

Rep. Edward Vigil, Chair  
Rep. Randy Fischer  
Rep. Libby Szabo

Sen. Gail Schwartz, Vice-Chair  
Sen. Randy Baumgardner  
Sen. Angela Giron



**CAPITAL DEVELOPMENT COMMITTEE**  
State Capitol Building, Room 029  
Denver, Colorado 80203-1784  
(303) 866-3521



September 24, 2013

Representative Max Tyler  
Chair, Joint Technology Committee  
200 East Colfax Avenue  
Denver, Colorado 80203

Dear Representative Tyler:

House Bill 13-1079, which established the Joint Technology Committee (JTC), directs the JTC to submit a written report on the JTC's findings and recommendations about capital budget items related to information technology to the Capital Development Committee (CDC). Specifically, the bill authorizes the JTC to make recommendations concerning state agency capital budget requests for information technology for the next fiscal year that have been approved by the Office of Information Technology or the Office of State Planning and Budgeting. Such recommendations may include the basis for approval, findings or comments on one or more budget requests, and a suggested prioritization of such budget requests.

The CDC received the FY 2014-15 capital budget submission from the Governor's Office of State Planning and Budgeting on September 3, 2013. The submission included three information technology project requests, including: (1) Electronic Health Record and Pharmacy System Replacement, Department of Human Services; (2) eLicense Implementation, Department of Agriculture; and (3) Workers' Compensation Mainframe Migration and Modernization Project, Department of Labor and Employment. The CDC will hear a presentation about each of these projects at its annual hearings in December. The CDC welcomes the input of the JTC regarding these requests, particularly if there are areas of concern or questions about the proposed projects. The CDC respectfully requests that the JTC submit any feedback about the projects prior to the beginning of the CDC's annual hearings on Monday, December 2. If no response is submitted by the JTC, the CDC will proceed with its normal project review.

A copy of the three information technology project requests is appended. If you have any questions or concerns please call Kori Donaldson, Legislative Council Staff, at 303-866-4976.

Sincerely,

A handwritten signature in cursive script that reads "Edward Vigil".

Representative Ed Vigil  
Chair, Capital Development Committee

Representative Tyler, Chair  
September 24, 2013  
Page 2

c: Capital Development Committee Members  
Joint Technology Committee Members  
Jessika Shipley, Joint Technology Committee Staff  
Matt Kiszka, Joint Technology Committee Staff  
Kori Donaldson, Capital Development Committee Staff  
CDC File

**CC-IT: CAPITAL CONSTRUCTION INFORMATION TECHNOLOGY REQUEST FOR FY 2014-15**

Agency or Institution: <b>Agriculture</b>	Signature:	Department or Institution Approval:
Project Title: <b>eLicense Implementation</b>	Signature:	Date: <b>2/20/13</b>
Project Year(s): <b>FY 2014 - 15</b>	Signature:	Date: _____
Agency or Institution Priority Number: <b>1</b>	Signature:	Date: <b>5/30/13</b>
Name and e-mail address of preparer: <b>Jeff Staller Jeff.Staller@state.co.us</b>		

Revision? Yes No	Total Project Costs	Total Prior Year Appropriations	Current Request FY 2014-15	Year 2 Request	Year 3 Request	Year 4 Request	Year 5 Request
<b>A. Land Acquisition</b>							
(1) Land/Building Acquisition	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>B. Contract Professional Services</b>							
(1) Consultants/Contractors	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(2) Quality Assurance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(3) Independent Verification and Validation (IV&V)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(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	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(9) Total Professional Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>C. Associated Building Construction</b>							
(1) (a) New (GSF):	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
New \$ /GSF							
(b) Renovate GSF:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(2) Renovate \$ /GSF							
(3) Site Work/Landscaping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(4) Other (Specify)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(5a) Inflation for Construction	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(5b) Inflation Percentage Applied		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(6) Total Construction Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>D. Software Acquisition</b>							
(1) Software COTS	\$ 700,000	\$ -	\$ 700,000	\$ -	\$ -	\$ -	\$ -
(2) Software Built	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(4a) Inflation on Software	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(4b) Inflation Percentage Applied		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(5) Total Software	\$ 700,000	\$ -	\$ 700,000	\$ -	\$ -	\$ -	\$ -
<b>E. Equipment</b>							
(1) Servers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(2) PCs, Laptops, Terminals, PDAs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(3) Printers, Scanners, Peripherals	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(4) Network Equipment/Cabling	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(5) Other (Specify)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(6) Miscellaneous	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(7) Total Equipment and Miscellaneous Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>F. Total Project Costs</b>	<b>\$ 700,000</b>	<b>\$ -</b>	<b>\$ 700,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>G. Project Contingency</b>							
(1) 5% for New	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(2) 10% for Renovation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(3) Total Contingency	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>H. Total Budget Request [F+G(3)]</b>	<b>\$ 700,000</b>	<b>\$ -</b>	<b>\$ 700,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>I. Source of Funds</b>							
CCF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CF	\$ 700,000	\$ -	\$ 700,000	\$ -	\$ -	\$ -	\$ -
RF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
FF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



the Department thousands of dollars annually in paper and postage costs, not to mention staff time for review and processing.

**Project Description:**

The eLicense program is currently being deployed by DORA. Other agencies moving to this solution include the Division of Real Estate and Education. The system is endorsed by OIT and SIPA and is already built and ready for use. The Department is undergoing a requirements phase to determine how to configure the system for Department specific programs such as pesticide registration, nursery and seed, scales, eggs, meat, certified organics, and chemigation to name a few.

The Department will fund the full cost of the system rather than assess an additional transaction fee to customers for use of the system. Cash fund balances of the various programs are sufficient to cover the expenditure; therefore, the Department will not pass the expense on to the agricultural industry that has, essentially, already paid for this solution. Fee increases will not be necessary to support this solution as the cost savings in printing and postage will help offset the annual cost of the system, estimated at approximately \$15,000.

Implementation of the system is scheduled for late spring or summer of 2014. The Colorado Agricultural Commission has already promulgated rule changes to move some license/permit renewal dates to accommodate the change. The rule changes were cost neutral to the agricultural industry and there were no changes in fee structure.

