Application System Audit Report

Unemployment Tax and Benefits (UTAB) System

Administered by the Employment Security Department

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A note about data involved in this audit

In January 2021, the State Auditor's Office was alerted to a potential cybersecurity incident involving its third-party file transfer service. Among the files that may have been compromised was a set of data files provided by ESD containing personal information of people who received unemployment benefits in the 2017 to 2020 time period. The data files were provided as part of our series of audits of the Unemployment Insurance program. We worked collaboratively with ESD to assess the information included in the files so we could notify those people whose personal information may have been compromised. The effort to address the cybersecurity incident involving the data files was handled separately from the audits themselves, and it did not affect the findings, conclusions or recommendations of any of the audits.

Office of the Washington State Auditor
Pat McCarthy

April 26, 2021

Cami Feek, Acting Commissioner
Employment Security Department
Olympia, Washington

Report on Application System Audit

Thank you for the opportunity to work with you to promote accountability, integrity and openness in government. The Office of the Washington State Auditor takes seriously our role of providing state and local governments with assurance and accountability as the independent auditor of public accounts. In this way, we strive to help government work better, cost less, deliver higher value and earn greater public trust.

Independent audits provide essential accountability and transparency for Department operations. This information is valuable to management, the governing body and public stakeholders when assessing the government's stewardship of public resources.

Attached is our independent audit report on the Unemployment Tax and Benefits (UTAB) system's application and general information technology controls. We appreciate the opportunity to work with your staff and value your cooperation during the audit.

Sincerely,

Pat McCarthy

State Auditor

Olympia, WA

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AUDIT RESULTS

Results in brief

This report describes the overall results and conclusions for the areas we examined related to the Unemployment Tax and Benefits (UTAB) system's application and general information technology (IT) controls. In most of the areas we examined, controls were not adequately designed and implemented to provide reasonable assurance of complete, accurate, secure and available data.

As referenced above, we identified areas where the Department could make improvements. We noted significant deficiencies in internal control over claims validation and IT security. The related recommendations are included in a separate confidential communication as findings. We also noted certain matters related to IT security that we communicated to Department management and the Commissioner in a separate confidential communication dated April 12, 2021. We appreciate the Department's commitment to resolving those matters.

Because public distribution of tests performed and related results over claims validation could increase the Department's risk of fraudulent claims, distribution of that information has been limited to management and the governing body of the Department. Because public distribution of tests performed and the related results over IT security could increase the risk to the Department's IT security, distribution of that information has also been limited to management and the governing body of the Department and is kept confidential under RCW 42.56.420.

In keeping with general auditing practices, we did not examine every function or aspect of the application system. Instead, based on our audit objectives, we examined those key input, processing, output, interface and general IT controls representing the highest risk to the application system's security, availability, and processing integrity. Our assessment of controls related to data security was limited to electronic access of the application, database, and program libraries. Our audit was not designed to assess or provide assurance on the Departments's overall security posture.

About the audit

This report contains the results of our independent audit of the UTAB system, conducted from October 2020 through February 2021. Our audit also examined the controls in place from January 1, 2020 through February 15, 2021.

The UTAB system is Washington's benefit payment system that administers the U.S. Department of Labor's unemployment insurance programs, including the recently enacted Coronavirus Aid, Relief, and Economic Security Act and the Lost Wages Assistance program. The UTAB system stores data on claims, claimants, employers, special wage information and document scans for the purpose of filing and paying an unemployment insurance claim.

Management is responsible for ensuring IT systems are designed, implemented, and maintained to provide reasonable assurance of security, availability and processing integrity. This includes establishing controls over acquiring, developing, and maintaining technology assets relevant to these objectives.

This audit was conducted under the authority of RCW 43.09.470, which requires the Office of the Washington State Auditor to conduct independent, comprehensive performance audits. Our audit involved obtaining evidence about the UTAB system's key input, processing, output, interface and general IT controls. The procedures we performed were based on our assessment of risks in the areas we examined.

Based on our risk assessment, we examined the following areas during the audit period:

- **Input controls** related to claims validation. Input controls are application controls designed to ensure data entered into an information system is complete, accurate, and valid.
- **Processing controls** related to claims validation. Processing controls are application controls designed to ensure that all transactions and data are processed completely, accurately, and are valid.
- **Output controls** related to claims validation. Output controls are application controls designed to ensure processed data and reports are complete, accurate, and valid.
- **Interface controls** related to the interface between the UTAB system and the Next Generation Tax System (NGTS). Interface controls are application controls designed to ensure the accurate, complete, and secure transmission of processing data between systems.
- **General IT controls** related to electronic access, program changes, and disaster recovery. General IT controls are designed to ensure proper development, integrity, and security of system and computer operations.

Next steps

Our performance audits of state programs and services are reviewed by the Joint Legislative Audit and Review Committee (JLARC) and/or by other legislative committees whose members wish to consider findings and recommendations on specific topics. Representatives from the Office of the Washington State Auditor will review this audit with JLARC's Initiative 900 subcommittee in Olympia. The public will have the opportunity to comment at this hearing. Please check the JLARC website for the exact date, time and location (www.leg.wa.gov/JLARC). The Office conducts periodic follow-up evaluations to assess the status of recommendations and may conduct follow-up audits at its discretion. See Appendix A, which addresses the I-900 areas covered in the audit. Appendix B contains information about our methodology.

