

FY 2014-15 Emergency Supplemental IT Capital Construction Request

Office of Information Technology Human Resource Information System

Motion:

Approve the emergency supplemental request from the Governor's Office of Information Technology for the HRWorks project (\$2,888,529 CCF).

GENERAL INFORMATION

2015-045

1. Which supplemental criterion does the request meet?

Technical

The Governor's Office of Information Technology (OIT) has determined that a less costly long-term option is available for the time and leave tracking component of the HRWorks project, formerly known as the Human Resource Information System (HRIS) project.

2. Which projects will be restricted to fund the supplemental request?

OIT plans to restrict the FY 2017-18 operating budget for the HRIS project in order to fund this supplemental request.

3. Has the request been approved by OSPB?

Yes

PRIOR APPROPRIATION AND SUPPLEMENTAL REQUEST INFORMATION

The appropriation to be amended was authorized in the following bill: SB 15-165

<u>Fund Source</u>	<u>Prior Appropriations</u>	<u>Supplemental Request</u>	<u>Future Requests</u>	<u>Total Cost</u>
CCF	\$31,288,801	\$2,888,529	\$7,414,260	\$41,591,590
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REASON FOR SUPPLEMENTAL REQUEST

OIT received an appropriation of \$16,070,000 in FY 2014-15 and an additional \$15,218,801 through a FY 2014-15 supplemental request. OIT says that an emergency supplemental request is needed to partially fund a system replacement for the time and leave tracking component of the project, to be implemented by CGI Group, Inc.

This emergency supplemental request is for additional FY 2017-18 costs associated with the implementation of the CGI solution for time and leave tracking, including other contractor costs, integration and storage costs, and state employee staffing support. OIT plans to submit an additional IT capital construction request for \$7,414,260 for FY 2018-19.

A contract for the time and leave tracking component of the project was initially awarded to Kronos. OIT says that compared to the original Kronos solution, the new proposed solution with CGI will ultimately save the state \$7.0 million in operating expenses over the next two years and \$1.6 million in annual savings thereafter, as a result of lower maintenance and licensing costs. In January 2018, OIT plans to submit an operating budget reduction request of \$5.4 million for FY 2017-18 and \$1.6 million for FY 2018-19 and beyond.

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SUMMARY OF PROJECT

The HRWorks project consists of four critical components:

1. statewide time and leave tracking (initially awarded to Kronos, now CGI);
2. payroll processing (CGI);
3. performance and personnel management (Workday); and
4. single-source statewide database for employee and position information (Lexmark).

OIT says that it also plans to use Mulesoft as an intermediary software to interconnect data in order to ensure all systems are able to successfully exchange information.

OIT further explains that state human resource functions are currently performed manually and state departments use different legacy systems. The state uses approximately 80 different applications to perform human resource functions. According to the original FY 2014-15 budget request, the state owns 12,700 Kronos licenses, which are no longer supported. The new proposed CGI solution will eliminate the need to upgrade the legacy Kronos licenses.

As part of this supplemental request, OIT evaluated three different options for the time and leave tracking system. Option 1 is to continue with the original implementation plan and maintain the use of Kronos. This option would require CGI to modify its baseline integration to Kronos. This option has a one-time capital cost of \$4.2 million and annual operating costs of \$1.4 million.

Option 2 is to implement an additional module, Kronos Activities. This option would require Kronos to modify its interfaces to align with the CGI baseline adaptor. This option has a one-time capital cost of \$3.7 million and annual operating costs of \$1.4 million.

Option 3 (the proposed solution) is to implement the time and leave tracking solution with CGI and to stop the Kronos implementation. While the one-time capital cost of this option is higher at \$7.0 million, annual operating costs are lower at \$118,803.

Finally, OIT says that the CGI solution will improve business processes by reducing risk, increasing functionality, and improving end-of-month accounting processes. The CGI time and leave tracking solution is designed for integration with the state's payroll and finance applications in the CORE system, which was also developed by CGI. The new solution will also allow departments to complete labor allocation more efficiently and accurately without time consuming adjustments.

QUESTIONS / OUTSTANDING ISSUES

See attached.

Supplemental Request

Governor's Office of Information Technology (OIT)
HRWorks, previously Human Resource Information System (HRIS)

Joint Technology Committee Staff Questions

Please respond by Wednesday, September 6, 2017 to
Jean Billingsley at jean.billingsley@state.co.us.

1. According to OIT, HRWorks will consolidate many disparate, outdated, and redundant systems into a central integrated system. Please list and detail the work completed to date to replace any of the disparate, outdated, or redundant systems (e.g., Kronos upgrade).

The HRWorks project is currently in the "Create" phase for CGI and the "Architect" phase for Workday. Both of these phases represent the configuration of the applications in development environments. As to work completed to replace the legacy systems to date, the Business Analysts have completed a 'deep dive' analysis of all known systems, their functionalities, and which departments are using them. This analysis has been compiled in a workbook and will help inform the Change Management processes, during which new business processes will be analyzed, designed, and ultimately be part of end user training.