In addition to processing licenses and permits, the system will allow for real-time processing, tracking, and reporting of enforcement actions. Inspectors in the field will have access to the online database of license holders, eliminating the manual process of reviewing high risk permit holders and developing an inspection schedule. The system can be configured to develop the schedule, providing more time for inspectors to be in the field rather than in the office.

**Consequences if not Funded:**

The Department will continue with manual operations. Paper applications and renewals will be sent via mail, completed by the customer and returned to the program for manual processing. The current process is inefficient and wasteful, costing the Department approximately \$40,000 in printing, supplies, and postage alone.

**Operating Budget Impact:**

This solution is cost neutral. Elimination of paper, printing, and postage will save the Department an estimated \$40,000, which will be used to cover the cost of annual license agreements for use of the system.

**Assumptions for Calculations:**

The Department is working with the vendor to complete the requirements phase of the project and until this phase is complete a total cost is unknown. However, an early estimate for configuration and deployment is approximately \$700,000, which may change slightly pending the outcome of the requirements phase. The Department will coordinate with OSPB and CDC staff once the final figure has been determined.

Initial operating savings is estimated at \$40,000. The number of applications and renewals has trended upwards of the past few years from the baseline \$30,000 established in 2010.

ADDITIONAL REQUEST INFORMATION	
Date of project's most recent program plan:	N/A
Request 6-month encumbrance waiver?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
New construction or modification?	<input checked="" type="checkbox"/> New <input type="checkbox"/> Renovation <input type="checkbox"/> Expansion <input type="checkbox"/> Capital Renewal
Total Estimated Square Footage	ASF GSF
Is this a continuation of a project appropriated in a prior year?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If this is a continuation project, what is the State Controller Project Number?	

ESTIMATED PROJECT TIME TABLE		
Steps to be completed	Start Date	Completion Date
Requirements Phase	Spring 2013	Summer 2013
Configuration	Winter 2013	Spring 2014
Deployment (go-live)	Spring 2014	Summer 2014

CASH FUND PROJECTIONS			
Cash Fund name and number:		22L, Agricultural Management Fund	
Statutory reference to Cash Fund:		35-1-106.9	
Describe how revenue accrues to the fund:		Interest from Unclaimed Property	
Describe any changes in revenue collections that will be necessary to fund this project:		None.	
FY 2012-13 Actual Ending Fund Balance	FY 2013-14 Projected Ending Fund Balance	FY 2014-15 Projected Ending Fund Balance with Project Approval	FY 2015-16 Projected Ending Fund Balance with Project Approval
\$2,272,934	\$2,200,000	\$2,100,000	\$2,300,000

CASH FUND PROJECTIONS			
Cash Fund name and number:		16R. Inspection and Consumer Services	
Statutory reference to Cash Fund:		35-1-106.5	
Describe how revenue accrues to the fund:		Fees	
Describe any changes in revenue collections that will be necessary to fund this project:		None.	
FY 2012-13 Actual Ending Fund Balance	FY 2013-14 Projected Ending Fund Balance	FY 2014-15 Projected Ending Fund Balance with Project Approval	FY 2015-16 Projected Ending Fund Balance with Project Approval
\$3,043,193	\$2,050,000	\$1,900,000	\$1,700,000

CASH FUND PROJECTIONS	
Cash Fund name and number:	23S, Plant Health, Pest Control, and Environmental

		<b>Protection</b>	
Statutory reference to Cash Fund:		35-1-106.3	
Describe how revenue accrues to the fund:		Fees	
Describe any changes in revenue collections that will be necessary to fund this project:		None.	
<b>FY 2012-13 Actual Ending Fund Balance</b>	<b>FY 2013-14 Projected Ending Fund Balance</b>	<b>FY 2014-15 Projected Ending Fund Balance with Project Approval</b>	<b>FY 2015-16 Projected Ending Fund Balance with Project Approval</b>
\$3,793,907	\$3,950,00	\$3,750,000	\$3,600,000



State of Colorado  
Governor's Office of Information Technology  
Kristin D. Russell, Secretary of Technology and Chief Information Officer



**TO:** Jeff Stalter  
Colorado Department of Agriculture  
Director, Budget & Business Operations

**FROM:** Douglas N. Beck, IT Director (OIT), Colorado Department of Agriculture

**DATE:** July 13, 2013

**SUBJECT:** CAVU/Irondata eLicense system. This system is in place at DORA with Real Estate and Education to follow.

Jeff,

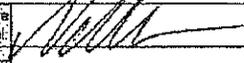
OIT has reviewed and provided approval of the request to move all Colorado Department of Agriculture licensing activity to the CAVU System in use at the Department of Regulatory Affairs (DORA), with the understanding that some technical issues may require further investigation by OIT, and the outcome of those investigations may cause a revision to the calculations and an increase in the requested funds. These investigations, if necessary, will be completed within 30 days of receiving the final "Scope" of the project, and any changes resulting from those investigations will be forwarded immediately to the Office of State Planning and Budget (OSPB).

Thanks,

Douglas N. Beck  
Information Technology Director  
Governor's Office of Information Technology.



