



December 11, 2024

The Honorable Representative Brianna Titone
Chair, Joint Technology Committee
State Capitol Building
Denver, CO 80233

RE: OSPB Submission of the non-prioritized FY 2024-25 IT Capital Construction Supplemental and FY 2025-26 IT Capital Construction Budget Amendment Requests

Dear Chair Titone:

As required by 24-37-304 (1) (c.5) (I), C.R.S., the Governor's Office of State Planning and Budgeting is providing all FY 2024-25 IT capital construction supplemental requests and FY 2025-26 budget amendment requests received from State departments to the Joint Technology Committee (JTC). These requests have not been prioritized and have not yet been recommended for funding. Prioritization and funding recommendations will be presented to the Committee on January 2, 2025.

Thank you for your consideration of the attached requests. Please contact me with any questions or concerns.

Sincerely,

Adrian Leiter

Adrian Leiter

Deputy Director of Budget

CC:

Senator Mark Baisley, JTC
Representative Ron Weinberg, JTC
Samantha Falco, JTC Staff
Craig Harper, Joint Budget Committee Staff Director
Scott Thompson, Principal Legislative Budget & Policy Analyst
David Edinger, Chief Information Officer
Keith Jacobi, Office of State Planning and Budgeting
Danielle Fheili, Office of State Planning and Budgeting



FY 2024-25 - DOC Pharmacy System Replacement: IT-CC-S-01

Request Year	Total Funds	CCF-IT	Cash Funds	Reappropriated Funds	Federal Funds
FY 2025-26	\$0	\$0	\$0	\$0	\$0
FY 2026-27	\$0	\$0	\$0	\$0	\$0
FY 2027-28	\$0	\$0	\$0	\$0	\$0

Categories of IT Capital Projects

Category	Rationale	Applicable
System Replacement	Costs escalating, failing technology, software or vendor support ended, or new technology, e.g., DRIVES, CHATS	Yes
System Enhancement Regulatory Compliance	(new functionality, improved process or functionality, new demand from citizens, regulatory compliance, e.g, CBMS	No
Tangible Savings Process Improvement	conscious effort to reduce or avoid costs, improve efficiency, e.g., LEAN, back office automation	No
Citizen Demand	“The Ways Things Are” (transformative nature of technology, meet the citizens where they are, e.g., pay online, mobile access)	No

Request Summary:

The Department of Corrections (DOC) requests \$0 General Fund (GF) in FY 2024-25 in order to replace its aging and failing legacy pharmacy records system with an off-the-shelf institutional pharmacy system. DOC anticipates the pharmacy system replacement project will cost around \$1,400,000 and requests a transfer from the Pharmaceuticals line to the IT capital account to spend on the project. The Department intends to leverage cost savings from its participation in the federal 340B Drug Pricing Program in FY 2024-25 to fund this effort.

Efforts to replace the department’s aging pharmacy system have been ongoing since 2015, with the onset of the Department of Corrections Offender Records Management (DeCORuM) Project. This effort will require OIT staffing, vendor project management, software maintenance and support fees, database software licensing fees, virtual server costs, development, and hardware costs. The Department of Corrections relies on its pharmacy software to meet the

treatment, tracking, and regulatory compliance of providing prescribed medications to over 16,000 incarcerated and releasing individuals under its supervision.

Impacted stakeholders of this project include Department of Corrections staff and contractors, OIT staff, and the software vendor. The incarcerated population and releasing residents will be positively impacted by improvements to the current pharmacy system. End users will include clinical staff and contractors, select vendors and partners, and health partners.

Project Description:

The Department requests the replacement of the pharmacy system and it assumes that it will be able to purchase a commercial off-the-shelf (COTS) system from an outside software vendor specializing in institutional pharmacy management systems, as opposed to designing and developing a custom software package.

This COTS software solution will allow the agency to eliminate multiple outdated software systems that span 30-plus years of aged technology. These aged systems are not only very costly to maintain but also present huge concerns with current security requirements as defined by the Governor's Office of Information Technology (OIT) and the State of Colorado Chief Information Security Officer (CISO). The system will also provide a secure single software solution to replace several applications that serve different pharmacy related functions, as well as provide a single source for data entry. This will make patient and health data more secure as well as provide a single source of truth that the Department can use for other Legislative, regulatory, and legal uses.

Historically, the Department has used numerous legacy systems, including the Department of Corrections Information System (DCIS), Personal Computer Department of Corrections Information System (PCDCIS), several Web applications, numerous database programs, and Excel spreadsheets to track pharmacy records and reports. Currently, the legacy system lags in meeting recent federal and state pharmacy reporting requirements for controlled substance monitoring and tracking.

- **System Integration Opportunities** - The pharmacy software solution will integrate with existing DOC systems and tools, including the electronic Offender Management Information System (eOMIS) for offender location, demographic, and electronic health record (EHR) data. The system will also integrate with future hardware upgrades, including automated pill packing machines to create additional efficiencies in pharmacy operations.
- **Risks and Constraints** - The largest risk to success of the project is the potential failure of the legacy systems prior to full implementation. The Department and OIT are actively engaged in efforts to stabilize the legacy Informix database system to ensure it reaches the end of the project timeframes. In addition to this risk, the department is at risk of non-compliance with controlled substance federal and state pharmacy reporting and monitoring requirements without implementation of this solution. Finally, further efforts

to participate in the 340B Prescription Drug Pricing Program depend on the capabilities and efficiencies of a modern pharmacy system.

- **Operating Budget Impact** - This request is strictly for the implementation phase and subsequent funding for ongoing software fees, maintenance and equipment fees are requested in the Department's FY 2025-26 Decision Items.

Background of Problem or Opportunity:

Historically, the Department has used numerous legacy systems, including the Department of Corrections Information System (DCIS), Personal Computer Department of Corrections Information System (PCDCIS), several Web applications, numerous database programs, and Excel spreadsheets to track pharmacy records and reports. Currently, the legacy system lags in meeting recent federal and state pharmacy reporting requirements for controlled substance monitoring and tracking.

The Department's legacy systems are built on an Informix database, which is now more than 30 years old. The applications which interact with these systems are built in 4gl and PowerBuilder programming languages, which are antiquated and no longer supported. The developers who built these systems have nearly all retired and new programmers are no longer educated in these systems. Maintenance costs for these databases and programming costs are in the highest tiers among rates in the OIT service catalog. These servers have exceeded end-of-life and the database software must be upgraded substantially in order to be supported even by third-party specialized vendors. The Department is in significant danger of losing access to its legacy systems, endangering over 30 years of data and seriously impeding effective pharmacy management and record keeping. Loss of these systems would have dire consequences on DOC's pharmacy management capabilities and operations, as well as on the inmate population that relies on DOC for health and medication management and issues.

The Department contracted with an outside vendor, Marquis Software Development, in 2015, for the purpose of replacing/upgrading offender data management and information processing software systems that are now over 30 years old. The contract specifically included a complete replacement of the large, legacy electronic offender information management program known as DCIS/PCDCIS with a modern solution, the electronic Offender Management Information System (eOMIS). This project included subcontracting a pharmacy solution through a third-party vendor. Unfortunately, the subcontractor was unable to fulfill its obligations and could not provide a solution that met state board of pharmacy requirements and disengaged from the project, leaving Marquis Software and the Department of Corrections in a quandary and needing to find an acceptable solution that would meet operational and regulatory requirements and could be implemented before legacy system failure.

Justification:

Adoption of a customized off-the-shelf (COTS) system was determined to be the most effective and efficient means of upgrading the agency's outdated pharmacy systems in 2015, and remains the most practical solution at this time. Lack of resources to develop and maintain a

new system of the scale of the department's system made the use of OIT developers and resources a non-viable solution for the replacement project. There are limited vendor solutions that meet the agency's needs and regulatory requirements.

Business Process Analysis -

A comprehensive review of the existing legacy functionality and necessary new systems was completed. Documented requirements were developed and vetted with OIT. Purchasing, statement of work and contracting efforts will follow upon approval of this project.

Cost-Benefit Analysis and Project Alternatives (per H.B. 15-1266) -

The Department of Corrections relies on its pharmacy software to meet the treatment, tracking, and regulatory compliance of providing prescribed medications to over 16,000 incarcerated and releasing individuals under its supervision. The DOC pharmacy fills and dispenses over 300,000 prescriptions annually. Elimination of the electronic pharmacy system would likely result in the need to cease pharmacy operations internally and the need to contract those services out to a pharmaceutical distribution company. This would also require a new pharmacy management software suite to integrate with the existing offender information management system and the contracted pharmacy provider.

An alternative to the implementation of a new COTS software solution would be continuing the use of the existing legacy pharmacy solution. This would require costly maintenance of the legacy system indefinitely. The system needs significant updates to meet recent regulatory requirements and OIT does not have sufficient developer resources to maintain existing legacy systems and make significant upgrades to the existing pharmacy software.

Success Criteria and Improved Performance Outcomes -

- Modernize the DOC pharmacy software solution with a product supported by a vendor committed to the pharmacy industry and ongoing updates to the operational and regulatory environment.
- Ensure compliance with current pharmacy board standards and laws (both State and Federal)
- Ensure compliance with data stability and accuracy standards and laws
- Convert and validate data to leverage in other current and/or future projects
- Improve efficiencies in development to adhere to new and changing legislative requirements and priorities
- Create greater flexibility for future integrations with other software systems, hardware, and data analysis and visualization tools
- Significantly reduced risk of system failure
- Facilitate restoration in case of failure
- Improve efficiency and time savings of end users interacting with a modern, user-friendly interface

Assumptions for Calculations -

The Department intends to use existing operational dollars to fund the implementation of the pharmacy software system. Cost savings achieved through participation in the 340B Drug Pricing will support vendor implementation costs. OIT services will be billed through common policy payments to OIT.

Deliverable	Price
Project Management	\$25,000/month
Project Kickoff & Discovery	\$151,696.81
Software Installation	\$489,547.87
Software Configuration	\$131,316.49
Data Conversion	\$146,065.96
eOMIS Interface Development	\$15,957.45
Testing & QA	\$124,593.09
Promotion to Production Environment & Stabilization	\$149,175.53
Training & Go-Live	\$189,095.74
Total Initial One Time Cost	\$1,397,448.94

Consequences if not Funded -

The Department of Corrections relies on its pharmacy software to meet the treatment, tracking, and regulatory compliance of providing prescribed medications to over 16,000 incarcerated and releasing individuals under its supervision. The DOC pharmacy fills and dispenses over 300,000 prescriptions annually. Elimination of the electronic pharmacy system would likely result in the need to cease pharmacy operations internally and the need to contract those services out to a pharmaceutical distribution company. This would also require a new pharmacy management software suite to integrate with the existing offender information management system and the contracted pharmacy provider. Alternatively, DOC would have to continue the use of the existing legacy pharmacy solution. This would require costly maintenance of the legacy system indefinitely. The system needs significant updates to meet recent regulatory requirements and OIT does not have sufficient developer resources to maintain existing legacy systems and make significant upgrades to the existing pharmacy software.

Implementation Plan Change Management -

- Project Kickoff and Discovery - Includes kickoff, meeting, workflow analysis, and project planning activities.
- Software Installation - Includes the license activation and installation of the commercial-off-the-shelf software solutions.
- Software Configuration - Includes the configuration of workflows identified in Software Requirements Checklist.

- Data Conversion - Electronic data conversion activities from legacy systems.
- eOMIS Interface Development - Unidirectional interface with eOMIS for tracking patients' current location.
- Testing and QA - Testing and QA prior to promoting the system to the production environment.
- Promotion to Production Environment and Stabilization - Includes the promotion and stabilization from the Development Environment to the Production Environment.
- Training and Go-Live - Blend of remote and onsite training. Online learning management system before and after go-live. Onsite training and go-live support for ten (10) days.

Alignment with OIT Best Practices and Standards -

- The project is a modified agile process.
- Implementation of a modern database and software system eliminates the need for outdated, out of support legacy database structures and software.
- Improves data security
- This project aligns with the agency's efforts to mitigate technical debt. The Department's Informix database and legacy software have been identified as a critical need for replacement by OIT; these cannot be retired until pharmacy replacement is completed

Procurement -

- OIT is, and will continue to be, involved with all activities, to include requirements documentation, vendor evaluation, and architecture design and implementation.

Accessibility Compliance -

- The Department is in the process of evaluating all existing software for accessibility compliance. The agency and vendor are required to remediate any deficiencies identified through accessibility testing. Current OIT contract accessibility requirements will be included in the contracting process.

Additional Information

Additional Request Information

Please indicate if three-year roll forward spending authority is required.	Yes
Is this a continuation of a project appropriated in a prior year?	No
If this is a continuation project, what is the State Controller Project Number?	N/A

If this request affects another organization, please provide a comfort letter.	N/A
Please attach a letter from OIT indicating review and approval of this project	Attached

Estimated Project Time Table

Steps to be completed	Start Date	Completion Date
Project Kickoff and Discovery	April 1, 2025	May 15, 2025
Software Installation, Configuration, and Data Conversion	May 15, 2025	June 30, 2025
eOMIS Interface Development	July 1, 2025	August 15, 2025
Testing, Training, and Go-Live	August 16, 2025	September 30, 2025



COLORADO
Governor's Office of
Information Technology

11/21/2024

Mark Ferrandino
Director
Office of State Planning and Budgeting
111 State Capitol
Denver, Colorado 80203

RE: FY 2024-25 Dept. of Corrections - Pharmac Replacement

Dear Director Ferrandino:

Pursuant to OSPB instructions, this letter is to confirm that the Office of Information Technology (OIT) has been informed of the development and submission of this proposed FY 2024-25 request for the Department of Corrections requests \$1,467,321 Cash Fund/ Reappropriated Funds (CF/RF) in FY 2025-26 for a vendor to complete the Pharmacy system replacement.

OIT has completed an internal review to ensure the project aligns with statewide IT goals and determined that OIT has the capacity to deliver and meet the requirements of the project.

Please note: OIT and the Department of Corrections are in agreement that a security review will be completed as part of the project itself, when applicable. Also, any OIT specific work should be reappropriated to OIT through the payments of OIT line, where applicable.