STATE OF WASHINGTON

April 20, 2021

The Honorable Pat McCarthy
Washington State Auditor
P.O. Box 40021
Olympia, WA 98504-0021

Dear Auditor McCarthy:

Thank you for the opportunity to review and respond to the State Auditor's Office (SAO) performance audit on the Unemployment Tax and Benefits (UTAB) system's application and general information technology (IT) controls. The Employment Security Department (ESD) and Office of Financial Management (OFM) worked together to provide this response.

We appreciate the SAO's focus on whether selected application controls were adequately designed and implemented to provide reasonable assurance of complete, accurate, secure and available data related to the department's UTAB system.

We agree that making sure our IT systems provide reasonable assurance of security, availability and processing integrity is vital to our operations. Protecting and improving these systems are of paramount interest to us.

We appreciate the areas the SAO identified where ESD could make improvements and we are committed to address those matters. As noted in the report, because public disclosure of tests performed and the related results could increase the risk to the department's IT security, it is kept confidential under RCW 42.56.420. Likewise, we are limiting the distribution of our action plan to the SAO and the Governor's Office.

Please thank your team for their collaborative approach throughout this performance audit.

Sincerely,

Cami Feek
Acting Commissioner
Employment Security Department

David Schumacher
Director
Office of Financial Management

cc: Jamila Thomas, Chief of Staff, Office of the Governor
      Kelly Wicker, Deputy Chief of Staff, Office of the Governor
      Keith Phillips, Director of Executive Policy Office, Office of the Governor
      Patricia Lashway, Deputy Director, Office of Financial Management
      Christine Bezanson, Director, Results Washington, Office of the Governor
      Tammy Firkins, Performance Audit Liaison, Results Washington, Office of the Governor
      Scott Frank, Director of Performance Audit, Office of the Washington State Auditor
      Phil Castle, Interim Deputy Commissioner, Employment Security Department

Initiative 900 requirements

Initiative 900, approved by Washington voters in 2005 and enacted into state law in 2006, authorized the State Auditor's Office to conduct independent, comprehensive performance audits of state and local governments.

Specifically, the law directs the Auditor's Office to "review and analyze the economy, efficiency, and effectiveness of the policies, management, fiscal affairs, and operations of state and local governments, agencies, programs, and accounts." Performance audits are to be conducted according to the U.S. Government Accountability Office's *Government Auditing Standards*.

In addition, the law identifies nine elements that are to be considered within the scope of each performance audit. The State Auditor's Office evaluates the relevance of all nine elements to each audit. The table below indicates which elements are addressed in the audit. Specific issues are discussed in the Schedule of Audit Findings and Responses section of this report.

I-900 element	Addressed in the audit
1. Identify cost savings	**No.** The audit did not identify measurable cost savings. However, strengthening application and general IT controls could help the Department avoid or mitigate costs associated with incomplete, inaccurate, unsecure, or unavailable data.
2. Identify services that can be reduced or eliminated	**No.** The audit did not identify services that could be reduced or eliminated.
3. Identify programs or services that can be transferred to the private sector	**No.** The audit did not identify programs or services that could be transferred to the private sector.
4. Analyze gaps or overlaps in programs or services and provide recommendations to correct them	**No.** The audit did not analyze gaps or overlaps in programs or services.
5. Assess feasibility of pooling information technology systems within the department	**No.** The audit did not assess the feasibility of pooling information systems.

I-900 element	Addressed in the audit
6. Analyze departmental roles and functions, and provide recommendations to change or eliminate them	**No.** The audit did not analyze departmental roles and functions, or provide recommendations to change or eliminate them.
7. Provide recommendations for statutory or regulatory changes that may be necessary for the department to properly carry out its functions	**No.** The audit did not identify a need for statutory or regulatory change.
8. Analyze departmental performance data, performance measures, and self-assessment systems	**No.** The audit did not analyze departmental performance data, performance measures, or self-assessment systems.
9. Identify relevant best practices	**Yes.** The audit identified and used relevant best practices to assess the Department's application and general IT controls.

Compliance with generally accepted government auditing standards

We conducted this performance audit under the authority of state law (RCW 43.09.470), approved as Initiative 900 by Washington voters in 2005, and in accordance with generally accepted government auditing standards as published in *Government Auditing Standards* (2018 Revision) issued by the U.S. Government Accountability Office. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

APPENDIX B: SCOPE, OBJECTIVES AND METHODOLOGY

Scope

The audit examined the UTAB system's key application controls over significant transactions and interfaces, as detailed in the methodology section, and general IT controls over electronic access, program change management, and disaster recovery. The audit did not assess every control related to the transactions, interfaces, and areas selected for audit. Instead, it focused on the controls identified as key to providing reasonable assurance of complete, accurate, secure, and available data.