**CC-IT: CAPITAL CONSTRUCTION INFORMATION TECHNOLOGY REQUEST FOR FY 2014-15**

Agency or Institution:	Dept of Human Services, Office of Behavioral Health, MHI Division	Department or Institution:	Signature: 	Date:	8/28/13			
Project Title:	Mental Health Institutes' Electronic Health Record and Pharmacy System Replacement	Signature:	CCHE Approval:	Date:				
Project Year(s):	FY 2015 - FY 2016	Signature:	OIT Approval:	Date:				
Agency or Institution Priority Number:	2	Signature:	OSP Approval:	Date:	8/30/13			
Name and e-mail address of preparer:		David Poulin, david.poulin@stata.co.us						
Revision? Yes No		Total Project Costs	Total Prior Year Appropriations	Current Request FY 2014-15	Year 2 Request	Year 3 Request	Year 4 Request	Year 5 Request
<b>A: Land Acquisition</b>								
(1) Land/Building Acquisition	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>B: Contract Professional Services</b>								
(1) Consultants/Contractors (P.M. & P.M.A.)	\$ 832,000	\$ -	\$ 416,000	\$ 416,000	\$ -	\$ -	\$ -	\$ -
(2) Quality Assurance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(3) Independent Verification and Validation (IV&V)	\$ 624,000	\$ -	\$ 312,000	\$ 312,000	\$ -	\$ -	\$ -	\$ -
(4) Training	\$ 72,000	\$ -	\$ 57,600	\$ 14,400	\$ -	\$ -	\$ -	\$ -
(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%	0.00%
(8) Other Services/Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(9) Total Professional Services	\$ 1,528,000	\$ -	\$ 785,600	\$ 742,400	\$ -	\$ -	\$ -	\$ -
<b>C: Associated Building Construction</b>								
(1) (a) New (GSF):	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
New \$ /GSF								
(b) Renovate GSF: 954,452	\$ 1,287,994	\$ -	\$ 1,287,994	\$ -	\$ -	\$ -	\$ -	\$ -
(2) Renovate \$ /GSF								
(3) Site Work/Landscaping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(4) Other (Specify)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(5a) Inflation for Construction	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(5b) Inflation Percentage Applied		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(6) Total Construction Costs	\$ 1,287,994	\$ -	\$ 1,287,994	\$ -	\$ -	\$ -	\$ -	\$ -
<b>D: Software Acquisition</b>								
(1) Software COTS	\$ 11,110,772	\$ -	\$ 7,254,298	\$ 3,846,478	\$ -	\$ -	\$ -	\$ -
(2) Software Built	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(4a) Inflation on Software	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(4b) Inflation Percentage Applied		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(5) Total Software	\$ 11,110,772	\$ -	\$ 7,254,298	\$ 3,846,478	\$ -	\$ -	\$ -	\$ -
<b>E: Equipment</b>								
(1) Servers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(2) PCs, Laptops, Terminals, PDAs	\$ 80,458	\$ -	\$ 40,228	\$ 40,228	\$ -	\$ -	\$ -	\$ -
(3) Printers, Scanners, Peripherals	\$ 4,926	\$ -	\$ 2,463	\$ 2,463	\$ -	\$ -	\$ -	\$ -
(4) Network Equipment/Cabling	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(5) Other	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(6) Miscellaneous	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(7) Total Equipment and Miscellaneous Costs	\$ 85,382	\$ -	\$ 42,691	\$ 42,691	\$ -	\$ -	\$ -	\$ -
(8) Total Project Costs	\$ 14,012,148	\$ -	\$ 9,380,581	\$ 4,831,567	\$ -	\$ -	\$ -	\$ -
<b>G: Project Contingency</b>								
(1) 5% for New	\$ 700,607	\$ -	\$ 469,029	\$ 231,578	\$ -	\$ -	\$ -	\$ -
(2) 10% for Renovation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(3) Total Contingency	\$ 700,607	\$ -	\$ 469,029	\$ 231,578	\$ -	\$ -	\$ -	\$ -
(4) Total Budget Request [F+G(3)]	\$ 14,712,755	\$ -	\$ 9,849,610	\$ 4,863,145	\$ -	\$ -	\$ -	\$ -
<b>I: Source of Funds</b>								
DCF	\$ 14,712,755	\$ -	\$ 9,849,610	\$ 4,863,145	\$ -	\$ -	\$ -	\$ -
CF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
RF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
FF	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



DEPARTMENT OF  
HUMAN SERVICES

John W. Hickenlooper  
Governor

FY 2014-15 Capital Construction IT Request  
September 1, 2013

Reggie Bicha  
Executive Director

  
Signature

8/28/13  
Date

Department of CCHE Capital Construction Priority: 02  
Mental Health Institutes' - Electronic Health Record and Pharmacy System Replacement

Summary of Capital Construction Request	Total Funds	CCF	Cash Funds	Federal Funds
FY 2014-15	\$9,849,610	\$9,849,610	\$0	\$0
FY 2015-16	\$4,863,145	\$4,863,145	\$0	\$0
FY 2016-17	\$0	\$0	\$0	\$0

**Request Summary:**

The Colorado Department of Human Services (CDHS), Office of Behavioral Health (OBH), requests \$9,849,610 Capital Construction Fund in FY 2014-15. The request is to replace the current legacy health information management systems (Clinical, Lab, Pharmacy and Dietary) used by the Mental Health Institutes (operated by the Office of Behavioral Health (OBH), and located at Pueblo and Fort Logan, with a comprehensive, fully-integrated Electronic Health Record (EHR) system that meets Federal regulatory and reimbursement standards. In addition to the initial software purchase, installation and training costs, the request also includes costs for required improvements to the network infrastructure, additional hardware, and continuing costs for vendor support and software licenses.

**Background and Justification:**

Resulting from a May 2011 audit, CDHS accepted the Office of the State Auditor's recommendation that the Institutes pursue the implementation of an EHR and replace the legacy pharmacy system to address problems identified in medication prescribing and monitoring, as well as improve clinical decision-making, reduce medical errors, and increase efficiencies. The rate of medication errors at both Mental Health Institutes (8.2 error events per 100 episodes of care at Fort Logan, and 5.6 at Pueblo, averaging the last 12 months) is typically more than twice that reported by other psychiatric facilities to the National Research Institute. An EHR system and new pharmacy system would eliminate transcription errors, which are the leading cause of medication errors. Other hospitals that have implemented EHR systems have significant reductions in medication errors. For example, the University of Texas, Harris County Psychiatric Center eliminated nursing transcription errors and reduced all medication errors by 89 percent within three months after implementing an EHR.

Additionally, a fully-integrated EHR will automatically tie patient treatments to patient outcomes (e.g., specific medications and therapies resulted in specific improvements in each patient's condition), and will directly assist clinical efforts to address the patients' mental illnesses and aggression that drive assaults, the need for seclusion and restraint, and that lengthen hospitalization. CDHS's C-Stat performance measures that will be positively impacted by a modern EHR include: Seclusion Hours per 1,000 Patient Hours; Restraint Hours per 1,000 Patient Hours; Staff Injuries Related to Seclusion and Restraint; Staff and Patient

## Injuries Requiring Medical Intervention Due to Assault; and the Lengths of Stay of Currently Enrolled and Discharged Restoration and Competency Exam Patients.