Sincerely,

Glenn Iverson

11/21/2024

C. Daniher

11/21/24

Glenn Iverson, Interim OIT Budget Director Christy Daniher, OIT DOC IT Director



CC-IT: CAPITAL CONSTRUCTION INFORMATION TECHNOLOGY REQUEST FOR FY 2025-26

Department	Education	Signature Department Approval:	<i>Wayne Peel</i>	Date	12/5/24
Project Title	School Finance System Modernization	Signature OIT Approval:	<i>Glenn Iverson</i>	Date	12/5/24
Project Year(s)	Ongoing	Signature OSP Approval:		Date	
Department Priority Number					
Five-Year Roadmap?		Name and e-mail address of preparer:	Michael Marsala, marsala_m@cde.state.co.us		

Revision?	Yes	No	Total Project Costs	Total Prior Year Appropriations	Request Year (FY 2025-26) Request	Year 2 Request	Year 3 Request	Year 4 Request	Year 5 Request
A. Contract Professional Services									
(1)			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(2)			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(3)			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(4)			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(5)			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(6)			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(7a)			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(7b)				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(8)			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(9)			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B. Software Acquisition									
(1)			\$ 8,571,429	\$ -	\$ 2,857,143	\$ 5,714,286	\$ -	\$ -	\$ -
(2)			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(3a)			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(3b)			\$ -	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(4)			\$ 8,571,429	\$ -	\$ 2,857,143	\$ 5,714,286	\$ -	\$ -	\$ -
C. Equipment									
(1)			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(2)			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(3)			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(4)			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(5)			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(6)			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
D. Project Contingency									
(1)			\$ 428,571	\$ -	\$ 142,857	\$ 285,714	\$ -	\$ -	\$ -
(2)			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
E. Total Request									
Total Budget Request [A+B+C+D]			\$ 9,000,000	\$ -	\$ 3,000,000	\$ 6,000,000	\$ -	\$ -	\$ -
F. Source of Funds									
	GF		\$ 9,000,000	\$ -	\$ 3,000,000	\$ 6,000,000	\$ -	\$ -	\$ -
	CF/RF		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	FF		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

check (should = E)

\$9,000,000

\$0

\$3,000,000

\$6,000,000

\$0

\$0

\$0



FY 2025-26 - CDE School Finance System Modernization: IT-CC-BA-01

Request Year	Total Funds	CCF-IT	Cash Funds	Reappropriated Funds	Federal Funds
FY 2025-26	\$3,000,000	\$3,000,000	\$0	\$0	\$0
FY 2026-27	\$6,000,000*	\$6,000,000*	\$0	\$0	\$0
FY 2027-28	\$0	\$0	\$0	\$0	\$0

*The out-year costs currently represent an estimate and will be reevaluated before the Department submits an IT capital request for phase two of the project for FY 2026-27.

Categories of IT Capital Projects

Category	Rationale	Applicable
System Replacement	Costs escalating, failing technology, software or vendor support ended, or new technology, e.g., DRIVES, CHATS	Yes
System Enhancement Regulatory Compliance	(new functionality, improved process or functionality, new demand from citizens, regulatory compliance, e.g, CBMS	No
Tangible Savings Process Improvement	conscious effort to reduce or avoid costs, improve efficiency, e.g., LEAN, back office automation	No
Citizen Demand	“The Ways Things Are” (transformative nature of technology, meet the citizens where they are, e.g., pay online, mobile access)	No

Request Summary:

The Colorado Department of Education (CDE) requests \$3,000,000 General Fund for FY 2025-26 and anticipates up to \$6,000,000 General Fund will be required to finalize the project in FY 2026-27. This project falls under the system replacement category for state IT Capital Projects.

The Colorado Department of Education (CDE) has an internally developed School Finance System which supports the administration of the Public School Finance Act of 1994 and the Public School Transportation Funding. This system is used to determine the monthly school finance distributions for school districts, totalling \$9.7 Billion in FY 2024-25 as well as the distribution of \$71.8 Million in School Transportation Funding. Additionally, the system

calculates school finance and transportation funding adjustments resulting from pupil count and transportation funding audits.

The Department received one-time General Funds of \$200,000 in FY 2024-25 to investigate the feasibility of modernizing the State Equal and Audit modules of the School Finance System. The Department hired a vendor to perform a comprehensive alternative analysis for modernizing the CDE School Finance System. The vendor has developed a Report on Alternatives Analysis and Refined Cost as well as a Project Plan for future phases of the project.

After a detailed evaluation of all alternatives, procurement of a Modified Off-the-Shelf (MOTS) technology solution is the recommended approach for modernizing Colorado's school finance management system. The estimated cost of a MOTS technology solution is between \$5 and \$9 Million over two to three years. Until the new replacement system is in place, the Department will continue the current manual processes.

Stakeholders include CDE staff, school districts, Legislative Council, Joint Budget Committee, and the general public. The project directly supports accurate processing of School Finance and School Transportation funding distributions. There are no negative impacts of the project or its deliverables.

Project Description:

The Department has an existing system to support calculations, distributions and audit adjustments for School Finance and School Transportation funding. As described below, this system is no longer functional.

CDE is at an important strategic juncture where upgrading its school finance management system is necessary to support its evolving needs. The current Colorado school finance formula calculates funding based on the number of students in a district and adjusts for school district size, cost of living, and additional student needs. The formula's use of a five-year average helps to smooth out fluctuations in funding and enrollment, providing more stability for school districts. Retaining data in the system for up to ten years is also necessary for supporting the audit process for pupil counts and transportation funding and tracking trends.

Colorado is anticipating a funding formula change occurring in fiscal year 2025-2026. The new formula will run concurrently with the existing school funding formula for several years. There is significant concern that the system will not be able to handle the historical funding formula and will not be able to manage two funding formulas at the same time due to its lack of functionality. The new school funding formula will increase funding to rural, at-risk, special education, and English Language Learner (ELL) students by increasing the weighting of those specific student categories when calculating the funding allocations to school districts.

CDE utilizes their Data Pipeline, where individual school districts upload student count data and submit it. This data is then manually cross-walked into the various student counts that are the basis for the school finance formula. The inability of the State Equal System to automatically ingest the appropriate data from the Data Pipeline is a substantial pain point.

The system relies on manual data management to meet CDE's needs. The development of the system was initiated by a contracted vendor in 2012 but was completed in-house after the vendor was found to have breached contract terms. The system became unstable in 2019 due to changes to the funding formula for Full-Day Kindergarten students. This instability has persisted and was exacerbated by the inclusion of reduced-price lunch eligibility and English Language Learner counts starting in FY 2021-22. This demonstrated that the system is unable to handle multiple data points for the same fiscal year, as it was not designed to accommodate this level of complexity. Fiscal year data is adjusted by CDE to implement updated legislation; however, prior historical data points for the same fiscal year are also necessary for auditing purposes. The system is unable to capture the correct data for calculations, requiring extensive manual work by CDE resources and reliance on spreadsheets to incorporate any change to CDE's funding formula or student count data. An automated future state system will allow CDE to promptly respond to legislative changes, while significantly reducing the possibility of human error, ensuring that CDE remains a good steward of state funds.

CDE contracted with Public Knowledge® (PK) to explore alternative options and help develop an alternatives analysis to address these issues and identify the most appropriate solution. PK's Alternatives Analysis approach leads to an impartial, defensible process for evaluating options with the most suitable scoring method for distinguishing between the proposed alternatives.

Over the past 12 years, CDE has been tasked with operationalizing the system, which does not meet most of its funding calculation, pupil count audit, or technological needs. Many components of the system are entirely non-operational, forcing CDE to manage around \$10 billion in school funding manually. This reliance on manual processes limits efficiency and increases the risks of errors. Funding formula changes must be managed by the School Finance team, presenting a daunting and laborious task of effectively implementing these modifications. Pupil count auditors cannot effectively use the system for compliance audit purposes due to misalignment of the funding calculation module and the audit module. Due to the system's limitations on accurate reporting, finance staff produce data and reports for districts independently, making reporting requests complex and time-consuming.

In the existing state, the system relies almost exclusively on institutional knowledge. Existing staff are burdened with heavy workloads and incur significant risk due to manual calculations and formula applications. This also presents a significant risk to the state if existing staff turnover and institutional knowledge of system use is lost.

Systems Integration Opportunities -

While the existing School Finance System is a stand-alone system, the Department and the vendor selected to evaluate implementation alternatives recommend the new system includes interfaces with the Department's Data Pipeline data collection system. This will allow for an automated population of student count data required for school finance calculations.

Risks and Constraints -

During the alternative analysis, PK performed a detailed review of the current landscape of school finance management systems in other states. This review focused on identifying relevant

technical capabilities of systems, analyzing market specific vendors, understanding best practices, and evaluating the competitive landscape. This research enables CDE to be well-informed about available solutions and emerging technologies that can address the unique challenges in Colorado. The review also examined solutions that other states have implemented for similar school finance management needs, providing a benchmark for CDE's future system

Based on the gathered data, six alternatives were identified for evaluation:

- Maintain Status Quo: Continue using the system without significant changes.
- In-House New System Development and Replacement: Replace the system with a new system developed in-house.
- Outsourced Existing System Modernization: Partner with a third-party vendor to modernize the system, leveraging external expertise to enhance current capabilities.
- Outsourced New MOTS (Modified Off-the-Shelf) Technology Solution: Implement a new, outsourced MOTS solution provided by a vendor or third party to manage school finance operations with greater automation and scalability.
- Outsourced Custom Built Solution: Develop a fully custom-built system, outsourced to a vendor, that is specifically designed to address CDE's unique school finance funding calculation and pupil count audit needs.

Modified Off-the-Shelf (MOTS) solutions are becoming increasingly popular in the public sector, including school finance management systems. They involve the modification of software that has already been built. MOTS solutions contain existing functionality tailored to common industry needs but can be customized to meet specific state requirements. MOTS solutions strike a balance between fully custom-built systems and purely Commercial Off-the-Shelf (COTS) software with no customization, offering flexibility while reducing the cost and time associated with building a system from scratch.

A MOTS solution is one of the proposed alternatives that PK has outlined for CDE as a possible approach for a future system. Kentucky has successfully implemented a MOTS system (Tyler Technologies' Munis) at the state level, while Vermont's implementation of a MOTS school finance system (PowerSchool's eFinancePlus) ended up being canceled before full implementation because the solution lacked basic functionality. If the State funds a replacement system and CDE initiates the procurement process, evaluating potential MOTS solutions should be the top priority.

In order to mitigate the risks, CDE plans to issue a Request for Information (RFI) to confirm the landscape of available systems to support Colorado's school finance system requirements. The RFI results will help CDE refine the business and technical requirements and evaluation criteria for inclusion in a Request for Proposals. PK will assist CDE in the development of the RFI, review and evaluation of the RFI responses, and development of the RFP.

During this process, PK has indicated it will be crucial to establish a detailed timeline that includes major milestones such as data migration, system testing, and user training to ensure a smooth and efficient transition. A phased implementation approach is recommended to mitigate risks and allow time for adjustments as the new system is integrated. Additionally, PK has recommended CDE should plan for regular updates and ongoing system support to maximize the long-term benefits of the MOTS solution and ensure continued alignment with its strategic

goals. By establishing comprehensive requirements, conducting vendor demonstrations, implementing SLAs, adopting a phased approach, and balancing functionality with costs, CDE can ensure that the vendor's MOTS solution aligns with our objectives.

CDE believes that the due diligence of conducting the alternative analysis and assistance during the procurement process by an experienced outside vendor will reduce risks for this system implementation. Further, CDE has a skilled Contracts and Procurement Team and experienced contract managers. Having a strong procurement process, followed by a strong contract and contract management processes, will further mitigate the risks associated with system implementation.

Another risk associated with this project is the inherent time frame associated with implementation of a new system. The projected time to implement a MOTS technology solution is two to three years. During the implementation, CDE will continue to operate on a non-operational system, forcing CDE to manage around \$10 billion in school funding manually. This reliance on manual processes limits efficiency and increases the risks of errors. These risks are increased given that CDE will be managing two separate school finance formulas over the next several years. These risks have been somewhat mitigated by the appropriation of additional 1.8 FTE with HB24-1448, for a total of 3.8 FTE. However, there will continue to be risks associated with manual processing of funding through two complex formulas for two to three years before a new system will be operational.

Operating Budget Impact -

The Department does not have an existing appropriation for the School Finance System. The system was developed in 2012 with one-time funding from the American Recovery and Reinvestment Act of 2009, (Public Law 111-5). One staff member from the Information Management System team provides technical support for the system as needed. This currently equates to approximately 0.5 FTE, which is an increase over prior years. The technical support generally involves troubleshooting, patching, and bug fixing as the current system has a considerable amount of technical debt.

In recent years, the Department has had 2.0 FTE supporting the School Finance formula. An additional 1.8 FTE was added in FY 2024-25 with the new School Finance formula in HB 24-1448, for a total of 3.8 FTE. Additionally, there are 4.0 FTE in the School Auditing Unit that provides technical assistance and support for the Student October Data Collection and the associated student types and performs pupil count and transportation audits.

The implementation of a new automated system will improve the efficiency of the existing staff members as the system will eliminate numerous manual processes and calculations. This will eliminate the potential of errors associated with manual processes and it will allow staff to focus on more valuable activities.

A MOTS system will require ongoing maintenance costs. The cost estimate from the alternative analysis by PK indicated the ongoing costs could be between \$2 Million to \$3.5 Million per year. Using an estimate for ongoing maintenance costs of 18% of implementation costs, the ongoing

costs could be between \$900,000 and \$1.62 Million. More refined cost estimates will be available following evaluation of the RFI and RFP responses.

Background of Problem or Opportunity:

Under the provisions of the Public School Finance Act of 1994 (Section 22-54-115, C.R.S.), the State Board of Education is responsible for determining the amount of funding which local school districts receive monthly from the state. The Colorado Department of Education calculates the monthly entitlement amounts in accordance with the definitions and funding formula outlined in statute.

