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Memorandum

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TO: Joint Technology Committee

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SUBJECT: Major Information Technology Capital Construction Projects

Summary

This memorandum discusses several ongoing and recently completed major IT capital construction projects, and other large IT systems in the state.

IT Capital Construction Projects

The Joint Technology Committee (JTC) is charged with reviewing major IT projects, prioritizing IT capital budget requests, forecasting the state's need for future IT budget requests, and reviewing IT legislation. An IT capital budget request is a request from a state agency or state institution of higher education for the installation, development, maintenance, or upgrade of IT, including the purchase of services from the Governor's Office of Information Technology (OIT). IT capital budget requests exclude any budget requests that are primarily operational in nature, or where the majority of the funding will be

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used to support or modify state staffing levels. Operating and maintenance budget requests for ongoing IT costs are reviewed and prioritized by the Joint Budget Committee (JBC).

State-funded IT capital construction projects are funded through the Information Technology Capital Account within the Capital Construction Fund pursuant to Section 24-75-302 (3.7), C.R.S.

The follow sections summarize several ongoing and recently-completed major IT projects, programs, and state IT systems. Although the JBC reviews operating budget requests related to the ongoing costs associated with the operations and maintenance of IT systems, the JTC may continue to evaluate, receive updates, and provide recommendations on major state IT systems.

Child Care Automated Tracking System

In FY 2015-16, the Colorado Department of Human Services (DHS) requested federal funds spending authority to enhance and replace major components of the Child Care Automated Tracking System (CHATS). CHATS is the subsidy payment system for the Colorado Child Care Assistance Program (CCCAP). CCCAP provides child care assistance to families who are working, searching for employment, or are in training, and families who are enrolled in the Colorado Works program and need child care services. The project used a hybrid approach that either retained or enhanced certain CHATS functionality and replaced selected functionality with new or current state-leveraged systems. The project included replacing the point-of-sale system for attendance tracking, providing easy-to-read, concise reports, and building a user-friendly environment for both providers and families. Over the course of the project, DHS enhanced and replaced CHATS modules in a phased approach, consisting of a set of 13 technical and nontechnical initiatives to address gaps and system requirements identified by CHATS users and health care providers. The project was completed in September 2018.

The project budget consisted entirely of federal funds. The JTC approved the project, and DHS was appropriated \$7.9 million in federal funds spending authority. DHS used the uncommitted balances from the Child Care Development Fund and annual grant awards from the federal Administration for Children and Families to fund this project.

Colorado Benefits Management System

The Colorado Benefits Management System (CBMS) supports eligibility for Medicaid and other human services programs, and is used by more than 5,000 county and medical assistance site employees. Colorado counties, who administer the assistance programs that CBMS processes, are some of the primary users of CBMS. DHS and OIT maintain and update the CBMS system. The first CBMS project began in 1996 and was initially a joint effort between the DHS and the Department of Health Care Policy and Financing (HCPF).

In September 2004, the state implemented CBMS to replace six state systems supporting various state-administered welfare programs, such as Medicaid, the Supplemental Nutrition Assistance

Program, Temporary Assistance for Needy Families, and Colorado Works.¹ Deloitte maintains CBMS for HCPF, DHS, and OIT. After the initial CBMS launch, the system experienced issues. Some of these issues may have been attributed to the system's inability to handle the required number of concurrent users during peak periods, and some counties not participating in the new system's design, development, testing, and training.

On January 13, 2020, the JTC received an update from OIT and DHS about the CBMS Transformation project after phase 2 of the project went live on August 26, 2019. After the launch, counties began experiencing issues and presented these to the JBC on January 7, 2020. DHS and OIT discussed some of the user issues with the JBC, which include; increasing processing time for cases, unplanned days of downtime, and training environment instability.² OIT and DHS stated that these issues are being mitigated. The CBMS Transformation project is considered a JBC operating budget request, and was not submitted to the JTC for review or approval.

Department of Corrections Offender Records Management System

Beginning in FY 2014-15, the Department of Corrections (DOC), in cooperation with OIT, requested state funds for a three-phase project to replace a legacy computer system with a new electronic information management system to track and record offender data from admission until release from parole. Once complete, the new system will replace the department's current legacy system, the Department of Corrections Information Management System (DCIS). The project addresses the three key areas of offender management, electronic health records, and post-incarceration. DOC signed a ten-year contract with Marquis Software Development, Inc., to implement a commercial off-the-shelf electronic offender management system. The first five years of the contract are for the full implementation of the DOC Offender Records Management System (DeCORuM) by Marquis. The last five years of the contract are for maintenance.