Without an EHR, the Institutes will continue to struggle in monitoring the quality, quantity, and effectiveness of patient treatment, and will be out of compliance with State Audit recommendations. Improvements in medication practices will be less attainable without a permanent, reliable solution to medication errors and clinical-coordination challenges without implementation of a modern, fully-integrated EHR to monitor and manage the clinical operations of the Institutes.

In addition, as most of the State's community mental health centers and community providers implement EHRs, the Institutes will be unable to share vital patient information about patients that often move from the community, to the Institutes, and back to the community. Thus, the ability to provide adequate continuity of care is greatly compromised. EHRs bring a patient's total health information together in one place and ensure that information is always current and relevant, providing clinicians with past medication trials and treatment, including adverse drug reactions. While an EHR can never take the place of clinical judgment and experience, it does actively provide options and explanations that improve the clinician's efficiency and compliance with accepted practice guidelines. Electronic health record systems reduce the amount of time clinicians spend locating and documenting patient care and solve the problem of illegible handwritten notes and physician orders.

### **Project Description:**

CDHS, in cooperation with the Governor's Office of Information Technology (OIT), is requesting funds to replace the existing electronic health information and billing systems for its two State-operated, acute-care, inpatient psychiatric hospitals at Fort Logan and Pueblo with a comprehensive and integrated EHR, inclusive of Lab, Pharmacy, and Dietary systems. This project would replace a number of separate, loosely integrated systems, including some constructed in Microsoft Access, and result in the implementation of a modern, comprehensive, fully-automated, EHR that is fully integrated with all necessary clinical, operations and financial modules and systems and is compliant with meaningful-use requirements. The two psychiatric hospitals (451 beds at Pueblo and 94 beds at Fort Logan) currently utilize a web-based dietary system (Vision's Carex system); legacy pharmacy (OPUS-ISM) and lab (Multidata) systems on local servers; a primary health information system (NetSmart's Avatar) on a local server for Admission/Discharge/Transfer (ADT), diagnostics, non-pharmacy billing, legal commitment records, some scheduling, seclusion and restraint, and medication variances; and multiple Microsoft Access databases for additional data capture and reporting.

This request is to implement a comprehensive solution that includes:

- EHR, including, but not limited to, all modules and functions required to meet the current and pending meaningful-use standards (e.g., physician order entry, robust clinical decision support, assessments, care plans, discharge planning, patient portal, Health Information Exchange (HIE) interface, full integration with lab, pharmacy and dietary components, billing, financial analysis and reporting, regulatory compliance, behavior interventions, diagnostic and medical history and treatments, document storage and retrieval, scheduling, medication reconciliation, clinical notes, electronic Medication Administration Record (eMAR), record-level audit capability, etc.);
- Point of care documentation for active treatment and implementation of an individualized care plan;

- 
- A system for historical records retention (e.g. 10 years) – archive systems that will comply with records management best practice; and
  - A fully-hosted and web-based solution, wherein the EHR and the integrated systems reside securely off-site, without the need for OIT resources or support of application servers.

Increased network speed and wireless access to the EHR are essential. Since the EHR replaces the paper chart, access to medical information must be immediate, continuous and convenient. Therefore the request includes funds to establish a secure wireless network on both campuses. The request also includes electronic tablets to be used by physicians and other clinicians (to allow real-time order entry, chart updating, and medical information access while conducting groups and interacting with patients), as well as bar code scanning and labeling equipment to interface with the pharmacy and EHR system and eliminate medication transcription errors.

Since this proposal is considered a major information technology project, it includes a related Operating request for \$1,456,000 (\$728,000 each fiscal year) to hire a Project Manager, a Project Management Analyst, and an Independent Verification and Validation (IV&V) Consultant. The Project Manager and Project Management Analyst will be trained and experienced in the leadership and management of such projects from commencement to completion. The IV&V Consultant, typically an independent third party, will ensure that the system meets required specifications and that it fulfills its intended purpose.

Also included with the software vendor costs (and in addition to the purchase, install, hosting, and process re-engineering costs) is \$1,213,673 in FY 2014-15, and \$1,436,872 in FY 2015-16 for customization (based upon 20% of the software and wireless systems purchase and installation costs), in addition to the purchase, licensing, training, and all installation costs. While the solution will be commercial off-the-shelf (COTS) software, all EHR products are designed as highly-interfaced modules that are augmented by “soft-coding” development tools, so that developers can make the many detailed modifications and enhancements that are necessary before the system can be fully operational. The request assumes that these modifications will be done by the software vendor, rather than by State FTE or contracted staff, and therefore includes these costs during the first two years in Capital Construction, rather than in Operating.

**Consequences if not Funded:**

The Institutes could continue to operate with the current legacy systems and not meet the recommendations of the State Auditors, with a likely outcome of continued high rates for medication errors and no increase in efficiency, safety or clinical management. Staff would continue to use paper documents to record and reference virtually all patient information about individual patient psychiatric and medical treatment needs. History and treatment decisions would still be determined (and delayed) by having to look through the paper-based medical chart. Doctors’ orders, clinicians’ progress notes, and medication administration records would remain hand written; important medical documents would be photocopied, hand-routed and finally queued for filing into the chart before they could be seen and used; patient charts would remain difficult to locate as clinicians borrow them to write their updates; and analyses of the effectiveness of medications and therapies would require labor-intensive searches to compile the necessary information (a process that currently impedes most efforts of this kind).

As the State’s community mental health centers and providers implement EHRs, and as the Department develops new behavioral health data systems, the Institutes would be unable to share vital electronic, clinical care information. Not funding the request delays the opportunity to improve the safe and effective

delivery of quality health care to patients while in the Institutes, and compromises the continuity of care between the Institutes and the community providers.

**Operating Budget Impact:**

In FY 2014-15, CDHS is requesting Operating funds to hire two FTE: one General Professional V Service Delivery Manager, and one General Professional IV Process Analyst for management and regulatory analyses. The cost for FTEs in FY 2014-15 is \$162,659.

In FY 2015-16, CDHS requests funds to hire three additional FTE (two Technician III staff for customer support and system maintenance, and a second Process Analyst as a General Professional III). The cost for FTEs in FY 2015-16 is \$966,598.