These calculations are completed through a combination of spreadsheets and an internally developed School Finance System. The internal School Finance System was implemented in 2012. This system incorporates the initial monthly entitlements pursuant to the Public School Finance Act as well as any funding adjustments resulting from audit findings related to the pupil counts. In order to accomplish this, the system is split into three distinct modules:

- State Equal - This module is used to conduct calculations of district funding. Currently relies heavily on spreadsheet data uploads rather than database querying.
- Audit - This module is used to determine funding adjustments when input changes are identified through the regular pupil count audits. These changes impact the district funding from the State Equal module and may result in districts receiving additional funding or owing state funds back to CDE.
- Transportation - This module is used to do a basic calculation of transportation funding. Since no changes have been made to legislation regarding this funding, this portion of the system remains somewhat stable.

In recent years, changes to the School Finance Act, such as Full-Day Kindergarten, the inclusion of reduced lunch in the at-risk funding and the English Language Learner (ELL) factor, has highlighted the inflexibility of the initial system build and has compromised the State Equal and Audit modules of the system. This has resulted in almost complete reliance on manual spreadsheets for calculations and manual processing for audit adjustments. Any changes to the Public School Finance Act are difficult if not impossible to incorporate into the system. Therefore, the upcoming potential changes due to the inclusion of a new at-risk measure pursuant to HB22-1202 is anticipated to compound these existing issues. Further, the implementation of a new school finance formula pursuant to HB24-1448 will cause even more issues. The system will not be able to manage two funding formulas at the same time due to its lack of functionality.

The School Finance System is a critical component in fulfilling the Department's responsibility for administration of the Public School Finance Act. Given the complexity of the school finance calculations and the amount of funding distributed through the monthly payments, it is imperative to have a reliable automated system, rather than reliance on spreadsheets to perform these calculations. Further, the calculation spreadsheets are not designed to incorporate audit adjustments when changes are identified to student counts and should only be utilized as a means of "checks and balances".

There have been ongoing performance issues with the internal School Finance System in recent years due to changes in legislation. Subsequent to the implementation of new legislation, the inflexibility of the existing system has made it impossible to consistently produce reliable calculations, requiring almost complete reliance on spreadsheets for calculations and manual processing for audit adjustments.

For instance, the change to Full-Day Kindergarten, the inclusion of Reduced Lunch Students in At-Risk and the new ELL Factor, have all created significant challenges to the smooth operation of the School Finance System. The current system requires manual population of At-Risk and ELL counts into the system, making it much more vulnerable to human errors. Additionally, to date, the inclusion of the English Language Learners counts has not been incorporated into the audit true-up calculations in the School Finance System. The new At-Risk Measure will also be a challenge to incorporate into the existing Audit module.

The current system's ability to effectively adapt to legislative changes in the Public School Finance Act is inadequate and requires immediate improvement. An automated system should be able to populate student counts based upon existing data reducing the potential of human error as a result of reliance on numerous spreadsheets to run complex calculations.

Justification:

As noted in the project description and background sections above, the existing system for school finance calculations, distributions and audit adjustments is no longer functional forcing CDE to manage around \$10 billion in school funding manually.

The current system and manual processes relies almost exclusively on institutional knowledge. Existing staff are burdened with heavy workloads and incur significant risk due to manual calculations and formula applications. This also presents a significant risk to the state if existing staff turnover and institutional knowledge is lost.

The state is at an important strategic juncture where upgrading its school finance management system is necessary to support its evolving needs. The new school finance formula begins in FY 2025-2026 and will run concurrently with the existing school funding formula for several years. There is significant concern that the system will not be able to handle the historical funding formula, and will not be able to manage two funding formulas at the same time due to its lack of functionality.

In the alternative analysis, PK evaluated the alternative to maintain the status quo, defined as continuing to use the existing system without significant changes. The risks associated with this alternative are substantial and compounding. The system's reliance on manual processes leads to the potential of errors in data entry and inability to accurately recalculate funding resulting from pupil count audit adjustment. The system is unstable, and not capable of handling expected future changes to the funding formula and student-level data.

Business Process Analysis -

As outlined above, CDE contracted with Public Knowledge® to explore options to modernize the existing School Finance System and develop an alternatives analysis to address these issues

and identify the most appropriate solution. PK's alternatives analysis approach leads to an impartial, defensible process for evaluating options with the most suitable scoring method for distinguishing between the proposed alternatives.

Cost-Benefit Analysis and Project Alternatives (per H.B. 15-1266) -

This section presents a range of potential solutions for CDE to consider. These alternatives were identified based on an in-depth analysis of the current system's limitations and opportunities for improvement. Each alternative represents a distinct approach, ranging from maintaining the current system to implementing more advanced technology solutions. This section evaluates six alternative options in terms of their potential benefits, risks, and alignment with CDE's long-term goals.

Maintain Status Quo

Maintaining the system as it stands presents a straightforward option. The system is already in place, meaning no additional resources are required for implementation, making it convenient from an operational standpoint. CDE would not need to engage in large-scale changes or training efforts and district users and CDE staff can continue their current workflows without adjustment.

However, the risks associated with this alternative are substantial. The system's reliance on manual processes leads to the potential of errors in data entry, inability to accurately recalculate funding resulting from pupil count audit adjustments, and provide system-generated reporting, creating operational inefficiencies that could escalate. The system is unstable, and not capable of handling expected future changes to the funding formula and student-level data. There is also a risk of non-compliance with future regulations as the system struggles to meet modern audit and data protection standards. Financially, while the initial costs are low, the long-term costs associated with inefficiencies, errors, and manual interventions are high. As evidenced by the Full-Day Kindergarten funding model change, any additional formula adjustments are likely to further destabilize the system. Continuing with the status quo will exacerbate these challenges, especially as the system becomes increasingly outdated. Further, the implementation of a new school finance formula pursuant to HB24-1448 will cause even more issues. The system will not be able to manage two funding formulas at the same time due to its lack of functionality.

From a technical alignment perspective, the system is misaligned with Colorado's long-term goals of scalability and automation. It lacks the ability to integrate with other CDE systems and does not support real-time data access or predictive analytics—capabilities that will be necessary for future-proofing Colorado's school finance operations.

Users and stakeholders have voiced concerns about the system's inefficiencies, errors, and overall instability. Minimal compliance with modern regulatory standards, such as audit traceability and data security, increases the risk of legal and financial repercussions. The timeline for this alternative is immediate, as no implementation efforts are required. However, the risks and inefficiencies are long-term and compounding.

In-House New System Development and Replacement

Replacing the current system in-house offers a significant upgrade over the current state. Achievability is relatively high as this alternative allows Colorado to develop a new school finance system that **would** meet the state's needs. The CDE's internal IT team would be responsible for developing, implementing, and maintaining the new system. This alternative would not involve any reliance on external vendors.

This alternative would meet CDE's needs from a functionality standpoint assuming robust requirements development and gathering occurs, but it falls short when considering the high risks outlined below. PK's evaluation of this alternative revealed deficiencies (and corresponding low scores) pertaining to return on investment, risk, and compliance. In terms of resources, in-house staff would need to manage the entire process, from design to implementation, requiring significant time and technical expertise. It is expected that CDE would need to hire additional technical resources to manage the system build, implementation and maintenance. The human resource demand would likely strain CDE, and the costs would likely be similar to those of using a third-party vendor.

Due to the resource requirements from CDE and its high overall risk, the acceptability of this alternative among stakeholders is moderate to low. While some may appreciate not relying on a third-party vendor, others may feel that developing a new system in-house is too onerous of a task. A third-party vendor solution is thus more likely to adhere to said standards. The timeline for implementing this upgrade could range from 12 to 24 months, with further updates likely needed down the line.

The risks associated with this alternative are high because of the following considerations:

- The need for developing and gathering robust requirements internally (with potential resource constraints affecting the ability for this to be done effectively).
- The potential of additional burden on existing CDE resources.
- Hiring, managing, and retaining the technical staff to develop a new system in-house is a significant undertaking, which CDE is reluctant to pursue.
- Testing a new system developed in-house would require significant dedication of time and resources.
- This alternative would not leverage learnings from other clients, prior implementations, and industry best practices, thus making it sub-optimal.
- The ability to make improvements to a new system is constrained by the capability of CDE in-house resources to do so.

Outsourced Existing System Modernization

Partnering with a third-party vendor to modernize the existing system offers a substantial step toward addressing the system's limitations while retaining the basic structure of the current platform. Achievability is high, as modernization efforts would be led by experienced vendors who have successfully implemented similar upgrades in other states. CDE's internal team would oversee the project but rely on the vendor's expertise for most of the technical work.

Technically, this alternative aligns well with current and future needs. Vendors offer modern tools for automation, real-time reporting, and data management that Colorado's system lacks. By modernizing the system through a third party, CDE can introduce these capabilities without fully replacing the existing infrastructure. However, this alternative falls short when compared to other alternatives because of its reliance on the existing system.

The resource demands for this option are moderate, as the vendor would handle much of the technical workload, reducing stress on CDE's internal team. However, project management resources would be required to ensure the modernization project meets Colorado's specific needs. The cost of modernization is high upfront, but operational costs would be moderate, assuming vendor support for maintenance and updates.

This alternative enjoys moderate stakeholder support, as it addresses the demand for modern features like real-time data access and user-friendly interfaces. Compliance with audit and data security standards would improve significantly, as vendors are often equipped to provide regulatory adherence. The timeline for implementing this solution is 6 to 12 months, allowing for phased integration and testing. Most stakeholders may feel reluctant to rely on the existing system as a "base" for a newly modernized system.

Risks are moderate to high based on the potential of vendor non-performance and the technical constraints of modernizing an obsolete system. One major risk lies in vendor dependency, which could lead to long-term costs for system maintenance and updates. Financially, the start-up costs associated with vendor services and customization could be high, particularly if the scope of modernization requires significant changes to the legacy system. Operational risks are reduced by the vendor's ability to automate key processes, but there remains the possibility of integration challenges between the existing infrastructure and modern features. The dependence on an unreliable existing legacy system as a "base" renders the risk of this alternative higher than that of the alternatives which involve replacing the existing system entirely.

Outsourced New MOTS Technology Solution

A new Modified Off-the-Shelf (MOTS) solution offers a significant upgrade or replacement of underlying technology with an efficient path to modernization. MOTS solutions are pre-built and customizable, making them highly feasible for Colorado's needs. This alternative is achievable within a shorter timeline compared to a custom-built solution, as MOTS systems have proven functionalities that can be configured to meet state-specific requirements.

Technically, MOTS systems align well with current and future requirements. They provide real-time data access, automation, and advanced reporting capabilities that Colorado's system lacks. They also offer scalability for growth, making them a long-term solution. However, customization limitations would need to be reviewed in the context of the "must-have" requirements defined by CDE.

Resource requirements by CDE are moderate, largely focused on vendor management, contract compliance, robust testing, and change management. Internal IT teams would collaborate with the vendor to oversee the configuration of the system and integrate it with existing infrastructure, but the bulk of the technical work would be performed by the vendor. The

start-up costs for a MOTS solution are medium to high, depending on the level of customization required. Operational costs are moderate, as most of the maintenance and updates would be handled by the vendor and spread across multiple clients.

Stakeholder support for this alternative is high, as it offers a rapid path to modernization while providing a user-friendly experience for districts and state staff. This alternative also offers more cost-effective, low-risk, and early benefits through the “out-of-the-box” functionalities available with MOTS solutions. Compliance with audit, security, and regulatory standards is typically built into MOTS systems, making this alternative highly attractive from a compliance perspective. The timeline for implementation ranges from 6 to 9 months, with significant functionality available shortly after rollout.

The risks associated with this option are lower than with custom-built systems but still present, particularly in terms of customization limits and vendor dependency. Financial risks are moderate, as the initial cost of licensing and vendor services could be substantial, but operational costs would remain stable over time with ongoing vendor support. Assuming robust due-diligence and testing, technical risks are minimal, as MOTS solutions have been deployed in similar environments. Compared to other alternatives, the vendor bears most of the risk in terms of “brand reputation”, thus minimizing the risk for CDE.

Outsourced Custom-Built Solution

Leveraging a third-party to develop a custom-built solution provides the most flexibility, allowing Colorado to design a system that fully aligns with its unique needs, without having to hire and manage in-house technical resources. However, this alternative requires sufficient controls to oversee the development, testing, implementation, project management, contract management and change management, to mitigate risks. The complexity of building a system from scratch presents high risks in terms of scope creep, cost overruns, and potential delays.

In terms of technical alignment, this option offers complete flexibility to meet all CDE’s current and future requirements, but it comes at a high cost. Custom-built systems can be designed to integrate with any other CDE platforms, accommodate any funding formula, and support advanced analytics. However, building this level of functionality from scratch is resource-intensive and time-consuming.

Resource demands are high, requiring internal IT teams and external contractors for design, development, and ongoing maintenance. The timeline for developing a custom-built solution is long, ranging from 12 to 24 months or more, depending on the complexity of the system.

Stakeholder support for this option is mixed. While some may appreciate the full control and customization it offers, others may be concerned about the high costs and long timeline. Compliance with regulatory and security standards can be built into the system, but this requires significant effort during development. These considerations make this a runner-up alternative, contingent upon the inputs received during the procurement process.

Technical risks are substantial, as developing and maintaining a custom-built solution places the burden on CDE to manage ongoing updates and system improvements. Financial risks are also high, with significant start-up costs for development, testing, and implementation, as well

as high long-term maintenance expenses. Operational risks are tied to the complexity of managing the system, which could strain internal resources. These technical risks render a high risk of failure for this alternative.

Hybrid Modular Solution

The Hybrid Modular Solution presents a potential middle ground by blending in-house upgrades with MOTS components. However, this approach carries higher risks, particularly in terms of technical complexity and integration challenges. The "mix and match" nature of combining different modules may lead to compatibility issues, increased management overhead, and inefficiencies. Additionally, the need for greater organizational change management required to coordinate multiple platforms could lead to higher long-term operational costs. While phased implementation might reduce initial disruption, the overall financial return would be suboptimal compared to a fully integrated MOTS solution, which offers a streamlined, cohesive system with proven benefits.