Our audit of claims focused on the controls to prevent and detect inaccurate claimant information. We did not review eligibility determinations or audit to determine whether claim amounts were calculated correctly. Our electronic access testing was limited to controls over accessing the UTAB system, and did not include network or physical security controls. Our disaster recovery testing was limited to reviewing the status of the Department's disaster recovery plan; we did not test to determine whether data backups were performed or tested.

Objectives

The purpose of this performance audit was to determine whether selected controls governing the UTAB system were adequately designed and implemented to provide reasonable assurance of complete, accurate, secure, and available data.

Methodology

We obtained the evidence used to support the findings, conclusions, and recommendations in this audit report during our fieldwork period of October 2020 through February 2021, with some additional follow-up work afterward. We summarize the work we performed to address the audit objectives in the following sections.

Significant transactions and interfaces

Our examination of application controls focused on key input, processing and output controls over claims, including related controls over fraud discovery, and key interface controls over the interface between the UTAB system and the Next Generation Tax System (NGTS). To assess whether selected application controls were adequately designed and implemented to provide reasonable assurance of complete, accurate, secure and available data, we reviewed the Department's written policies and procedures, interviewed key personnel, inspected system

configurations, observed the system's responses to various inputs, recalculated system-generated amounts, and reviewed system logs and other applicable documentation. We assessed the results of our testing against state requirements contained in Office of the Chief Information Officer (OCIO) Standard 141.10, OCIO Policy 151, and leading practices detailed in Federal Information System Controls Audit Manual (FISCAM) 4.2 Business Process Controls, FISCAM 4.3 Interface Controls, and Information Systems Audit and Control Association (ISACA) guidance regarding separation of IT duties.

Electronic access

Our examination of general IT controls over electronic access focused on key controls over access to the application system, data files and the program libraries. To assess whether selected electronic access controls were adequately designed and implemented to provide reasonable assurance of complete, accurate, secure and available data, we reviewed the Department's written policies and procedures, interviewed key personnel, inspected system configurations, and reviewed system logs and other applicable documentation. We also analyzed user access permissions and observed the system's responses to various situations, including access attempts by unauthorized users. We assessed the results of our testing against state requirements contained in OCIO Standard 141.10 §7.2 Application Development and §7.3 Application Maintenance, and leading practices detailed in the 2016 ISACA Change Management Audit Program.

Program changes

Our examination of general IT controls over program changes focused on key controls over changes to the UTAB system code. To assess whether selected program change controls were adequately designed and implemented to provide reasonable assurance of complete, accurate, secure and available data, we reviewed the Department's written policies and procedures, interviewed key personnel, inspected system configurations, observed the system's responses to various inputs, and reviewed system logs and other applicable documentation. We assessed the results of our testing against state requirements contained in OCIO 141.10 §7.2 Application Development and §7.3 Application Maintenance, and leading practices detailed in the 2016 ISACA Change Management Audit Program.

Disaster recovery

Our examination of general IT controls over disaster recovery focused on the Department's disaster recovery plan. To assess whether the plan was adequately designed and implemented to provide reasonable assurance of data continuity and availability in the event of a disaster, we interviewed key personnel to understand the Department's policies and procedures related to its draft plan and analyzed the written draft plan. We assessed the results of our testing against state requirements contained in OCIO Policy 151 Disaster Recovery.

Work on internal controls

This was an audit of internal controls. We reviewed selected application and general IT controls over the UTAB system, as detailed in the methodology section above.

Our audit assessed whether controls in these areas were adequately designed and implemented to provide reasonable assurance of complete, accurate, secure, and available data.

Reporting confidential or sensitive information

Because public distribution of tests performed and related results over claims validation could increase the Department's risk of fraudulent claims, distribution of that information has been limited to management and the governing body of the Department. Because public distribution of certain tests performed and the related results could increase the risk to the Department's IT security, the public audit report does not present details of our work and related recommendations. Distribution of that information has also been limited to management and the governing body of the Department and is kept confidential under RCW 42.56.420.

ABOUT THE STATE AUDITOR'S OFFICE

The State Auditor's Office is established in the Washington State Constitution and is part of the executive branch of state government. The State Auditor is elected by the people of Washington and serves four-year terms.

We work with state agencies, local governments and the public to achieve our vision of increasing trust in government by helping governments work better and deliver higher value.

In fulfilling our mission to provide citizens with independent and transparent examinations of how state and local governments use public funds, we hold ourselves to those same standards by continually improving our audit quality and operational efficiency, and by developing highly engaged and committed employees.

As an agency, the State Auditor's Office has the independence necessary to objectively perform audits, attestation engagements and investigations. Our work is designed to comply with professional standards as well as to satisfy the requirements of federal, state and local laws. The Office also has an extensive quality control program and undergoes regular external peer review to ensure our work meets the highest possible standards of accuracy, objectivity and clarity.

Our audits look at financial information and compliance with federal, state and local laws for all local governments, including schools, and all state agencies, including institutions of higher education. In addition, we conduct performance audits and cybersecurity audits of state agencies and local governments, as well as state whistleblower, fraud and citizen hotline investigations.

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