Phase I of the project included a new database management system, an electronic health records (EHR) system, and a behavioral audit system, which were completed in November 2016. Phase II migrates the data of incarcerated offenders to the new integrated offender management system. Phase III replaces the parole and community Colorado Web-based Integrated Support Environment system, the parole electronic system, and required enhancements to complete a fully integrated offender information management system. Phase IV further enhances and updates parts of the EHR system as needed.

Thus far, DOC has been appropriated \$30.2 million in CCF for the project. DOC received an appropriation of \$5.8 million in FY 2014-15, \$11.0 million in FY 2015-16, and \$12.6 million in FY 2017- 18. DOC also received a supplemental appropriation in FY 2015-16 for \$0.8 million.

¹Governor's Office of Information Technology, Department of Health Care Policy and Financing, and Department of Human Services, Improve and Modernize Colorado Benefits Management System (CBMS), FY 2011-12 Supplemental Budget Request, p.1.

²Joint Technology Committee staff, Summary of Joint Budget Committee Meeting with County Representatives, http://coga.prod.acquia-sites.com/sites/default/files/html-attachments/j_jtc_2020a_01132020_114555_am_committee_summary/200113%20AttachE.pdf

On October 1, 2019, DOC and OIT submitted a spending authority time extension request for \$7.5 million in state funds that had not yet been spent or encumbered from prior appropriations and was set to expire in June 2020. The JTC and JBC approved this time-extension request until June 2023.

DOC is requesting an additional \$9.9 million in funding for FY 2023-24 to complete the project. DOC provided an update to the JTC on the status of the project and the request during the committee's meeting on October 18, 2022.

Driver License, Record, Identification, and Vehicle Enterprise Solution

The Colorado Driver License, Record, Identification and Vehicle Enterprise Solution (DRIVES) project replaced the outdated Driver License System and Colorado State Titling and Registration System with a modern, web-based system. The Department of Revenue (DOR), in cooperation with OIT, purchased a commercial off-the-shelf replacement software solution to unify the two systems into one master system. DRIVES operates in a vendor-provided (Fast Enterprises), state-hosted environment and is supported by network architecture designed by OIT. The JTC approved funding and DOR was appropriated a total of \$93.3 million for the project, \$41.0 million in FY 2014-15 and \$52.3 million in FY 2015-16. In FY 2019-20, \$18.8 million of state funds were reverted to the Information Capital Account by DOR following the successful, under-budget completion of the DRIVES project.

The project was fully implemented in August 2018. After the full launch, DRIVES faced several challenges, including the issuance of temporary tags, title issues, connections to the National Motor Vehicle Title information system, and county reporting and reconciling of financial accounts. Mitigation of these issues is ongoing.

Department of Early Childhood IT Systems

The new Department of Early Childhood was created in 2021 through House Bill 21-1304 and officially launched on July 1, 2022. The department identified the need for various IT systems while in the process of setting up the new department. The department was appropriated \$3.5 million through House Bill 22-1197 for the development of various systems to support the launch of the Universal Preschool Program in the 2023-2024 school year. The department was also appropriated \$14.7 million for FY 2022-23 for the development of various systems to support the work of the department. The JTC has been receiving monthly updates on the status of these projects during the 2022 interim.

Health IT Roadmap

From FY 2018-19 through FY 2020-21, the Governor's Office of eHealth Innovation (OeHI) and HCPF received a combination of state and federal funds spending authority for a three-phase project to implement nine initiatives related to the Colorado Health IT Roadmap, including health delivery reform, payment reform, improvements to care coordination, cost reductions, and health care value improvements. The initiatives will build upon the state's current health information infrastructure in order to improve health care delivery and payment models.

The JTC approved and OeHI was appropriated \$6.6 million, with \$1.9 million in state funds in FY 2018-19 and \$11.5 million, with \$1.1 million in state funds, in FY 2019-20. In FY 2020-21, the JTC approved and OeHI was appropriated \$4.4 million, with \$0.4 million in state funds.