Following project completion, the cost for ongoing system development support will be met either by continued funding through the Operating Request for the \$1,436,872 applied above through the software vendor, or by contracted or hired FTE. The optimal approach will be jointly determined soon by OBH and OIT staff as the Operating Request is finalized.

Other Operating expenses include costs for in-state travel between Fort Logan and Pueblo, and Common Policy costs per FTE. These costs total \$24,122 in FY 2014-15, \$31,675 in FY 2015-16, and \$14,362 in subsequent years.

Following project completion, FY 2016-17 will see the discontinuance of the use of, and costs for, the legacy systems. This savings equals \$377,787 per year.

**Assumptions for Calculations:**

- Cost estimates for the EHR purchase, installation and maintenance are based upon amounts submitted by vendors in response to a published Request For Information (RFI). The estimates represent the midpoint between a well-integrated EHR solution with lowest annual cost (the most effective category of EHR at the lowest long-term cost) and a well-integrated EHR solution with next highest long-term cost. This approach establishes sufficient funding to implement a successful solution based upon the low-end of acceptable products while accounting for the unknown factors that cannot be addressed in an RFI for a large-scale automation project. The vendor features and costs identified through the RFI are included in the supporting attachments.
- Robust and well-integrated health information systems are: a) built around core functions that cannot be modified by purchasers, and b) include development tools that provide for soft-coding modifications and enhancements. The \$1,436,872 annual cost for required vendor enhancement represents 20% of the cost to purchase and install the EHR software and the wireless network. As an ongoing operating expense, this amount would vary from year to year, based upon the solution implemented and the need for complex enhancements.
- Vendor costs for training are based upon figures obtained during the RFI process of \$1,200 per day, and 60 days required across implementation.
- These estimates are based upon the current lease costs through the Governor's Office of Information Technology vendor, Hewlett Packard. The number per unit and location are included in the supporting attachments.
- These estimates are based upon current market rates determined via internet search, and the number required for the Mental Health Institute pharmacies, clinics and treatment units. The number per unit and location are included in the supporting attachments.

- These are based upon the current quotes from the CDHS Division of Facilities Management, and the number required per treatment unit, clinic and pharmacy. The number per unit and location are included in the supporting attachments.
- These estimates were provided by OIT and their wireless vendor and are based upon the square footage and construction of the floors that require wireless connectivity for timely access to the electronic medical information. The costs reflect a 20% increase for construction, wiring and establishing power for the wireless system. The floors and buildings identified for wireless communication are included in the supporting attachments.
- These assume the discontinuance of paying for the projected expenses for the current dietary, lab, pharmacy and primary health information system licenses, vendor support fees, and server costs once the project is fully operational in FY 2016-17.
- The standard 5.0% rate for technology project contingencies is applied.

OIT has reviewed and provided conditional approval of this request, with the understanding that some technical issues require further investigation by OIT, and the outcome of those investigations may cause a revision to the calculations and an increase in the requested funds. These investigations will be completed within 30 days, and any changes resulting from those investigations will be forwarded immediately to the Office of State Planning and Budget (OSPB). Below are the technical concerns identified by OIT that require further investigation. (Note: OIT Leadership has reviewed the details for the wireless cost estimates, has stated that their initial concerns below have been addressed, and that the estimates provided in the request by the vendor MSN for wireless infrastructure, security software, architecture are appropriate. OBH is seeking written confirmation from OIT Leadership in this regard and will forward such to OSPB immediately upon receipt.)

- Regarding wireless estimates, was an air space or wireless footprint assessment conducted by MSN communication to determine the "scale" of the wireless footprint needed to provide wireless data coverage for these facilities. This is a good method for determining coverage concerns however, it does not address supporting wireless infrastructure concerns. This concern is confirmed with the identification of some additional funding for a supplement or contingency for potential hardware that might need to be purchased during the design or implementation phase.
- Critical security, access control, firewall, routing and Wireless LAN Control (WLANC) and or lobby ambassador hardware and software may not have been incorporated into the MSN financial projections.
- Existing wireless security and existing state wireless architectures may not have been incorporated into the wireless financial projections.
- Other supporting desktop software applications and server support systems essential to the use and management of a HIPAA secured wireless network for Electronic Health Information (ePHI) data may not have been included in the financial assessment including personal firewalls and potential virtual and/or remote desktop applications like Citrix or Microsoft Virtual Desktop Service (VDS).

ADDITIONAL REQUEST INFORMATION	
Date of project's most recent program plan:	1/23/2013 for the Scope of Work; 2/22/2013 for the published Request For Information (RFI)
Request 6-month encumbrance waiver?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
New construction or modification?	<input checked="" type="checkbox"/> New <input type="checkbox"/> Renovation <input type="checkbox"/> Expansion <input type="checkbox"/> Capital Renewal
Total Estimated Square Footage	ASF GSF
Is this a continuation of a project appropriated in a prior year?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If this is a continuation project, what is the State Controller Project Number?	NA

ESTIMATED PROJECT TIME TABLE		
Steps to be completed	Start Date	Completion Date
Expand business requirements with stakeholders	9/1/2013	2/28/2014
Issue Request for Proposal	3/1/2014	3/31/2014
Select EHR vendor	4/1/2014	4/30/2014
Interim purchase order / contract negotiation	5/1/2014	7/31/2014
Infrastructure improvements	7/1/2014	9/30/2014
Software implementation, and initial customization and training (by major components)	7/1/2014	12/31/2015
Closing customization and training	1/1/2016	6/30/2016
Maintenance and enhancement (ongoing)	7/1/2016	

**CC-IT: CAPITAL CONSTRUCTION INFORMATION TECHNOLOGY REQUEST FOR FY 2014-15**

Agency or Institution:	Dept of Labor and Employment	Signature Department or Institution Approval:	<i>[Signature]</i>	Date	8-22-13
Project Title:	Workers' Compensation Mainframe Migration and Modernization Project	Signature CCHE Approval:		Date	
Project Year(s):	FY 2014 - FY 2017	Signature OIT Approval:		Date	
Agency or Institution Priority Number:	1	Signature OSPB Approval:	<i>[Signature]</i>	Date	8/20/15
		Name and e-mail address of preparer:	paul.vonriesemann@state.co.us		