The technical alignment and interoperability of a hybrid system needs to be strong and planned in advance to cater to a modular approach, in order for the system to evolve and scale with future needs. Financially, this option is the second-most expensive of the six outlined, with a low return on investment (ROI) because of the risks outlined below. While some stakeholders may be intrigued by a hybrid modular approach, many are likely to be reticent to support it because of the sub-optimal financial returns. Compliance with regulatory standards would theoretically be enhanced through the MOTS components, which offer built-in security and audit features. However, trying to integrate stand-alone modules likely will result in regulatory non-compliance. The timeline for full implementation would vary based on the modules added; however, most major functionality could be deployed within 12 to 18 months, with future phases extending beyond that.

The moderate to high risks, causing low ROI for this alternative, are the main reasons why it falls short. The risks are outlined below:

- At best, there might be a loss of synergy between each of the modules. At worst, different modules may not integrate, or pose repeated long-term errors, defeating the purpose of the modular solution.
- Additional procurement and management oversight would be required with this alternative, potentially necessitating the creation and awarding of up to four separate RFPs as well as the management of four module development projects.
- There is a high risk of failure. This is the result of relying on two layers of work: A solution for each of the modules being implemented, and the subsequent integration between all of them. CDE would likely either manage the integration in-house or hire a third-party system integrator to do so, either of which would result in significant effort and strain.

Cost Breakdown

The following is a cost analysis for each alternative. Each alternative is assessed based on initial implementation costs and ongoing operational expenses, offering details of the financial investment required over time. This analysis is designed to help CDE balance cost, risk, and

long-term benefits when selecting the optimal solution for modernization. The table below provides a summary followed by more detailed cost information for each alternative.

Alternative Cost Summary

Alternative	Initial Cost	Ongoing Cost (Per Year)
Maintain Status Quo	Minimal to none	\$1M - \$2M
In-House System Development and Replacement	\$5M-\$9M	\$2M - \$3M
Existing System Modernization (by vendor/third-party)	\$4M - \$8M	\$2M - \$3.5M
New MOTS Technology Solution (provided by vendor/third-party)	\$5M - \$9M	\$1.5M - \$3M
Custom-Built Solution (by vendor/third-party)	\$8M - \$12M	\$3M - \$5M
Hybrid Modular Solution (in-house and vendor/third-party)	\$6M - \$10M	\$2M - \$3.5M

Maintain Status Quo

Initial Costs: Minimal to none

- The system will continue to operate as-is, with minor updates or patches as needed.

Ongoing Costs: \$1M - \$2M per year

- Ongoing maintenance of the System.
- Increased costs over the next 3-4 years associated with manual data entry, corrections, and inefficiencies (including staff hours), with a higher complexity of funding formula calculations envisaged in the future.

- A significantly higher risk of compliance penalties due to errors or missed audit requirements.
- Increasing labor costs due to lack of automation and inefficiencies.

In-House System Development and Replacement

Initial Costs: \$5M-\$9M (over 3-4 years)

- Costs include the labor costs of the in-house project management and development teams, and building the infrastructure, features, and user interface of the new system in-house.
- Oversight costs (independent third-party oversight or oversight by CDE staff).
- Significant in-house testing effort for the new system.

Ongoing Costs: \$2M - \$3M per year

- Continuing costs for maintaining the new system.
- Sporadic technical development resources required for ongoing platform updates, enhancements and changes.
- Ongoing operational resources to continue with manual data corrections, and operational inefficiencies, using the existing system, given the long lead time for new in-house system development.
- Technical maintenance staff required for steady-state system support post go-live.

Outsourced Existing System Modernization

Initial Costs: \$4M - \$8M (over 2-3 years)

- Partnering with a third-party vendor to modernize the existing system, including integrating automation and reporting features.
- Costs related to vendor contracts, system redesign, and integration with existing infrastructure.
- Vendor setup and system testing.

Ongoing Costs: \$2M - \$3.5M per year

- Licensing fees for third-party tools.
- Ongoing vendor support and maintenance.
- System updates and additional services.

Outsourced MOTS Technology Solution

Initial Costs: \$5M - \$9M (over 2-3 years)

- Procurement, configuration, and customization of the MOTS solution to meet CDE's specific needs.
- System integration, data migration, and testing.
- User training and support for the transition.

Ongoing Costs: \$1.5M - \$3M per year

- Licensing fees for the MOTS platform.
- Ongoing vendor support and system upgrades.
- Periodic customization updates based on changing regulations or needs.

Outsourced Custom-Built Solution

Initial Costs: \$8M - \$12M (over 3-4 years)

- Full system development from the ground up, including custom code, system design, and architecture.
- Longer timelines for design, testing, and implementation.
- Project management costs and developer resources.
- Higher risks of delays and cost overruns.

Ongoing Costs: \$3M - \$5M per year

- Significant ongoing maintenance and support costs.
- Continuous updates to align with future requirements, changing regulations, or system enhancements.
- High dependency on external vendors or development teams for long-term support.

Hybrid Modular Solution

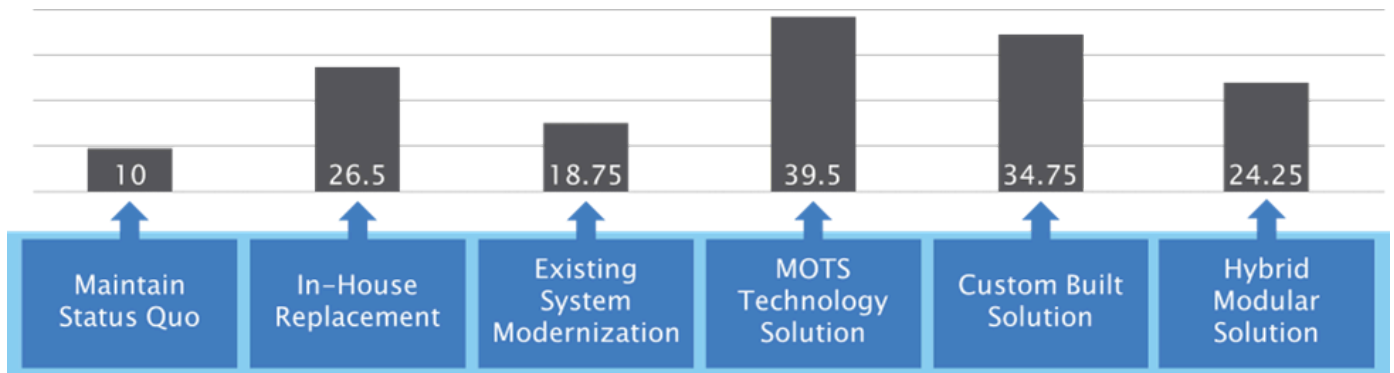
Initial Costs: \$6M - \$10M (over 2-3 years)

- Combination of MOTS solutions with custom-built modules to address specific CDE needs.
- Phased implementation costs to reduce immediate financial burden.
- Integration, testing, and system deployment costs.
- Initial procurement and development of custom modules.

Ongoing Costs: \$2M - \$3.5M per year

- Ongoing licensing fees for MOTS components.
- Maintenance and updates for custom modules.
- Continued vendor support for MOTS and custom features.

To assess the viability of each alternative for CDE's future state system, PK performed a scoring framework approach that allows for a clear comparison of each alternative's strengths and weaknesses in relation to CDE's strategic goals. Scores were averaged to provide a more accurate analysis and consider any outliers. The following figure below provides a scoring summary:



After a detailed evaluation of all alternatives, procurement of a MOTS Technology Solution is the recommended approach for Colorado’s future school finance management system. This solution offers a balance of pre-built functionality, flexibility, reliance on a tested solution, and scalability while addressing the state’s immediate needs for automation, data accuracy, and compliance.

The alternative analysis prepared by PK included some potential requirements for the future state system and provides a high-level implementation timeline to guide procurement and development processes. As outlined above, CDE intends to issue a Request for Information followed by a Request for Proposals. The RFI will allow CDE to gauge what off-the-shelf solutions are available on the market. The next step after evaluating RFI responses will be to initiate the RFP process, focusing on selecting a vendor that meets the technical and operational needs of CDE.

CDE will continue to work with PK on defining clear system requirements and engaging stakeholders to finalize the specifications needed for the MOTS solution. This will be incorporated into the RFP.

Market Research

In addition to the evaluation process, PK conducted extensive market research to identify viable alternatives for Colorado including identifying relevant technical capabilities of systems, analyzing market specific vendors, understanding best practices, and evaluating the competitive landscape. This research enables CDE to be well-informed about available solutions that other states have implemented for similar school finance management needs and emerging technologies and solutions.

Success Criteria and Improved Performance Outcomes -

The measures of success for this project will be to significantly reduce the possibility of human error assuring accurate calculations and distributions of the \$9.7 Billion in school finance funding and subsequent audit adjustments. Additionally, an automated future state system will allow CDE to promptly respond to legislative changes and eliminate the almost exclusively reliance on institutional knowledge of existing staff members.

Assumptions for Calculations -

Exact vendor expenses are dependent on a future RFP. This request is based upon the maximum estimated cost for the recommended MOTS solution, spread over two fiscal years. Out-years would be adjusted as appropriate to reflect actual need if the cost was lower.

Consequences if not Funded -

The risks associated with not pursuing a new school finance system are substantial and compounding. Without a replacement system, CDE will continue to operate on a non-operational system, forcing CDE to manage over \$9 billion in school funding manually. The current reliance on manual processes is inefficient and leads to the potential of errors in data entry and inability to accurately recalculate funding resulting from pupil count audit adjustment. The system is unstable, and not capable of handling future changes to the current funding formula and student-level data. Further, the transition to the new school finance formula begins in FY 2025-2026 and will run concurrently with the existing school funding formula for several years. There is significant concern that the current system will not be able to handle the historical funding formula, and the current system will not be able to manage two funding formulas at the same time due to its lack of functionality.

Implementation Plan Change Management -

As outlined above, PK has indicated it will be crucial to establish a detailed timeline that includes major milestones such as data migration, system testing, and user training to ensure a smooth and efficient transition. A phased implementation approach is recommended to mitigate risks and allow time for adjustments as the new system is integrated. Additionally, PK has recommended CDE should plan for regular updates and ongoing system support to maximize the long-term benefits of the MOTS solution and ensure continued alignment with its strategic goals. These phases will be incorporated into the RFP and resulting contract. By establishing comprehensive requirements, conducting vendor demonstrations, implementing SLAs, adopting a phased approach, and balancing functionality with costs, CDE can ensure that the vendor's MOTS solution aligns with their objectives.

Alignment with OIT Best Practices and Standards -

CDE is exempt from OIT oversight and has an internal IT (IMS) team. The School Finance team will have a member of the CDE IMS team on the RFP selection committee and during contract review. The CDE IMS team must also approve all IT related purchases and will ensure alignment with CDE best practices and the agency technology planning.

Procurement -

CDE has a skilled Contracts and Procurement Team and experienced contract managers. Additionally, the School Finance team will have a member of the CDE IMS team on the RFP selection committee and during contract review.

Disaster Recovery and Business Continuity -

Disaster recovery and business continuity planning will be incorporated into the RFP and resulting contract consistent with CDE IMS requirements and industry standards.

Accessibility Compliance (Must be addressed) -

IT Accessibility requirements pursuant to HB21-1110, SB23-244, and OIT rules for accessibility standards for IT systems will be incorporated into the RFP and resulting contract.

Impact to IT Common Policy (For Statewide OIT Projects Only) -

Not applicable.

Additional Information

Additional Request Information

Please indicate if three-year roll forward spending authority is required.	Yes
Is this a continuation of a project appropriated in a prior year?	No
If this is a continuation project, what is the State Controller Project Number?	N/A
If this request affects another organization, please provide a comfort letter.	N/A
Please attach a letter from OIT indicating review and approval of this project	Attached

Estimated Project Time Table

Steps to be completed	Start Date	Completion Date
Procurement (including RFI and RFP)	November 2024	November 2025
System Design and Customization	November 2025	August 2026
Data Migration and Integration	May 2026	November 2026
Testing and Quality Assurance	July 2026	December 2026
User Training and Rollout	December 2026	June 2027
Go-Live	June 2027	



COLORADO
Governor's Office of
Information Technology

01/01/2025

Mark Ferrandino
Director
Office of State Planning and Budgeting
111 State Capitol
Denver, Colorado 80203

RE: FY 2025-26 Dept. of Education School Finance System Modernization Request

Dear Director Ferrandino:

Pursuant to OSPB instructions, this letter is to confirm that the Office of Information Technology (OIT) has been informed of the development and submission of this proposed FY 2025-26 request for the Department of Education to modernize the School Finance System, replacing it with a modified off the shelf system (MOTS) as an outside study recommended.

Sincerely,

Glenn Iverson

11/19/2024

Glenn Iverson, Interim OIT Budget Director

Davyd Smith - OIT

11/19/2024

Davyd Smith, OIT IT Director for CDE





FY 2024-25 - HCPF OeHI Rural Connectivity Extension: IT-CC-S-01

Request Year	Total Funds	CCF-IT	Cash Funds	Reappropriated Funds	Federal Funds
FY 2024-25	\$0	\$0	\$0	\$0	\$0
FY 2025-26	\$0	\$0	\$0	\$0	\$0
FY 2026-27	\$0	\$0	\$0	\$0	\$0

Categories of IT Capital Projects

Category	Rationale	Applicable
System Replacement	Costs escalating, failing technology, software or vendor support ended, or new technology, e.g., DRIVES, CHATS	No
System Enhancement Regulatory Compliance	(new functionality, improved process or functionality, new demand from citizens, regulatory compliance, e.g, CBMS	Yes
Tangible Savings Process Improvement	conscious effort to reduce or avoid costs, improve efficiency, e.g., LEAN, back office automation	No
Citizen Demand	“The Ways Things Are” (transformative nature of technology, meet the citizens where they are, e.g., pay online, mobile access)	No

Request Summary:

The Department of Health Care Policy and Financing (HCPF), in partnership with the Office of eHealth Innovation (OeHI), and the Office of the Lieutenant Governor requests a \$0 total funds extension to the current spending authority for the OeHI Rural Connectivity project, which is a system enhancement and regulatory compliance project. The Department requests a three-year extension to its spending authority to continue implementation efforts and issue grants to rural providers to use towards modernizing their information technology (IT) infrastructure to enable affordable solutions and innovations in patient care. The current appropriations for the project are set to expire on 6/30/2025 and the OeHI will be unable to fully spend down the appropriation before it reverts. This is primarily due to leveraging more federal funding than anticipated in the initial request. OeHI received a 90% federal enhanced match from CMS versus the anticipated 50% on several projects.