HRWorks and Payroll Modernization

In FY 2014-15, the Department of Personnel and Administration (DPA) and OIT requested funds to replace the state's 35-year old mainframe Colorado Personnel Payroll System (CPPS) and to eliminate or consolidate existing agency human resources (HR) systems, which include databases and spreadsheets. The project was intended to create a single source for all HR and payroll data for state employees and implement five critical components of the state's enterprise Human Resource Information System. The HRWorks project consisted of five critical components:

- benefits administration;
- statewide time and leave tracking;
- payroll processing;
- performance and personnel management; and
- single-source statewide database for employee and position information.

Originally, the departments planned to purchase two software applications: a timekeeping software from Kronos, and a core human resource management software from an enterprise resource planning vendor. In January 2017, DPA and OIT discovered significant issues with the interfaces between the time and leave tracking component and other components of the project. After initially awarding the time and leave contract to Kronos, DPA and OIT determined a new proposed solution with CGI would ultimately save the state \$7.0 million in operating expenses over the next two years and \$1.6 million in annual savings thereafter due to lower maintenance and licensing costs.

OIT and DPA were appropriated a total of \$41.6 million in state funds for the project. OIT received an appropriation of \$16.0 million in FY 2014-15 and \$7.4 million in FY 2018-19. DPA and OIT have also received additional appropriations through supplemental requests: \$15.2 million in FY 2014-15, \$2.9 million in FY 2017-18, and \$1.6 million in FY 2019-20.

On December 10, 2019, DPA submitted a budget amendment request for \$12.4 million of General Fund to continue working on the project using agile methodology. On January 7, 2020, the JTC and the JBC heard a presentation from DPA about HRWorks, which included information on the first sprint completed, the plan for the next 90 days, and the project costs to date. However, the budget amendment request for funding was ultimately not approved due to the budget cuts made in response to the COVID-19 public health emergency. On September 14, 2020, DPA discussed the termination of the HRWorks project due to the lack of funding for the FY 2020-21 budget cycle. DPA discussed the lessons learned, including the successful use of agile methodology, and the continuing need of the project as current agency HR systems continue to be costly and inefficient.

For the FY 2022-23 budget cycle, DPA was appropriated \$6.0 million for the first phase of a new project to replace CPPS and implement a new, modernized payroll system. The department is requesting

funding for phase two of the project for FY 2023-24 and is currently estimating the total project cost for the new payroll system to be \$53.0 million. The department states that implementing a new, modernized payroll system and eliminating CPPS will be the first of several projects to implement other HR systems and obtain a full statewide Human Resources Information System. The JTC has been receiving monthly updates on the status of the payroll modernization project during the 2022 interim.

Medicaid Management Information System

Colorado's Medicaid program, Health First Colorado, uses an online system to process and manage Medicaid claims, referred to as the Medicaid Management Information System (MMIS). The MMIS reviews, processes, and pays all Medicaid claims submitted by providers throughout the state. The MMIS was first developed by a contractor (Consultec) in 1996. According to HCPF, the MMIS experienced numerous issues once it went live such as inaccurate payments, long processing times, and numerous unlicensed providers receiving payments.

In 2012, HCPF began a project to replace the legacy MMIS with a new system called the Colorado interChange. The department initially chose HP Enterprise Services as the vendor, but HCPF later decided to terminate that contract and chose DXC Technology as the vendor later in the project. This multi-year project, which was later named the Colorado Medicaid Management Innovation and Transformation project or the COMMIT project, was appropriated funds through the JBC starting in 2013. The system went live on March 1, 2017.

Program Eligibility and Application Kit

Implemented in 2010, the Program Eligibility and Application Kit (PEAK) website allows Coloradans to apply for Medicaid online. PEAK was appropriated funds through the JBC in 2010. PEAK is a collaboration between HCPF, OIT, DHS, and a private contractor, Deloitte Consulting, LLC. PEAK interfaces with CBMS, which is the system that processes applications and makes eligibility determinations for public benefits such as for food, cash, and medical assistance. The eligibility data in CBMS feeds into the MMIS, which pays providers for the services Medicaid recipients receive. In November 2014, HCPF improved its PEAK website to provide a single online process for consumers to apply for Medicaid or tax credits, and improved CBMS to determine eligibility for Medicaid and tax credits.

Sales and Use Tax Simplification System

In 2019, the General Assembly passed Senate Bill 19-006, which was recommended by the Sales and Use Tax Simplification (SUTS) Task Force. The bill required DOR and OIT to create a SUTS system and Geographic Information System (GIS) database. The SUTS system and GIS database are intended to help businesses comply with Colorado's complex sales tax system.