Revision? <small>If yes, list submission date</small>	Yes	No	Total Project Costs	Total Prior Year Appropriations	Current Request FY 2014-15	Year 2 Request	Year 3 Request	Year 4 Request	Year 5 Request
<b>A. Land Acquisition</b>									
(1) Land/Building Acquisition			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>B. Contract Professional Services</b>									
(1) Consultants/Contractors			\$ 1,800,000	\$ -	\$ 1,800,000	\$ -	\$ -	\$ -	\$ -
(2) Quality Assurance			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(3) Independent Verification and Validation (IV&V)			\$ 250,000	\$ -	\$ 250,000	\$ -	\$ -	\$ -	\$ -
(4) Training			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(5) Leased Space (Temporary)			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(6) Feasibility Study			\$ 50,000	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ -
(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			\$ 100,000	\$ -	\$ 100,000	\$ -	\$ -	\$ -	\$ -
(9) Total Professional Services			\$ 2,200,000	\$ -	\$ 2,200,000	\$ -	\$ -	\$ -	\$ -
<b>C. Associated Building Construction</b>									
(1) (a) New (GSF):			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
New \$ /GSF									
(b) Renovate GSF:			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(2) Renovate \$ /GSF									
(3) Site Work/Landscaping			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(4) Other (Specify)			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(5a) Inflation for Construction			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(5b) Inflation Percentage Applied				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(6) Total Construction Costs			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>D. Software Acquisition</b>									
(1) Software COTS			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(2) Software Built			\$ 3,300,000	\$ -	\$ 3,300,000	\$ -	\$ -	\$ -	\$ -
(4a) Inflation on Software			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(4b) Inflation Percentage Applied				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(5) Total Software			\$ 3,300,000	\$ -	\$ 3,300,000	\$ -	\$ -	\$ -	\$ -
<b>E. Equipment</b>									
(1) Servers			\$ -	\$ -	\$ 150,000	\$ -	\$ -	\$ -	\$ -
(2) PCs, Laptops, Terminals, PDAs			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(3) Printers, Scanners, Peripherals			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(4) Network Equipment/Cabling			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(5) Other (Specify)			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(6) Miscellaneous			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(7) Total Equipment and Miscellaneous Costs			\$ 150,000	\$ -	\$ 150,000	\$ -	\$ -	\$ -	\$ -
F. Total Project Costs			\$ 5,650,000	\$ -	\$ 5,650,000	\$ -	\$ -	\$ -	\$ -
<b>G. Project Contingency</b>									
(1) 5% for New			\$ 282,500	\$ -	\$ 282,500	\$ -	\$ -	\$ -	\$ -
(2) 10% for Renovation			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(3) Total Contingency			\$ 282,500	\$ -	\$ 282,500	\$ -	\$ -	\$ -	\$ -
H. Total Budget Request [F+G(3)]			\$ 5,932,500	\$ -	\$ 5,932,500	\$ -	\$ -	\$ -	\$ -
<b>I. Source of Funds</b>									
CCF			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CF -Workers Comp Cash Fund #142			\$ 5,932,500	\$ -	\$ 5,932,500	\$ -	\$ -	\$ -	\$ -
RF			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
FF			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

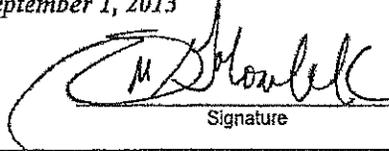


DEPARTMENT OF  
LABOR AND EMPLOYMENT

John W. Hickenlooper  
Governor

FY 2014-15 Capital Construction Request  
September 1, 2013

Ellen Golombek  
Executive Director

  
Signature

8/22/13  
Date

**Department of Labor and Employment Priority: 01  
Workers' Compensation Mainframe Migration and Modernization Project**

Summary of Capital Construction Request	Total Funds	CCF	Cash Funds	Federal Funds
FY 2014-15	\$5,932,500	\$0	\$5,932,500	\$0
FY 2015-16	\$0	\$0	\$0	\$0
FY 2016-17	\$0	\$0	\$0	\$0

**Request Summary:**

The Colorado Department of Labor and Employment (CDLE), specifically the Division of Workers' Compensation (DOWC) in cooperation with the Governor's Office of Information Technology (OIT) is requesting funding to migrate its current claims system off of the current 23-year old mainframe computer system and on to a modernized computer platform. Both agencies believe there are urgent reasons to begin this effort now as the mainframe is approaching its end of life. The Division is requesting \$5,932,500 in cash spending authority and no FTE for this project. Funding will be from fund balance from the Workers' Compensation Cash Fund with no anticipated fee or surcharge rate increase as a result of this request.

**Background and Justification:**

When a Colorado worker is injured in the line of work, the State has a responsibility to regulate benefits provided to the injured worker, pursuant to The Workers' Compensation Act of Colorado. The DOWC Claims Management System has the capability to provide on-demand electronic information for any reported claim within Colorado. This system provides information on individual claims in response to inquiries from insurance adjusters, employers, attorneys, claimants and executive governing staff. A complete chronological history of any work-injury claim submitted to the DOWC is archived within this computer system, including benefit summaries and orders.

The current DOWC mainframe system is 23-years old. As advancements in technology have accelerated within the last 20 years, resources available to maintain the mainframe environmental languages have become more limited. Many mainframe programmers have retired, or pursued other newer technology interests. It also limits the Divisions ability to assist its customers with on-demand or instant access to their information. This has limited the availability of mainframe programmers to support an outdated language like that used in the DOWC system (Adabase/Natural).

---

The DOWC Claims Management System is physically hosted at the General Government Computer Center, (GGCC) at 6th and Kipling in Denver. The Division of Workers' Compensation provides the aggregated funding for any support and maintenance of the existing system as determined by the OIT Common Policy funding allocation process. This includes any hosting application support from the Software Vendor Software (Software AG).