As of June 30, 2024, the project has received appropriations of \$17,476,007, including \$6,570,804 CCF and has either spent or encumbered \$8,568,264. The Department projects that with the three-year extension on the funding, it will be able to fully spend the appropriation while making critical investments in the rural provider community. Failure to approve this extension would result in loss of program adoption and faith in the State's willingness to support the Rural Community. The State's Rural Analytics project started with a smaller population and each year it has grown with the help of the stakeholders and the OeHI team's in-person engagement with rural providers. By fully utilizing the Capital Construction Funding, we can continue to show rural Colorado that the State is invested in their sustainability and health outcomes.

Project Description:

OeHI is focused on leveraging health information exchange, data sharing, technology, innovation, and policy to reduce health care inefficiencies, improve health outcomes, and lower costs over time. Colorado's Health IT Roadmap establishes a strategy to harmonize and advance data sharing and health information exchange across Colorado.

OeHI established the Rural Connectivity Program to address gaps in the HIE network by providing affordable and effective technical connectivity options for the rural critical access hospitals and certified rural health clinics. For the baseline survey assessment and metrics, OeHI established that all 60 independent rural clinics, and 49 of 84 total rural safety-net facilities (critical access hospitals and certified rural health centers), were not connected to the HIE network and lacked technical work force and access to analytics due to affordability of these solutions, tight budgets, and workforce capacity. Based on provider readiness and degree of impact, OeHI prioritized the rural safety-net facilities to be part of the Rural Connectivity Program.

In FY 2019-20, OeHI and the Governor-appointed eHealth Commission developed a COVID-19 Surveillance Dashboard in partnership with Colorado Community Managed Care Network (CCMCN) and the Colorado Rural Health Center (CRHC) for pandemic response efforts and to begin providing affordable health information technology solutions to rural providers. This effort served as the first step in providing critical health information exchange and analytic connections to rural safety-net facilities in the state. In October 2020, OeHI continued this implementation, expanding COVID-19 Surveillance Dashboard access to 60 of the 84 rural safety-net facilities, a 40% increase from the prior year. Through this process, OeHI assessed provider readiness to connect to the HIE network and other technical infrastructure, such as broadband and telemedicine, and prioritized rural safety-net providers for the next stages of connectivity. This foundational work establishes a data infrastructure with the rural safety net facilities and provides essential background data to establish effective strategies for implementation. This infrastructure allows for expansion of the care coordination and quality reporting models, ultimately creating affordable and accessible health information exchange for rural providers.

In FY 2020-21, legislators approved the Capital IT appropriation of \$6.5 million to OeHI for the Rural Connectivity Program. In FY 2021-22, the remaining \$11.0 million in project funding was approved. This appropriation focused on connecting rural critical access hospitals and certified rural health clinics to the HIE network and analytic infrastructure.

Since the initial project funding was approved, OeHI has been able to leverage 90% federal funding for all work versus the estimated 50% because the work focused entirely on the Medicaid population. Remaining funding will continue to be used as a one-time investment to onboard all rural independent providers (primary care, behavioral health, and social programs) to the state's health information exchange network and toward solving shared technology problems, based on demonstrated need. The initial infusion of technical support and expertise to upgrade, construct a comprehensive workflow, and provide necessary training to providers and staff will continue to build the foundation for ongoing digital transformation, reducing the need for technical staff over time.

For the baseline survey assessment and metrics in 2020, OeHI established that all 60 independent rural clinics, and 49 of 84 total rural safety-net facilities (including critical access hospitals and certified rural health centers), were not connected to the HIE network and lacked technical work force and access to analytics due to affordability of these solutions, tight budgets, and workforce capacity. We are proud to share that all 84 identified critical access hospitals and rural health clinics have been connected to the statewide health information exchange network. Additionally, 25 of the identified independent rural clinics have been connected to the HIE network in this time. This is a notable accomplishment.

Working with community partners, the Community Analytics Platform (CAP) has been developed and made available to the entire rural community. Full implementation was completed by the end of FY2023-24. Through the CAP, rural safety-net providers view real-time COVID-19 testing data, Medicaid attribution data, and admission, discharge, and transfer (ADT) hospital reports based on their patient panels. We are working now to expand these insights statewide and connect disparate data sources (including behavioral health and clinical data) into visualizations that can support other state programs, such as the Hospital Transformation Program. This work also requires technical assistance to reduce the burden on the provider. Long-term, this could include notifications that a certain illness is increasing throughout the patient population, which supports public health practitioners as well.

Failure to approve the request would result in rural communities continuing to fall further behind on overall care management, affordability, accessibility, and economic recovery. These funds allow ALL rural providers an opportunity to partake in state affordability and transformative technology and payment efforts such as the state's prescriber tool, e-consult, and value-based payment models; they are also in alignment with health cabinet goals such as the behavioral health administration efforts to increase tele-behavioral health and the integration of systems and data to support care coordination.

Systems Integration Opportunities -

Working with community partners the Community Analytics Platform (CAP) has been developed and is available to the entire rural community. The CAP builds upon the State's existing HIE infrastructure and HIE Data Vault. The project does not rely on any external funding outside of the Rural Connectivity budget. The Project does utilize the existing partnerships established within the established HIE ecosystem which includes Contexture, Quality Health Network, and Colorado Community Managed Care Network. Through the CAP, rural safety-net providers view real-time COVID-19 testing data, Medicaid attribution data, and admission, discharge, and transfer (ADT) hospital reports based on their patient panels. We are working now to expand

these insights statewide and connect disparate data sources (including behavioral health and clinical data) into visualizations that can support other state programs, such as the Hospital Transformation Program. This work also requires technical assistance to reduce the burden on the provider. Long-term, this could include notifications that a certain illness is increasing throughout the patient population, which supports public health practitioners as well.

Risks and Constraints -

Currently there are no Risks or Constraints to this request. As the CAP was created we worked through all anticipated constraints and risks.

Operating Budget Impact -

Currently, OeHI is not requesting any new FTE or operational funding. This project sets up rural safety net providers for sustainability. This sustainability planning and transition is underway, and future operational support costs may be incorporated in a future budget request.

Background of Problem or Opportunity:

Rural Colorado has the highest health care costs in Colorado and in the nation. Without health IT infrastructure and support to rural providers, the urban-rural divide of health care affordability will continue to grow. Connection to HIEs in Colorado is desired but currently cost-prohibitive for many rural health clinics and hospitals. These costs include connection, data transmission, and analytics costs from the state's HIEs, analytic vendors, and electronic health record (EHR) vendors. These facilities operate on smaller budgets and are unable to connect to the HIE network due to outdated or nonexistent electronic health records, lack of technical workforce to implement the connections, and constrained budgets.

There is a digital divide between those who can afford to pay and access health information and those who cannot afford to do so. Additionally, many rural facilities struggle to recruit and employ skilled technical staff to support health information technology and to access common data and analytics. Without the basic provider infrastructure - which is largely in place on the front range - rural providers simply cannot implement the tools that are core to affordability strategy and innovation, such as patient referral management, eConsults, or implementation of critical capabilities like telehealth. Many providers this program supports are currently utilizing paper records and/or vastly outdated technology, which is burdensome to providers and does not enable them to provide top patient care. While independent rural providers see the need and value for this technology, it is often simply out of their financial reach.

OeHI initially planned for a 50% federal match for onboarding facilities to the HIEs but was able to obtain a 90% federal Medicaid match. While working with the rural facilities to build and implement the CAP, additional burdens and barriers were discovered. These burdens and barriers include resources to perform mandated reporting, Electronic Health Record Systems (EHR) costs and functionality, costs and resources for network security, and unforeseen closing and acquisition of many rural health facilities. Additionally, the transition from current systems has taken longer than anticipated due to understaffing and competing priorities. Despite those operational challenges, OeHI fully expects to be able to exhaust all funding if an extension is granted.

Justification:

OeHI and the eHealth Commission Rural Connectivity Workgroup completed extensive analysis to develop this project including business process analysis, cost-benefit analysis, defining criteria for improved performance metrics, assumptions for calculation, consequences if not funded, implementation plans, change management plans, and alignment with OIT best practice and standards. Details of each are described below.

Business Process Analysis -

Colorado's Health IT Roadmap Initiatives "Affordability and Accessibility of Analytics" and "Affordability and Accessibility of Health Information Technology" were identified through extensive stakeholder input to detail initiative and business analysis in partnership with OIT, HCPF and the eHealth Commission to define the requirements. OeHI is committed to refining business requirements and defining processes throughout the lifecycle of the project.

Cost-Benefit Analysis and Project Alternatives (per H.B. 15-1266) -

OeHI conducted research to determine the value of implemented enhancements and improved coordination of statewide health IT infrastructure prior to submitting this request. Attached is the initial literature research conducted in 2018 titled Appendix C and recent research on state investments of ARRA HITECH ACT funds for HIE and health information technology infrastructure titled Appendix B1. OeHI reviewed, and continues to review, how other states leverage federal funds to invest in state infrastructure. See attached for a summary and analysis of other state investments. Additionally, as OeHI implements projects, each project will have specific metrics and outcomes to track and measure the impact of the investment to the state. Initial planning for financial models is underway.

To satisfy SB17-304, OeHI conducted surveys and research, and convened monthly public eHealth Commission meetings and Roadmap stakeholder meetings to ensure infrastructure meets end-user needs and statutory requirements. Prior requests for information and stakeholder sessions informed this funding request.

Success Criteria and Improved Performance Outcomes -

All projects that receive a federal funding match through CMS require outcome-based measures. These measures will be reviewed and approved by CMS prior to the start date of this project. All projects launched by OeHI have success criteria and performance metrics defined by stakeholders and managed by OeHI and OIT's Portfolio Management Office.

Assumptions for Calculations -

OeHI assumes the currently approved funding would be sufficient to complete the project. OeHI assumes that many of the projects would still qualify for the enhanced Medicaid match, while possibly transitioning to some state-only costs. OeHI assumes that all projects that receive an enhanced Medicaid match would be approved by CMS in an APD beforehand.

This request does not include any new funding to support OeHI's current Rural Connectivity Program, but extends connectivity options to small, independent providers traditionally not eligible for federal funding opportunities. Additionally, the Digital Transformation Grant Fund could be leveraged by any rural providers based on an equitable and competitive process.

OeHI assumes that any funding left over after June 30, 2028, would revert back to the General Fund.

Consequences if not Funded -

Lack of connectivity limits the ability to share key health details across communities, providers, and insurers. Therefore, providers do not have access to their patient's longitudinal health record and cannot avoid duplicative utilization of services because their system is not connected to a centralized exchange. These disparities have been highlighted and emphasized during COVID-19 pandemic emergency response efforts. With the rural health care workforce already inadequate in coverage and number, expanding use of the state's HIE network would bolster the current workforce both individually and collectively.

Additionally, not proceeding is a missed opportunity to leverage federal fund match and delays sustainability for these independent safety-net providers. Without funding, independent rural providers and the patients they serve will continue to be at a disadvantage, in comparison to the urban health systems and providers who have the funding to pay for connectivity. This disadvantage could result in worse health outcomes and higher health care costs for patients such as duplicate tests and procedures.

Implementation Plan

The Implementation Plans for these initiatives were developed by OeHI in collaboration with OIT, managed day-to-day by OeHI/OIT Health IT Portfolio Management Office (PMO), and governed by the eHealth Commission, which serves as the Steering Committee for the Colorado Health IT Roadmap. Through the development of Colorado's Health IT PMO, specific metrics and outcomes are being defined for all funded efforts. As part of this planning effort and ongoing assessment, OeHI conducted research to understand how other states have planned, designed, and implemented statewide health IT leveraging. Appendix B includes literature research from the initial request and Appendix C includes research on investments other states have made on HIE and health information technology to improve care and reduce costs. The following visual depicts OeHI and eHealth Commission's governing structure.

Change Management -

Change Management is a requirement for all OeHI projects. The change management strategy includes training, communication, and testing as applicable. Additional change management and technical assistance for statewide initiatives such as the implementation of electronic clinical quality measurement reporting is necessary to ensure providers adopt the technology in a meaningful way.

Alignment with OIT Best Practices and Standards -

All efforts outlined in this proposal would comply with applicable rules, policies, procedures, and standards issued by OIT, including change management, project lifecycle methodology and governance, technical standards, documentation, and other requirements. This includes all Cyber Security Policies, all IT standards, and partnership with the Governor's Data Advisory Board.

Procurement -

The procurement of this project involves both programmatic (non-technical) efforts and technical projects. OIT is directly involved with OeHI scoping and procurement of solutions through the health IT PMO. Projects are gated through OIT as applicable. OeHI continues to work with OIT in a coordinated and collaborative manner.

Disaster Recovery and Business Continuity -

All implementations would be compliant with all existing state and federal IT architecture, security and business continuity requirements and guidelines, and State cybersecurity policies set forth by the Office of Information Security. Additionally, all OIT Project Gating would be closely followed to ensure adequate risk assessments are conducted and all necessary actions are taken as a result. The Disaster Recovery Plan is a requirement of Gate 4 and the Authorization to Operate would not be granted without the needed documentation and planning.

Accessibility Compliance (Must be addressed) -

The Department, in collaboration with OIT, will ensure compliance with statutory requirements for IT accessibility under HB21-1110 and SB23-244, as well as Section 24-85-103, CRS., which mandates accessibility standards for IT Systems statewide by adhering to the following implementing plan guidelines:

- o Governance, Roles and Responsibilities
- o Evaluation and Remediation
- o Skills and Training
- o Communication and Support Process
- o Procurement and Vendor Management
- o Software Development Lifecycle

Impact to IT Common Policy (For Statewide OIT Projects Only) -

It is not anticipated that this request would impact common policy. Any ongoing appropriations would be directly appropriated to the HCPF or the Governor's Office.

