are pleased to have received an unmodified "clean" audit opinion with no material weaknesses. The Department takes the two significant deficiencies reported, in the areas of controls over modeling activities and information technology controls, very seriously and we are dedicated to resolving the issues identified. We will share the final audit results with responsible senior officials, other interested program managers, and staff who will begin preparing corrective action plans to be used in the resolution process.

Again, please convey our appreciation to everyone on your staff whose efforts permitted the Department to complete the audit within the established timeframe.

Please contact Gary Wood, Director, Financial Management Operations, at (202) 245-8118 with any questions or comments.

Our mission is to ensure equal access to education and to promote advisational excellence throughout the Nation.

INDEPENDENT AUDITORS' REPORT (Continued) EXHIBIT D Status of Prior Year Recommendations

Our assessment of the current status of the recommendations related to findings identified in the prior year audit is presented below:

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Fiscal Year 2015 Recommendation	Fiscal Year 2016 Status
CLA recommended the Department CISO work with the FSA CISO to:	
Refine and fully implement FSA's system security program to monitor compliance with NIST requirements, in coordination with the Department's organization wide information security program, at both the agency and system level.	Repeat finding; see Significant Deficiency
Strengthen and refine the process to ensure accountability for individuals responsible for remediating the identified control deficiencies in the Department and FSA's systems, including cooperation between the Technology Office and Business Operations.	Modified Repeat finding; see Significant Deficiency
Strengthen and refine the process for holding contractors accountable for remediation of control deficiencies in the Department and FSA's systems.	Repeat finding; see Significant Deficiency
Noncompliance with Laws and Regulations	
CLA recommended that the Secretary of Education and FSA Chief Operating Officer:	
Modify their loan servicing systems, procedures and internal processes to comply with the legal timing requirement for referring delinquent nontax debts to Treasury.	Repeat finding; see Instance of Noncompliance