The existing mainframe application contract is effective through July 2014. This agreement was based on DOWC mainframe computer access needs. The agreement was developed by OIT in conjunction with the software vendor and allows for the hosting of various applications on the physical mainframe in order to meet the requirements of the DOWC Claims Management System. DOWC anticipates increased usage costs when the Software AG licensing is renewed in 2014. Other State agencies such as Human Services have completed a modernization releasing them from mainframe dependencies in order to avoid these increased costs

Three Colorado state agencies (Revenue, State Patrol and CDLE) are hosted on the GGCC mainframe and utilize the Software AG Adabase/Natural programming language. Human Services migrated away from the mainframe this year. As other state agencies formulate plans to migrate away from the mainframe, there is a viable risk of CDLE being the sole occupant on the mainframe. If CDLE does become the sole user of the mainframe the consequences would be increased costs for hosting maintenance and support, reduction in support staff (resulting in significant delays in vendor services), and ultimately a reduction of functionality. There would be a direct impact upon the DOWC business practices' which would jeopardize the Division's mission of ensuring enforcement of the Workers' Compensation Act, including timely claims processing, records maintenance, insurance compliance, cost containment and first-level dispute resolution.

**Project Description:**

The implementation and delivery of the next generation DOWC system will require a multi-year effort and must be completed before problems reach critical levels. Each phase of this overall effort will be treated as a separate phase, and each will be fully implemented in the "production" environment before the next modernization phase begins. This approach limits the implementation risk.

**Proof of Concept.** The objective of the Proof of Concept is to enable the vendor to utilize the proprietary software utilities to examine the legacy code and determine the scope of the migration effort. This analysis will provide a high level estimate of the duration involved for the migration. The estimated proof of concept cost is \$50,000 and will precede the migration development effort. It is estimated this effort will take two - three months.

**Phase I Migration.** The first phase of the effort will be of the migration of the current DOWC ADABAS/Natural away from its legacy mainframe platform to a contemporary platform. Apart from a new database and operating environment, the migrated system will be functionally equivalent to the existing system. Migration refers to re-writing the DOWC legacy system to a modern programming language and hardware platform.

The goal of legacy transformation is to retain the value of the legacy assets on the new platform and eliminate the risk and cost threats of the legacy mainframe. The expectation is that DOWC will be on a new technology platform as a functional equivalent system. This new system can then be aligned more closely to current and future business needs through the addition of new functionality. Other state departments exchange data with DOWC, including the newly modernized ACSES program. Several of these department have/or are in the process of their own modernization projects which will benefit

---

DOWC as well as other state agencies that exchange data. The estimated migration cost for this first phase is on the order of \$1.3 million. It is estimated this effort will take six – eight months.

**Phase II Modernization.** The objective of Phase II involves customizing the technological landscape to accommodate the division's strategies, business intelligence, regulatory requirements and skills availability. The complete modernized system will integrate with the user community by delivering a solution that recognizes the importance of the essential business objectives and requirements in its design and implementation. This modernization employs current tools, methods, and technology to increase the effectiveness and efficiency in the DOWC program. DOWC and OIT considered evaluation of the commercial off-the-shelf (COTS) applications, but due to limited programming resources and risk of service interruptions by implementing these applications increases, this solution was abandoned. Modernization involves customizing the rapidly changing technological landscape to accommodate agency strategies, business intelligence, regulatory requirements, and skills availability. Enterprises must control operational costs while remaining competitive. Modernization of the existing Workers' Compensation legacy system platform, will offer the opportunity to do both. Estimated modernization cost for this phase is on the order of \$2 million. It is estimated this effort 12 – 18 months.

**Expected Outcomes.** The migration project will achieve the following benefits:

- DOWC system will be moved off the current mainframe operating system supported by Software AG
- The system will overcome its basic limitations with 23-year old technology
- The future cost of maintaining the DOWC system will be more consistent, and expected rise in current operating costs will have been averted
- The risk to the Workers' Compensation program and its ability to deliver essential services will be reduced

This migration and modernization project consolidates multiple language platforms into a singular state-wide supported language environment. Workers' Compensation is among only a handful of agency business units currently housed on the GGCC/mainframe computer.

Measurements of success indicators will be uninterrupted delivery of services, resolution of existing backlogged programming requests, as well as stakeholder feedback. Further indication of success will be the ability to recruit and retain programming resources pertinent to the new modernized platform as well as elimination of manual work-around(s) and legacy vendor dependency. The Division currently oversees 115,000 claims.

In addition to the systems used by the Department of Labor and Employment (Workers' Compensation and Colorado Automated Tax System), Software AG hosts two other state agencies: Department of Revenue – Drivers Licenses System (DLS) and Department of Human Services' Automated Child Support Enforcement System (ACSES). The Colorado ACSES division has recently experienced success in pursuing a program similar to that proposed here, modernizing their legacy platform with the state awarded vendor Innwake International Inc. DOWC seeks to mitigate this risk by utilizing best practices and lessons learned from the Colorado Department of Human Services by mirroring the applicable variations to the project process, the modernization of the Automated Child Support Enforcement System (ACSES).

---

Innowake International Inc. has a proprietary modernization solution that has been successfully implemented within Colorado Department of Human Service Child Support Division. An active Request for Pricing (RFP) has been created and currently on file at OIT Headquarters. Any state agency wishing to modernize their ADABAS/Natural environment can utilize this state-awarded contract with Innowake.

**Consequences if not Funded:**

DOWC has the option to keep the system the same or to move toward securing a new RFP as well as evaluating a Commercial Off the Shelf (COTS) application. Each of these listed alternatives introduces more risk as well a longer duration to move forward in modernization

One primary identifiable risk inherent to the legacy mainframe environment is that as other modernization efforts are realized, the remaining operational and support costs are no longer shared by the all state agencies using the platform, but are now absorbed directly by the remaining few state agencies using the legacy system. DOWC does not wish to accept the risks associated with increasing operational costs along with increasingly limited resources for maintenance on the legacy platform. Remaining on the platform will undoubtedly create future constraints in the hiring of programmers and developers to support legacy applications

**Operating Budget Impact:**

This request has no impact to the Division's personal services or operating line items and no additional FTE are being requested as part of this request.