Additional Information

Additional Request Information

Please indicate if three-year roll forward spending authority is required.	Yes
Is this a continuation of a project appropriated in a prior year?	Yes
If this is a continuation project, what is the State Controller Project Number?	2021-024121
If this request affects another organization, please provide a comfort letter.	N/A
Please attach a letter from OIT indicating review and approval of this project	Attached

Appropriation Continuation History

Funding Source	FY 2021-22 Appropriated	FY 2022-23 Appropriated	FY 2023-24 Appropriated	Total Appropriations
Total Funds	\$6,498,000	\$10,978,007	\$0	\$17,476,007
Capital Construction Funds	\$1,081,800	\$5,489,004	\$0	\$6,570,804
Cash Funds	\$0	\$0	\$0	\$0
Reappropriated Funds	\$0	\$0	\$0	\$0
Federal Funds	\$5,416,200	\$5,489,003	\$0	\$10,905,203

Available Funds Continuation History

Funding Overview	FY 2021-22	FY 2022-23	FY 2023-24	Total
Amount Spent	\$341,400	\$3,352,922	\$4,873,942	\$8,568,264
Amount Encumbered	\$0	\$0	\$0	\$0
Total Funds Available	\$6,156,600	\$13,781,685	\$8,907,743	\$8,907,743

Estimated Project Time Table

Steps to be completed	Start Date	Completion Date
Connect all Rural Facilities in the Project to the CAP	7/1/2023	6/30/2028
Enhanced Security Network	7/1/2022	6/30/2028
Identify independent practices ready for connection that need to be included in these Efforts	3/1/2024	6/30/2028
Reduce Burden of Electronic Health Record Systems (EHR) Costs and Functionality	7/1/2022	6/30/2028
Reduce Burden of Mandated Reporting	7/1/2023	6/30/2028



COLORADO

**Governor's Office of
Information Technology**

July 25, 2024

Mark Ferrandino
Director
Office of State Planning and Budgeting
111 State Capitol
Denver, Colorado 80203

RE: FY 2024-25 Office of eHealth Innovation (OeHI) Rural Connectivity project 3 Year
Extension \$0 request

Dear Director Ferrandino:

Pursuant to OSPB instructions, this letter is to confirm that the Office of Information Technology (OIT) has been informed of the development and submission of this proposed FY 2024-25 request for the Office of eHealth Innovation (OeHI), in partnership with the Office of the Lieutenant Governor, and the Department of Health Care Policy and Financing (the Department) requests a \$0 total funds, including \$0 Capital Construction Fund (CCF) extension to the current spending authority for the OeHI Rural Connectivity project, which is a system enhancement and regulatory compliance project. The Department requests a three-year extension on the spending authority to continue implementation efforts and issue grants to rural providers to use towards modernizing their information technology (IT) infrastructure to enable affordability solutions and innovations in patient care with rollforward authority.

OIT has completed an internal review to ensure the project aligns with statewide IT goals and determined that OIT has the capacity to deliver and meet the requirements of the project.

Please note: OIT and OeHI are in agreement that a security review will be completed as part of the project itself, when applicable. Also, any OIT specific work should be reappropriated to OIT through the payments of OIT line, where applicable.

Sincerely,

Rus Pascual, OIT Budget Director


Jim Nethercott, OIT IT Director for HCPF



CC-IT: CAPITAL CONSTRUCTION INFORMATION TECHNOLOGY SUPPLEMENTAL REQUEST FOR FY 2024-25

	Department Labor and Employment	Signature Department Approval: Amanda Neal 5-Dec-24	
	Project Title DVR Case Management System	Signature OIT Approval: <i>Glenn Iverson</i>	Date 12/6/24
	Project Year(s): FY 2023-24 and FY 2024-25	Signature OSP Approval:	Date
	Department Priority Number		
	Five-Year Roadmap?	Name and e-mail address of preparer:	

Revision? Yes No	Total Project Costs	Total Prior Year Appropriations	Request Year (FY 2024-25) Supplemental Request	Year 2 Request	Year 3 Request	Year 4 Request	Year 5 Request
A. Contract Professional Services							
(1)	OIT Contracted Program Manager	\$ 1,192,870	\$ 646,709	\$ 546,161	\$ -	\$ -	\$ -
(2)	Quality Assurance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(3)	Independent Verification and Validation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(4)	Training	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(5)	Leased Space (Temporary)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(6)	Feasibility Study	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(7a)	Inflation for Professional Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(7b)	Inflation Percentage Applied		0.00%	0.00%	0.00%	0.00%	0.00%
(8)	Other Services/Costs	\$ 1,762,643	\$ 1,424,339	\$ 338,304	\$ -	\$ -	\$ -
(9)	Total Professional Services	\$ 2,955,513	\$ 2,071,048	\$ 884,465	\$ -	\$ -	\$ -
B. Software Acquisition							
(1)	Software COTS Purchase	\$ 700,000	\$ 350,000	\$ 350,000	\$ -	\$ -	\$ -
(2)	Software Built	\$ -	\$ 1,629,052	\$ -	\$ -	\$ -	\$ -
(3a)	Inflation on Software	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(3b)	Inflation Percentage Applied	\$ -	0.00%	0.00%	0.00%	0.00%	0.00%
(4)	Total Software	\$ 700,000	\$ 1,979,052	\$ 350,000	\$ -	\$ -	\$ -
C. Equipment							
(1)	Servers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(2)	PCs, Laptops, Terminals, PDAs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(3)	Printers, Scanners, Peripherals	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(4)	Network Equipment/Cabling	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(5)	Miscellaneous	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(6)	Total Equipment and Miscellaneous	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
D. Project Contingency							
(1)	5% project contingency	\$ 264,228	\$ 202,505	\$ 61,723	\$ -	\$ -	\$ -
(2)	IT ADLE Payment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
E. Total Request							
Total Budget Request [A+B+C+D]		\$ 5,548,793	\$ 4,252,605	\$ 1,296,188	\$ -	\$ -	\$ -
Future IT Capital Replacement Costs		\$ 425,261	\$ 425,261				
F. Source of Funds							
	GF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	CF/RF	\$ 1,272,474	\$ 996,386	\$ 276,088	\$ -	\$ -	\$ -
	FF	\$ 4,701,580	\$ 3,681,480	\$ 1,020,100	\$ -	\$ -	\$ -

check (should = E) \$5,974,054 \$4,677,866 \$1,296,188 \$0 \$0 \$0 \$0



FY 2024-25 - CDLE DVR Case Management : IT-CC-S-01

Request Year	Total Funds	CCF-IT	Cash Funds	Reappropriated Funds	Federal Funds
FY 2024-25	\$1,296,188	\$0	\$0	\$276,088	\$1,020,100
FY 2026-27	\$0	\$0	\$0	\$0	\$0
FY 2027-28	\$0	\$0	\$0	\$0	\$0

Categories of IT Capital Projects

Category	Rationale	Applicable
System Replacement	Costs escalating, failing technology, software or vendor support ended, or new technology, e.g., DRIVES, CHATS	Yes
System Enhancement Regulatory Compliance	(new functionality, improved process or functionality, new demand from citizens, regulatory compliance, e.g, CBMS	No
Tangible Savings Process Improvement	conscious effort to reduce or avoid costs, improve efficiency, e.g., LEAN, back office automation	No
Citizen Demand	“The Ways Things Are” (transformative nature of technology, meet the citizens where they are, e.g., pay online, mobile access)	No

Request Summary:

The Department of Labor and Employment requests supplemental FY 2024-25 budget request for a total of \$1,296,188 with \$276,088 in Reappropriated Funds and \$1,020,100 in Federal Fund spending authority for the continuation of a capital technology project in order to support the implementation of the DVR Case Management Vocational Rehabilitation System, as a replacement for a legacy case management system (AWARE) that is over 10 years old. The Legislature appropriated \$4,677,866 in the FY 2023-2024 Long Bill for this project and CDLE is seeking a supplemental appropriation for the second and final phase in FY 2024-25. The current AWARE system that is used by the Division of Vocational Rehabilitation staff for case management and vendor services is aging and has been substantially the same for more than a decade. Changes that are necessary for the Department to respond to the dynamic

environment in which it operates take longer, costs more, and require direct involvement from the vendor.

This request represents a “System Replacement” category of the IT project. The new system will enable staff to efficiently manage all aspects of vocational rehabilitation service administration and tracking, from initial service and assessment through Individual Plan for Employment (IPE) development and implementation, employment, and post-exit follow-up while meeting all federal and state legal and reporting requirements.

The Department anticipates the requested funds will cover all vendor costs, including product planning; system architecture and design; legacy system data migration; systems integration processes; training and documentation; data interface and development deliverables, and; additional user-facing features and functionality. The outyear costs are approximately the same as the current ongoing costs of the AWARE system and would be covered with existing resources.

A modernized system will also increase access to virtual services and reduce the time to be approved for assistance, allowing Department staff to more attentively serve those in need. Department staff and customers will be able to evaluate service providers more effectively, ensuring the people it serves have access to the providers with more successful outcomes. Self-service portals will streamline vendor registration, reporting, and billing, increasing the quality of our services overall.

Project Description:

The Department is requesting a full replacement of its AWARE legacy case management system used by the Division of Vocational Rehabilitation (DVR) for vocational rehabilitation case management and vendor services. The current system does not have any advantages to address the new digital reality, streamline any processes, or bring real attention to the future of work.

The new system must be able to support approximately 200 concurrent users located in 30 offices statewide to track the life cycle of potentially eligible individuals, applicants, and eligible cases from referral to closure and post-exit data tracking, collecting data for each status, and requiring the completion of Rehabilitation Services Administration mandated reporting elements as the customer’s case progresses under all applicable laws and regulations.

Specifically, the Department requires a case management system that meets the following requirements:

- Full online access for the people DVR serves, vendors, and employers, allowing for better sharing, engagement, collaboration and citizen satisfaction.

- More effective, streamlined, and agile processes allowing staff to do more while responding quicker and more cost effectively to the changing regulatory environment and citizen needs.
- Improved data availability to evaluate and correlate services provided, vendor costs, and average cost per case to positive employment outcomes to drive better outcomes for the people DVR serves.
- New system that is capable of running on any browser and device to enable mobility and better communication with the people DVR serves, vendors, and employers.
- Considerable time savings and flexibility in configuration and the update release process to save staff time while meeting needs faster.
- Consistent with Department goals, extensible, and promotes the Department's vision in the new digital reality with well capitalized vendors who are investing in vocational rehabilitation and other health and human service government solutions for a more promising future for the citizens we serve.

In order for this project to be successful, the Department will require cooperation with the Governor's Office of Information Technology (OIT) to help implement the new software. OIT will provide supportive project management, business requirements analysis, and technical integration services with the State's network where applicable. The vendor will work in conjunction with the Department's Business Technology Group to develop a system with a foundation of human-centered design and provide resources to support technical needs, facilitate data extractions and conversion from the current legacy system, and support post go-live in vendor relationship and management in addition to release management and compliance and governance.

Systems Integration Opportunities

It is anticipated the new system will provide tools for vocational rehabilitation counselors to manage each customer's case, such as to-do reminders, case notes, vendor management, communication, and budgeting, and will also include options for important vendor and client portals. The system would enable document retention and data integration with other existing systems, such as AdobeSign and Box via application programming interface (API) and other methods, and will allow Department staff to make configuration changes to its benefit.

Additionally, the Department's request for proposal (RFP) for a new case management system also requires the new system to interface with the following:

- The state of Colorado's accounting system.
- Directly with databases maintained by the Department and Workforce programs for wage information and unemployment claims.
- Referral/application forms established by other Workforce Innovation and Opportunity Act (WIOA) Programs for the purposes of common intake.

- Optional ability to interface with the Social Security Administration's Ticket to Work program to automatically send and receive reimbursements.
- Ticket Tracker software.
- Allow case note emails to be sent.
- Allow for configuration and establishment of export files for the State Wage Interchange System (SWIS), State Verification and Exchange System (SVES), Colorado Department of Higher Education (CDHE), Colorado Department of Education (CDE), and Colorado Department of Labor and Employment (CDLE), among others.

Risks and Constraints

The Department relies almost exclusively on grant funding for vocational rehabilitation services that includes a 78.7 percent federal match to the state 21.3 percent non-federal contribution. The appropriation of funds from the legislature to allow the Department to finance this enhanced system will also maximize its existing federal grant funds on direct programming for the communities of Colorado. The risks associated with this project revolve around the potential failure of the current aging legacy system. The likelihood of this has increased recently as the technology continues to age out of its useful life.

Operating Budget Impact

The request is for the purchase and installation of a new COTS case management system. After the requested \$5,974,054 in funding has been fully expended, there will be approximately \$600,000 annually for ongoing maintenance and cloud-based hosting, which is comparable to the existing case management system if it were maintained, and can be covered within existing resources.

Background of Problem or Opportunity:

The Colorado Department of Labor and Employment's Division of Vocational Rehabilitation (DVR) strives to promote a thriving employment environment with opportunity for every Coloradan with a disability to live independently and prosper. DVR provides a variety of employment related services to meet the needs of students with disabilities and eligible individuals with disabilities. This includes training and career-preparation programs to assist individuals with disabilities in reaching their employment goals.

DVR uses the current case management system to record the case progression of individuals participating in multiple programs, such as vocational rehabilitation and potentially eligible Students with Disabilities, and supports its Counselors using the system, while using Managed Vendor Services for hosting and updates to meet changing grant requirements. The system adheres to federal and state policies and procedures that change frequently, and handles nearly all federal and state grant reporting requirements and modifications, which is a needed requirement.

The case management system is a vendor-managed Software-as-a-Service (SaaS) system architected more than a decade ago and was first implemented in Colorado in 2011. The current system is aging and has been substantially the same since implementation. Changes necessary for DVR to respond to the dynamic environment in which it operates require direct involvement from the vendor and are both costly and slow. DVR's current system does not allow for online collaboration and does not work on mobile devices. While it meets minimum federal grant reporting requirements, it does not support efficient business processes or collaboration between DVR, providers, partners, or people with disabilities receiving services from DVR. DVR needs a current, cloud based platform that is easily configured, maintained, enhanced, and able to respond to the ever-changing WIOA environment.