Senate Bill 19-006 included an appropriation clause for FY 2019-20 that appropriated \$10.0 million to OIT for the initial funding of the electronic SUTS system and for the GIS database to maintain jurisdictional boundaries of sales tax districts and to calculate appropriate sales and use tax rates for individual addresses. The General Assembly appropriated an additional \$8.8 million to OIT for FY 2020-21, for the initial funding and ongoing maintenance of the electronic SUTS system and GIS database.

According to DOR's update to the JTC on September 14, 2020, the SUTS and GIS systems were completed at almost \$10.6 million under budget, with funding reverting back to the General Fund. The Sales and Use Tax Simplification Task Force is recommending a bill for the 2023 session that would appropriate \$4.4 million to DOR to make various enhancements to the functionality of the SUTS system.

Stationary Sources Solution Modernization

In FY 2022-23, the Colorado Department of Public Health and Environment (CDPHE) received \$4.1 million for the first phase of a \$13.0 million project to replace and modernize its outdated core data systems used primarily for stationary source regulatory and management purposes. The system is used by the Stationary Sources Program within the CDPHE Air Pollution Control Division, which is responsible for the oversight of stationary source of pollution in the state, including oil and gas facilities; Title V major sources, as defined by the Environmental Protection Agency; landfills; and others. The new web-based system will perform a number of functions, including submitting applications and payment for required permits, uploading documents required by regulations or statute, and allowing each user in the regulated community to update and modify information on file. The department has been providing monthly updates to the JTC on the status of the project throughout the 2022 interim.

Trails

DHS and OIT's Modernizing the Child Welfare Case System project enhanced and modernized the existing Trails case management system, which is the state's statewide automated child welfare information system, and its associated infrastructure. Trails supports child protective system activities and allows the state to securely report data to the federal government. Trails has over 6,000 users across Colorado. The project addressed:

- mobile device compatibility;
- data integration;
- improved interface navigation;
- faster implementation of system modifications; and
- profile-driven capabilities.

DHS and OIT were appropriated a total of \$22.8 million, with \$11.4 million in state funds in FY 2015-16, FY 2016-17, and FY 2017-18. The project's federal funds are a match from the federal Administration of Children and Families. In July 2018, DHS released the fourth set of improvements

to the Trails system. However, county users and administrators experienced several issues, including technical bugs, data integrity, user communication, and problems with accurate reporting.

On August 26, 2019, DHS submitted a Trails emergency supplemental budget request to fund new upgrades to the system needed to access federal funding. The department requested \$5.8 million in state funds and \$3.9 million in federal funding spending authority. The JTC considered and sent a letter to the JBC requesting the committee to fund this emergency supplemental budget request on September 10, 2019.³ The JBC approved this emergency supplemental budget request on January, 21, 2020.

Unemployment Insurance Systems

Beginning in 2016, The Colorado Department of Labor and Employment (CDLE) began migrating two legacy mainframe unemployment insurance (UI) systems, the Colorado Unemployment Benefits System (CUBS) and the Colorado Automated Tax System (CATS) into a single, modernized Unemployment Insurance platform. These systems are used by CDLE to provide temporary and partial wage replacement to workers who have become unemployed. CUBS processes all claimant-side transactions, and CATS handles all employer-facing processes.

Phase one of the program, which involved migrating the UI systems off the mainframe and into the cloud, was completed in March 2018. Phase two of the project, which involved a full replacement of the CUBS, in the new MyUI+ system, was originally scheduled to go-live in May 2020. However, due to the COVID-19 pandemic, the department shifted all available resources to focus on addressing the increase in unemployment insurance claims and implementing the many new unemployment benefit provisions of the federal Coronavirus Aid, Relief, and Economic Security (CARES) Act and other pieces of federal legislation that were passed in response to the public health emergency. The department launched the MyUI+ system in January 2021.

The JTC approved funding for the first two phases of the project in FY 2016-17, FY 2017-18, and FY 2018-19, and CDLE was given a total of \$57.8 million cash funds spending authority for these phases of the project. For FY 2021-22, CDLE was appropriated an additional \$28.4 million in cash funds spending authority to complete the project and replace the CATS. As of the department's most recent project update to the JTC on August 17, 2022, the new employer-facing system is expected to launch in late 2023 or early 2024. The project is funded with revenues from the Employment and Training Technology Fund, which is funded with assessments against each employer's UI premium.

³https://leg.colorado.gov/sites/default/files/images/190910_emer_supp_request.pdf.