**Assumptions for Calculations:**

**Estimated Project Costs:**

- Data Migration and Modernization Vendor - \$3,300,000
- Proof of Concept - \$50,000
- Independent Verification and Validation (IV&V) - \$250,000
- Disaster Recovery (DR) - \$100,000
- Computer Servers - \$150,000
- IT Professional Services - \$1,800,000
- Project Contingency - \$282,500
- Total Project Estimated Cost (excludes on-going maintenance) - \$5,932,500

It is estimated that this project will be no longer than 36 months.

**Vendor Costs: \$3,300,000**

- Migrate DOWC Data Management System – Development  
It is assumed a Migration Vendor will begin work on October 2014.
- Migrate DOWC Date Management System – Complete Implementation  
Development and implementation work associated with migration is completed and a traditional implementation of the migrated system begins.
- Begin DOWC Data Management System Modernization -- Development  
It is assumed a vendor will be hired to modernize the DOWC Data Management System during this fiscal year.

**Proof of Concept:**

This funding allows the vendor to utilize software to examine the code and properly scope the project.

**Independent Verification and Validation (IV&V).**

House Bill 1288 requires independent verification and validation (IV&V) done by a third party organization not involved in the development of the project. The verification is to determine whether user requirements are met along with ensuring that the project is structurally sound and built to required specifications. It is estimated the cost will be \$250,000 and is included in estimated project total.

**Disaster Recovery.**

In line with House Bill 1288, Disaster Recovery is mandated for all major IT projects. It is estimated the cost will be \$100,000.

**Computer Servers.**

The initial estimate from OIT Network Infrastructure was that this system would require from 4-6 virtual servers for the new environment servers to house system at an estimated cost of \$25,000 each for a total cost of \$150,000.

**IT Professional Services**

Project Manager 2,000 hours per year x 3 years @ \$80.00/hr = \$480,000  
Business Analyst 2,000 hours per year x 3 years @ \$65.00/hr = \$390,000  
Architect 2,000 hours per year x 3 years @ \$55.00/hr = \$330,000  
Application Tester 2,000 hours per year x 3 years @ \$45.00h/hr = \$270,000  
Application Conversion Specialists 2,000 hours per year @\$55.00/hr = \$330,000

**Project Contingency:**

The Division is requesting a 5% project contingency for the entire project for unexpected costs that may occur during implementation and is considered standard for IT projects.

**Maintenance Support**

This request does not include funding for on-going maintenance support after full system implementation. At this time, the Division believes it has three options for on-going maintenance: OIT will fully support the system – similar to its current role along with Software AG; Innwake will fully support the system for an unknown cost; or a combination of OIT staff and Innwake. The cost for OIT is part of the annual cost allocation process and we anticipate no change in funding if OIT maintains support. Current maintenance support CDLE receives from OIT is approximately \$600,000 annually and we expect it to be similar with this new system. If Innwake is chosen as the sole vendor for maintenance a request for additional funding will be done at such time, if needed. Therefore, until the Division has a clear picture of maintenance requirements no funding is being requested.

ADDITIONAL REQUEST INFORMATION	
Date of project's most recent program plan:	
Request 6-month encumbrance waiver?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
New construction or modification?	<input checked="" type="checkbox"/> New <input type="checkbox"/> Renovation <input type="checkbox"/> Expansion <input type="checkbox"/> Capital Renewal
Total Estimated Square Footage N/A	ASF GSF
Is this a continuation of a project appropriated in a prior year?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If this is a continuation project, what is the State Controller Project Number?	

ESTIMATED PROJECT TIME TABLE		
Steps to be completed	Start Date	Completion Date
Begin Developing Business Requirement	March 2014	
Hire Project Manager	May 2014	
Request Proof of Concept from Innowake	July 2014	September 2014
Begin Data Conversion	September 2014	
Begin Phase I Migration	October 2014	April 2015
Test Migration	November 2014	April 2015
Phase I End-User Training	March 2015	April 2015
Begin Phase II Modernization	April 2015	August 2016
Test Phase II Modernization	May 2015	August 2016
Phase II End-User Training	July 2016	August 2016
Full System Acceptance		September 2016

CASH FUND PROJECTIONS (DELETE IF NOT APPLICABLE)	
Cash Fund name and number:	Workers' Compensation Cash Fund / 142
Statutory reference to Cash Fund:	8-44-112(7)(a)
Describe how revenue accrues to the fund:	<i>Workers' Compensation Premium Surcharge</i> —is paid by insurance companies based on the amount of workers' compensation premiums received in the state. The surcharge rate is set by rule annually in May to take effect in July, and is 1.27 percent of premiums. The funds collected are used for workers' compensation cost containment, the Workers' Compensation Division, and the Major Medical Insurance Fund and Subsequent Injury Fund. The director determines how the surcharge is distributed amongst the 4 benefitting areas.
Describe any changes in revenue	No changes to the surcharge rate are anticipated for this project.

collections that will be necessary to fund this project:			
<b>FY 2012-13 Actual Ending Fund Balance</b>	<b>FY 2013-14 Projected Ending Fund Balance</b>	<b>FY 2014-15 Projected Ending Fund Balance with Project Approval</b>	<b>FY 2015-16 Projected Ending Fund Balance with Project Approval</b>
\$26,291,023	\$27,800,000	\$25,800,000	\$22,800,000

# STATE OF COLORADO

## GOVERNOR'S OFFICE OF INFORMATION TECHNOLOGY

601 East 18th Avenue, Suite 250  
Denver, Colorado 80203  
Phone (303) 764-7700  
Fax (303) 764-7725  
www.colorado.gov/oit



John W. Hickenlooper  
Governor

Kristin Russell  
Secretary of Technology and  
State Chief Information Officer

To: Matthew Blackmon  
Budget Director, CDLE

From: Brenda Berlin *Brenda Berlin*  
CFO, OIT

Date: August 29, 2013

Re: Capital Construction Budget Request

OIT has reviewed the Capital Construction Budget Request document regarding a project to migrate and modernize the CDLE Workers' Compensation ADABAS/Natural mainframe computer system. This request aligns with the strategic direction of the Office of Information Technology and OIT formally approves the request for submission to the Office of State Planning and Budgeting and the Capital Development Committee.

Please contact me at (303) 764-7928 with any questions. Thank you.



*Enabling the effective, efficient and elegant delivery of government services through trusted partnerships and technology*