While DVR's current vendor has led the market for years and was considered a sole source provider in the past, new vendors have entered the market. Newer products have introduced the opportunity for person-centric, flexible, and compliant solutions that streamline processes, take advantage of self-service portals, and measure results for continuous improvement.

Justification:

The Department is required to provide services that benefit people with disabilities. The current case management system has no online collaboration or sharing capabilities for the Department to operate effectively and take advantage of the new digital reality. The Department is eager to explore the technology options for achieving these goals. The Department expects a new case management system will result in significant time savings for staff and will improve business processes by having a system that allows for more streamlined navigation and faster technology. Once implemented, the Department anticipates a modernized case management system could result in significant savings through a reduction in the staff time required to complete critical functions.

A modernized case management system will increase access to virtual services and drive down the time to be approved for assistance, allowing Division staff to more attentively serve those in need and be able to evaluate service providers more effectively and with more successful outcomes. Additionally, self-service portals will streamline vendor registration, reporting, and billing, increasing the quality of its services overall.

Business Process Analysis

The Division continues to become more community-based, responsive, collaborative, and is working to increase successful outcomes resulting in the inclusion of those with disabilities in the new digital reality at higher wages.

Currently, changes necessary for the Department to respond to the dynamic environment in which it operates take longer, cost more and require direct involvement from the vendor. Making it difficult to implement in a reasonable and timely manner given today's software standards and business needs. The current AWARE system has no online collaboration or

sharing, nor does it work on mobile devices used by many for daily interactions. In short, although the current system meets minimum federal grant reporting requirements, its processes are cumbersome and it does not help those partnering with the Department, including the people it serves, service providers, and employers.

The Department’s current vendor has led the market for years and was considered a sole source provider in the past. However, new and well-capitalized competitors with real vocational rehabilitation experience and modern, state-of-the-art systems, are emerging in the market and are now available to help the Department accomplish its mission, while navigating the complicated and ever-changing WIOA and RSA requirements. These new vendors focus on person-centric, flexible, and compliant solutions that streamline processes, take advantage of self-service portals, and measure results for continuous improvement. These solutions are based on vocational rehabilitation knowledge and enable the best person-centered workflows developed to meet the demands of vocational rehabilitation, while being highly configurable and continually enhanced on a regular cadence. These solutions meet the Department's goals of providing exceptional virtual services for its citizens, promoting processes and policies that help employers thrive, ensuring the Department is prepared for the future of work, and is inclusive of those with disabilities.

Cost-Benefit Analysis and Project Alternatives (per H.B. 15-1266)

The Department is faced with the options of continuing with its current vendor managed service that is costly and no longer meeting the needs of the Department and those it serves, or selecting a new vendor to provide a modernized case management system that will allow the Department to successfully and more efficiently meet its mission.

The Department’s contract with the vendor of its current case management system runs through June 30, 2024. License and hosting fees for the current solution are \$498,418 in FY 2022-23, increasing to \$523,339 in FY 2023-24. Additionally, the Department allocates \$150,000 annually for costly custom work that would seem routine and configurable in most systems, but is not possible in the current aging system laden with technical debt that causes the Department to conduct weeks worth of additional testing when software updates are released. Rates for custom work are also exorbitant by current market conditions for software consulting:

Role Classification	Hourly Rates Offsite	Hourly Rates Onsite
Project Manager	\$329	\$478
Senior Technical Specialist	\$266	\$361
Technical Specialist	\$239	\$318

In comparison, consulting services for one alternate provider under National Association of State Procurement Officials (NASPO) listings are \$187 per hour. The five-year cost estimate for renewal of the current aging system is expected to be approximately \$3.3 million without any advantages to address the new digital reality, streamline any process, or bring real attention to the future of work.

The likely estimate of a five-year contract for a new solution will range in the area of \$600,000 to \$650,000 annually for license fees and support depending on the number of licenses, products, and programs that will be enabled. This is similar to the Department’s current total spend for licenses and services. Therefore, ongoing fees are expected to be comparable across the Department’s existing case management system or transitioning to a new modernized system.

The requests includes the utilization of reappropriated funds to minimize the need for additional General Fund and meet the vocational rehabilitation services grant requirements that include a 78.7 percent federal match to the state’s 21.3 percent non-federal contribution, and the Department expects to

Based on the scope of this technology project, the Department and OIT will request additional staff resources, as follows:

Position	FTE	Months	Annual Costs*
OIT: Interface Developer (IT Professional)	1.0	12	\$100,548
OIT: Database Developer (IT Professional)	1.0	18-24	\$100,548
OIT: Technical Business Analyst (Analyst III)	1.0	18-24	\$93,690
OIT: Data Analyst (Analyst III)	1.0	18-24	\$93,690
OIT: Operational Change Manager (IT Professional)	1.0	18-24	\$100,548
OIT: Product Architect (IT Professional)	0.5	18-24	\$57,137
OIT: Project Manager (IT Professional)	1.0	18-24	\$100,548
DVR: Business Analyst (Analyst III)	1.0	18-24	\$93,690
DVR: Operation Change Manager (Administrator IV)	1.0	18-24	\$111,092
DVR: Project Manager (Analyst V)	1.0	18-24	\$133,522
Total	9.5	N/A	\$985,013

**Costs include fully loaded Personal Services with benefits and operating costs for FY 2023-24. FY 2024-25 will be reduced due to one-time operating costs required for new FTE.*

The Department expects a new case management system will result in significant time savings for its staff by improving business processes with a system that allows for more streamlined navigation and faster technology. The Department anticipates a modernized case management could result in a savings of as much as \$2 million annually in staff time. This is a real impact

that will be put back into vocational rehabilitation programs to provide better contact, engagement, and service for more citizens who need it. It is expected that redirecting staff effort away from inefficiencies within the current case management system will lead to increased successful employment outcomes, higher earnings for these individuals, and more people with disabilities being included in the workforce.

Success Criteria and Improved Performance Outcomes

Success of this project will be determined based on the following criteria:

- Ability to properly track and report key performance metrics as mandated by the federal requirements.
- Ability to interface with outside software.
- Ability to update in order to be compatible with emerging technologies.
- Ability to track eligible cases from referral to closure and post-exit.
- Ability to collect data on the status of each case.
- Ability to have person-centric Vendor and Client portals.
- Ability to have document retention and data integration with other existing systems.
- Ability to easily configure to the release of DVR and WIOA changing standards on a regular cadence with product roadmap transparency.

Assumptions for Calculations

Through market research and discussions with the Governor’s Office of Information Technology (OIT), the Department has reviewed prospective solutions and the table below outlines estimated costs.

Item	Expense	Description
OIT/IA Project Management	\$1,192,870	Interagency agreement
DVR Project Management	\$676,608	DVR staff to integrate new system
Software COTS Purchase	\$700,000	FY 2023-24 and FY 2024-25
Software Build	\$1,629,052	Design Phases
Other Services/Costs	\$1,086,035	Delivery Testing and Training
Contingency	\$264,228	5%
<i>Future IT Capital Replacement Costs*</i>	<i>\$425,261</i>	<i>N/A</i>
Total	\$5,974,054	N/A

\$600,000 Maintenance & Operations not included in the request, as the Department is able to cover these costs within existing resources.

*This funding request includes the additional 10% to be set aside for future replacement costs.

Consequences if not Funded

If the request is not funded, the Department will not be able to meet its goals of providing exceptional virtual services for its citizens, promoting processes and policies that help employers thrive, ensuring the Department is prepared for the future of work, and those with disabilities are included in that future. Specifically, the Office of the State Controller has indicated it will not approve another sole source contract with the Department's current vendor, as the current contract has been in place for over 10 years without a competitive solicitation. The Department's services to citizens will also suffer and retention will continue to be negatively impacted due to the challenges with the current system. Counselors currently spend significant portions of their time documenting critical case functions within the AWARE system, decreasing the time they have available to work with the people they serve. In addition, the people the Department serves can't apply directly to the system and vendors are unable to access the system for streamlined submission of reports and invoices. Further, AWARE has limited ability to interface with the state's accounting system, complicating the Department's ability to encumber and expend funds for vocational rehabilitation services, while still ensuring mandatory federal reporting is accurate and submitted timely. All of these functions require manual entry and duplication of efforts. Another risk of continuing to use the current AWARE system is the lack of a technology roadmap, making it exceptionally difficult for the Department to anticipate system changes and proactively plan for the future. AWARE is not agile since it operates on old architecture without a plan in place for the system to become more efficient. There is increasing technical debt within this system, making it more difficult and costly to maintain.

Failing to act will result in declining success, mediocre results, and leave the Department exposed to a vendor not committed to the future and unable to respond to the demands of the new world or any emergency. Embracing the future of work with a system developed with the new digital reality in mind is the path to success for the Department and the many citizens it helps to secure employment, prosper, and lead an independent life.

Change Management

The change management and overall implementation strategy as outlined in the Department's RFP for the new case management system will include:

- **Implementation Requirements:** Within two weeks of contract award, the awarded vendor must schedule and set up a series of kickoff meetings with the Department. In addition, implementation of the new system must include: initial system design and configuration, and the creation of maintenance files to support the system; any requirements for workflow mapping; installation of all required hardware and software; building and testing of all required interfaces and data and reporting conversion plan; coordination of the implementation with the Department, and; a plan by which the system will Go-Live no later than the date mutually agreed.

- **Training:** The selected vendor will be responsible for providing ongoing user and technical support, via all appropriate methods, to DVR staff beginning at the time of Go-Live and continuing for the life of the contract. This includes 24/7 emergency support limited to an event such as a complete system failure; standard user and technical support via all appropriate methods during normal business hours; properly trained user and technical support staff in sufficient quantities to support DVR, and; an effective shared support system so that both the selected vendor and the State are using the same or integrated system to eliminate redundant entry and promote efficient resolution per Service Level Agreement (SLA) requirements.
- **Agile Updates:** Agile updates to the State's designee must be provided at a biweekly minimum from the start of the contract through the implementation phase. Project status reports shall include at a minimum: significant work plan activities performed during the reporting period; review of the completed activities and a comparison to the project plan; identification of project risks and document recommendations to mitigate such risks; deliverables completed during the reporting period; identification of milestones reached and a comparison to the project plan; significant work plan activities planned for the next reporting period; deliverables expected to be completed in the next reporting period, and; identification of problems and/or issues and methods to track the status of current problems and/or issues.
- **Testing:** The testing plan must address all forms of testing and at a minimum will include functional testing, user acceptance testing, final acceptance testing, and a process where the vendor selected will obtain the sign-off upon completion of each stage of testing. Testing requirements also state that acceptance testing must occur prior to Go-Live to allow for the State to confirm the system adheres to all contractual requirements. During testing, the system must also perform successfully under all normal operational conditions; all defects must be resolved prior to Go Live; the selected vendor and the State must mutually agree on the definitions of Severity Level 1 and 2 defects within 30 days of contract award; the selected vendor must submit a plan to address and fix all Severity Level 1 and 2 deficiencies within five days of identification, and; the selected vendor must provide a test report to the State's contract representative within 15 business days of completion of each phase of testing.

Alignment with OIT Best Practices and Standards

The Department will align with OIT best practices by developing a cloud-based managed services solution that meets OIT long term objectives for more virtual services that engage citizens in the most effective and efficient manner possible. The data provided by the new case management system will also inform the Department on how to meet its mission.

This request also aligns with the Department goal of expanding virtual access to government services anytime and anywhere since its new case management system will have a Client Portal

option and be responsive in design, allowing the people DVR serves to complete applications and view, upload, and download case documents relevant to their case while being extensible for future requirements in a digitally inclusive world.

Procurement

The Department, in partnership with OIT, is working on the planning and procurement components of this request. The procurement process will meet the Colorado Procurement Code requirements for competitive, equitable, and fair purchasing.

The procurement process will utilize a competitive solicitation and contract negotiation in order to ensure completion of the project within a specific timeline, deliverables, and payment milestones to the greatest benefit of the state.

Disaster Recovery and Business Continuity

The Department has developed disaster recovery requirements in its RFP detailing that the new case management system must include backup and recovery procedures that will allow recovery of the system and all data up to the moment of the disaster and successfully resume functioning within four hours of any disaster. These requirements also outline that the final plan must include objectives, what situations are covered under the plan, technical considerations, system failover plans, roles and responsibilities, how and when to notify the State Contract Representative, recovery procedures, and procedures for deactivating the Disaster Recovery Plan. In addition, disaster recovery requirements in the RFP also outline procedures for automatically backing up data, annual testing, and that the proposed system must meet National Institute of Standards and Technology (NIST) standards for disaster recovery and contingency planning and have a current SOCII report available at all times.

The Department has also factored a business continuity plan in its RFP that requires the new system to backup and completely restore key system data files with common backup media readable by readily available hardware. This business continuity plan also specifies that the vendor must maintain a daily data backup schedule reflecting each day's processed information and that the system shall maintain seven years of backups for all historical datasets post migration.

Accessibility Compliance

A new case management system will offer the ability to address and further enhance accessibility compliance requirements that are not present or capable of being implemented in the current legacy system. Specifically, the current system does not allow for online collaboration and does not work on mobile devices. The software vendor will maintain the ability to adhere to OIT statutory obligations regarding accessibility compliance and new requirements as required in HB21-1110 for individuals with disabilities. The Department maintains that a new case management system will allow it to embrace and provide more effective virtual services so more people with disabilities secure employment faster and are included in the new digital reality at higher wages.

Impact to IT Common Policy

This request will not have an impact on the OIT Common Policy funding since the Department manages all aspects of the DVR Case Management system, including vendor management.

Additional Request Information

Please indicate if three-year roll forward spending authority is required.	Yes
Is this a continuation of a project appropriated in a prior year?	Yes
If this is a continuation project, what is the State Controller Project Number?	2024-02123
If this request affects another organization, please provide a comfort letter.	N/A
Please attach a letter from OIT indicating review and approval of this project	Attached

Estimated Project Time Table

Steps to be completed	Start Date	Completion Date
Project Planning with OIT, Selected Vendor and DVR	July 1, 2023	August 15, 2023
Design Phase re Data Conversion, Interfaces, Reports and APIs	August 15, 2023	May 1, 2024
Design Phase re Counselor, Vendor, and Citizen and Portals	November 1, 2023	May 1, 2024
Delivery, Testing and Training	May 1, 2024	November 1, 2024
Training and Go Live	November 1, 2024	January 19, 2024



COLORADO
Governor's Office of
Information Technology

01/01/2025

Mark Ferrandino
Director
Office of State Planning and Budgeting
111 State Capitol
Denver, Colorado 80203

RE: FY 2024-25 Dept. of Labor and Employment Supplemental Capital Request

Dear Director Ferrandino:

Pursuant to OSPB instructions, this letter is to confirm that the Office of Information Technology (OIT) has been informed of the development and submission of this proposed FY 2024-25 request for the Department of Labor and Employment DVR Case Management Request to replace the legacy AWARE Case Management system that is over 10 years old.

OIT has completed an internal review to ensure the project aligns with statewide IT goals and determined that OIT has the capacity to deliver and meet the requirements of the project.

Please note: OIT and the Department of Labor and Employment are in agreement that a security review will be completed as part of the project itself, when applicable. Also, any OIT specific work should be reappropriated to OIT through the payments of OIT line, where applicable.

Sincerely,

A handwritten signature in black ink that reads "Glenn Iverson".

Glenn Iverson

11/19/2024

Glenn Iverson, OIT Interim Budget Director
Benjamin Moeller, OIT IT Director for CDLE



CC-IT: CAPITAL CONSTRUCTION INFORMATION TECHNOLOGY REQUEST FOR FY 2025-26

Department	Colorado Department of Public Safety	Signature Department Approval:	Teresa Anderle 15-Nov-24
Project Title	Colorado Gang Database	Signature OIT Approval:	Carolyn Koehnen, IT Director 15-Nov-24
Project Year(s)	FY 2025-26	Signature OSPB Approval:	Date
Department Priority Number			
Five-Year Roadmap?		Name and e-mail address of preparer:	Jennifer Dye (jennifer.dye@state.co.us)

Revision? Yes x No If yes, last submission date: _____	Total Project Costs	Total Prior Year Appropriations	Request Year (FY 2025-26) Request	Year 2 Request	Year 3 Request	Year 4 Request	Year 5 Request
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A. Contract Professional Services

(1) OIT Contracted Program Manager	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -
(2) Quality Assurance	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -
(3) Independent Verification and Validation	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -
(4) Training	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(5) Leased Space (Temporary)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(6) Feasibility Study	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(7a) Inflation for Professional Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(7b) Inflation Percentage Applied		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(8) Other Services/Costs	\$ 300,000	\$ -	\$ 300,000	\$ -	\$ -	\$ -	\$ -
(9) Total Professional Services	\$ 300,000	\$ -	\$ 300,000	\$ -	\$ -	\$ -	\$ -

B. Software Acquisition

(1) Software COTS Purchase	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -
(2) Software & Web Build	\$ 900,000	\$ -	\$ 900,000	\$ -	\$ -	\$ -	\$ -
(3a) Inflation on Software	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(3b) Inflation Percentage Applied	\$ -	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(4) Total Software	\$ 900,000	\$ -	\$ 900,000	\$ -	\$ -	\$ -	\$ -

C. Equipment

(1) Servers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(2) PCs, Laptops, Terminals, PDAs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(3) Printers, Scanners, Peripherals	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(4) Network Equipment/Develop	\$ 320,000	\$ -	\$ 320,000	\$ -	\$ -	\$ -	\$ -
(5) Miscellaneous	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(6) Total Equipment and Miscellaneous	\$ 320,000	\$ -	\$ 320,000	\$ -	\$ -	\$ -	\$ -

D. Project Contingency

(1) 5% project contingency	\$ 80,000	\$ -	\$ 80,000	\$ -	\$ -	\$ -	\$ -
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E. Total Request

Total Budget Request [A+B+C+D]	\$ 1,600,000	\$ -	\$ 1,600,000	\$ -	\$ -	\$ -	\$ -
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F. Source of Funds

GF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CF/RF (MTCF)	\$ 1,600,000	\$ -	\$ 1,600,000	\$ -	\$ -	\$ -	\$ -
FF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

check (should = E) \$1,600,000 \$0 \$1,600,000 \$0 \$0 \$0 \$0



FY 2025-26 - CDPS Colorado Gangs Database: IT-CC-BA-01

Summary of Request	Total Funds	CCF-IT	Cash Funds	Reappropriated Funds	Federal Funds
FY 2025-26	\$1,600,000	\$0	\$1,600,000	\$0	\$0
FY 2026-27	\$0	\$0	\$0	\$0	\$0
FY 2027-28	\$0	\$0	\$0	\$0	\$0

Categories of IT Capital Projects:

Category	Rationale	Applicable
System Replacement	Costs escalating, failing technology, software or vendor support ended, or new technology, e.g., DRIVES, CHATS	Yes
System Enhancement Regulatory Compliance	(new functionality, improved process or functionality, new demand from citizens, regulatory compliance, e.g, CBMS	No
Tangible Savings Process Improvement	conscious effort to reduce or avoid costs, improve efficiency, e.g., LEAN, back office automation	No
Citizen Demand	“The Ways Things Are” (transformative nature of technology, meet the citizens where they are, e.g., pay online, mobile access)	No

Request Summary:

Colorado Gangs (CoG) is web application that utilizes an Oracle database that contains intelligence information related to gangs and gang members gathered by law enforcement agencies across the state. Pursuant to 24-33.5-412(1)(i) C.R.S., the database is to be maintained, operated and managed by the Colorado Bureau of Investigation (CBI); however, no funding is appropriated to the Department for that purpose. As a result, the database and website designated for law enforcement use are antiquated and present security risks. The estimated cost for the Colorado Gang Database Migration and Website Replacement requirements is approximately \$1.6 million.

CoG is an application that stores gang information such as gang names, gang members, gang contacts and is used by law enforcement as an investigative tool. It allows law enforcement the ability to add and change any information about the gangs, tracking gangs and gang members

that they contact during patrol or other investigative efforts conducted by law enforcement. This information is also query-able in the Colorado Crime Information Center (CCIC) to provide law enforcement with the most accurate information possible.

It is critical to replace the current outdated website due to the scarcity of vendors available to support its operations. Additionally, some website functionality is no longer available, such as the ability to remove users, purge old data, etc. The new system will increase public and officer safety across the state, and promote information sharing to help improve community safety.

Project Description:

CoG is a computer database maintained by the CBI that compiles gang intelligence gathered by law enforcement agencies across the state. Inclusion in the database is based upon recommendations from the CoG Advisory Board and facilitated by the CBI. CoG is for use by authorized crime investigators and prosecutors statewide. It is a dynamic and evolving information system designed to maximize the value of the work performed by local law enforcement to help make their communities safer.

CoG allows Colorado agencies to work together in a collaborative nature to prevent gang proliferation, crime, to protect life and property, and to support mutual efforts to reduce gang activity in Colorado through this information sharing site. Complete information on subjects of investigation, and on crimes and related details is maintained by the local agencies with primary enforcement jurisdiction.

The current CoG system will be retired and replaced with a new website and database for law enforcement to access. No new functionality, cost savings, or input from end users will be expected. The only external stakeholder will be the vendor.

Operating Budget Impact -

Computer Projects of Illinois, Inc. (CPI), a law enforcement software solutions provider, will be supporting this project through its development and testing, and will host the web application and database on their site. This secure method will result in no hardware costs associated with this project. That said, there will be an ongoing annual maintenance and support costs of \$120,000 beginning one year following installation through CPI. The CBI will address any ongoing operating expense needs for maintenance and support costs in the regular budget process.

The current CoG is antiquated and beyond end of life capabilities. The system does not currently meet the needs of the statewide law enforcement community, and limits the ability of agencies and organizations to maximize collaborative efforts and effectively share information about gang activity in their cities and towns.

Additionally, the CBI is required by law to house/host the CoG. Therefore, it is imperative to replace this system to ensure the Bureau's state and federal statutory compliance.

Background of Problem or Opportunity:

In 1989, faced with the proliferation of gang activity on a statewide level, the Colorado Legislature recognized the need for a criminal intelligence system to combat gang crime. Beginning in 1999, the cooperative effort of the several state, county and local law enforcement agencies resulted in the design and implementation of Colorado Gang (CoG) as a statewide gang intelligence system available to participating law enforcement personnel. In 2004, Ciber, Inc. was the vendor procured to implement the Colorado Gangs (CoG) database project.

Prior to the launch of the system, operating parameters/guardrails were established to help minimize any potential abuse of the system. It was stated that CoG records entered in the system by the User Agency shall be reviewed and validated by the User Agency for continuing compliance with system submission criteria within a 5-year retention period. Any information not validated within that period must be purged from the system. However, at this time, auto-purge does not work and puts the CBI in violation of federal regulation 28 CFR Part 23.20(h).

Because CoG is outdated and presents a security risk in its current state, some law enforcement agencies have built their own gang database which significantly decreases the collaborative nature and intent of CoG.

With on-going efforts in place to reduce crime rates across the state, ensuring the CoG is a viable tool being utilized by the public safety community would be a significant step in helping to improve public and officer safety throughout Colorado cities and towns.

Justification:

The CBI is required by statute to maintain the CoG database pursuant to 24-33.5-415.3 C.R.S. This has been an unfunded mandate; therefore, funding is needed to perform the significant overhaul of the system and ongoing maintenance required to ensure compliance. Additionally, due to security risks with the application in its beyond end of life capabilities, OIT will not support this application or allow its continued operation.

CoG allows Colorado agencies to work together in a collaborative nature to prevent gang proliferation, crime, to protect life and property, and to support mutual efforts to reduce gang activity in Colorado through this information sharing site. Because the system is being accessed by Colorado law enforcement, it must have the technological capabilities to be an effective tool.

Because this is an existing system and no additional functionality is being added, no business analysis is needed; we are simply replacing what we currently have. From an IT perspective, there will be numerous improvements that will be incorporated into the new system. This new application will also fix security issues that exist today with the current website and application.

Assumptions for Calculations -

CPI has provided pricing to redevelop the CoG/Hotfile system at \$1.6M for the entire project. First, the CoG database will be migrated and services residing in Colorado's existing SaaS architecture at the CPI data center will be rewritten for an estimated cost of \$300K. Then, the COG web application will be redeveloped and redeployed using the new data services broker model for all database intel into a new Webapps virtual machine residing in Colorado's existing SaaS architecture at the CPI data center for an estimated cost of \$900K.

In addition, CPI will provide services to include, design, requirements gathering, ongoing meetings and documentation, user manual development, admin training, PM, unit testing, SIT testing, and post-deployment issue resolution at a cost of \$400K.

If funding for the overhaul of the CoG system is not approved, OIT will shut down the current application due to the nature of its potential security risks. This, in turn, will lead to non-compliance of CBI with statutory requirements.

Implementation Plan

Project implementation will involve coordination with the Governor's Office of Information Technology (OIT) as a technology governance partner and in accordance with OIT standards, policies, and best practices, as well as the policies of the Colorado Information Security Office.

The vendor will implement the plan in separate steps. They will rewrite the database on their database system and then redevelop and redeploy the CoG web application.

This will be an OIT managed project and subject to their project management processes to include security requirements, DR, change management, testing, accessibility, and other project parameters which will align with OIT best practices.

The CBI will develop a plan to navigate through the creation and implementation of this new system. Elements such as migration of information, training for law enforcement, testing of the system, and user accessibility will all serve as components of the Scope of Work that is currently being developed for this project.

It should be emphasized that due to the sensitivity of the information in CoG, additional steps would need to be taken to provide safeguards within the system, and through comprehensive training, to ensure guardrails are in place to prevent abuse of the system.

Additional Request for Information

Please indicate if three-year roll forward spending authority is required. (Yes, if the project runs over 1 year.)	Yes
Is this a continuation of a project appropriated in a prior year?	No

If this is a continuation project, what is the State Controller Project Number?	N/A
If this request affects another organization, please provide a comfort letter.	N/A
Please attach a letter from OIT indicating review and approval of this project	Attached

Estimated Project Time Table

Steps to be completed	Start Date	Completion Date
Project kickoff	July 2025	August 2025
Migrate and rewrite database	August 2025	Sept 2025
Redevelop and Redeploy Web Application	Sept 2025	April 2026
Project IV&V	April 2026	May 2026
End User Installation, Testing and Training	May 2026	June 2026



COLORADO
Governor's Office of
Information Technology

January 1, 2025

Mark Ferrandino
Director
Office of State Planning and Budgeting
111 State Capitol
Denver, Colorado 80203

RE: FY 2025-26 Dept. of Public Safety IT Capital CC Colorado Gangs System Project

Dear Director Ferrandino:

Pursuant to OSPB instructions, this letter is to confirm that the Office of Information Technology (OIT) has been informed of the development and submission of this proposed FY 2025-26 request for the Department of Public Safety requests \$1.6M in IT capital to overhaul the Colorado Gangs System. Colorado Gangs (CoG) is a web application that utilizes an Oracle database that contains intelligence information related to gangs and gang members that has been gathered by law enforcement agencies across the state. Pursuant to 24-33.5-412(1)(i) C.R.S., the database is to be maintained, operated and managed by the Colorado Bureau of Investigation (CBI); however, no funding is appropriated to the Department for that purpose. As a result, the database and website are antiquated, and the contained intelligence data is not secure to unauthorized users. The estimated cost for the Colorado Gang Database Migration and Website Replacement requirements would be approximately \$1.6M.

OIT has completed an internal review to ensure the project aligns with statewide IT goals and determined that OIT has the capacity to deliver and meet the requirements of the project.

Please note: OIT and CDPS are in agreement that a security review will be completed as part of the project itself, when applicable. Also, any OIT specific work should be reappropriated to OIT through the payments of OIT line, where applicable.

Sincerely,

Rus Pascual, OIT Budget Director Glenn Iverson - Interim
Carolyn Koehnen, Public Safety IT Director

Glenn Iverson
Carolyn Koehnen