The specific physical decommissioning of systems is out of scope of the project, but OIT will proactively work with agencies to assist in decommissioning their systems and interfaces.

2. Are all executive branch agencies planning to use all components of the new HRWorks system? If not, please list the agencies and which portions of HRWorks are not anticipated to be used by each agency. Please include an explanation as to why each agency does not plan to use HRWorks in its entirety.

At this time, all agencies will be using CGI's payroll system, except for institutions of Higher Education, College Assist, and College Invest. Institutions of higher education use other ERP systems, such as Oracle and Banner, for payroll. All agencies will be using CGI's Time and Leave system, except for institutions of Higher Education, College Assist, College Invest, and CDOT. Institutions of higher education use either their ERP's time and leave or another solution that interfaces to their ERP system. CDOT is not included because they had previously purchased their own Human Resources and Time and Leave solution, SAP. Therefore, they were never in scope. All executive branch agencies will be using Workday's human capital management system, with CDOT and non-executive branches using the system only to obtain employee identification numbers (EIN) for newly hired employees. CDOT also uses SAP for their Human Resources system. To ensure that each employee only ever has one EIN, that these are never duplicated, and that they are shared across both HR systems, it was determined that Workday would be the system of record for all EIN's.

3. According to the supplemental request on page 2:

The interfaces between the existing Time and Labor Tracking System and the other HRIS components had significant interoperability issues.

OIT and DPA are currently undertaking implementation of the four critical components of the enterprise human resources solution:

- 1. Statewide Time and Leave Tracking (initially awarded to Kronos/subsequently CGI);*
- 2. Payroll Processing (CGI);*
- 3. Performance and Personnel Management (Workday); and,*
- 4. Single-Source Statewide Database for Employee and Position Information (Lexmark).*

On page 4, the department states that:

CGI proposed a Kronos “baseline” integration that assumed all departments would be on Kronos 6.2 or higher. It became apparent that the state’s Kronos configuration would not work with CGI’s baseline integration without significant customization.

a) Are the integration issues occurring with Kronos version 6.2 or higher? Please include a technical explanation of the issues.

The integration issues between CGI and Kronos were primarily functional rather than technical. Kronos uses labor levels for security and reporting. Kronos has seven labor levels and the State decided on which items to use for these levels when interfacing from Kronos to CPPS, the present personnel and payroll system. CGI’s baseline integration to Kronos included different labor levels than the Kronos to CPPS integration. Either CGI or Kronos would need to change the labor levels to complete the integration successfully. Option 1 used the Kronos-CPPS labor levels which required the additional activities module from Kronos. Option 2 used the CGI-Kronos baseline integration labor levels. Both alternatives required additional system integration efforts that were not anticipated by the parties.

b) Other than Kronos, do any of the other HRWorks components mentioned above have significant interoperability issues? Please include a technical explanation of any issues, as well as a description of the legacy system(s) being replaced.

HRWorks includes Human Capital Management (HCM) provided by Workday and Time & Leave and Payroll provided by CGI. The State is not aware of any interoperability issues with these components. The State has identified approximately 80 interfaces to and from HRWorks to other systems. The State believes that use of Mulesoft will minimize the technical issues with these interfaces.

c) Were interoperability issues identified before moving forward with the initial solution? If not, why not? If so, have those interoperability issues been addressed?

The interoperability issues were not identified before moving forward with the initial solution in the contract. These issues were identified during prototyping sessions. The contract between the State and CGI included general assumptions that the State would complete the Kronos implementation of Kronos version 6.2 or later by 11/1/17 to meet the baseline integration standards. The contract did not specify the labor levels required in the baseline integration. This level of detail is usually discussed during project prototyping and configuration. During the prototyping sessions, it became clear that CGI assumed that the labor levels would match those required for CGI’s baseline integration to Kronos. The State assumed that the baseline integration would work with Kronos 6.2 or better with the labor levels included in the Kronos to CPPS integration.

d) Will the new CGI time and leave tracking system require customization? If so, will this negatively impact interoperability with other systems? Please provide a technical explanation.

The new time and leave system will not include customization.

e) Do any components of HRWorks include cloud solutions? If so, please list all of the systems with a short description of the function, vendor/system name and type (e.g., time and leave, CGI, SaaS, etc.).

Vendor System/Name	Short Description of Function	Notes
CGI	Payroll and Time and Leave	Vendor hosted

Workday	Human Capital Management (HCM)	SaaS Cloud solution
Hyland	Enterprise Content Management	This is an enterprise solution; HRWorks is only part of its overall implementation

f) Since these systems will be processing, transferring, and storing confidential employee data, has OIT's Chief Information Security Office (CISO) approved all of these vendors and systems? If not, please provide the reason and the planned dates when CISO will complete their initial reviews.

Yes, the CISO was involved in developing requirements and reviewing vendor solutions in the context of security requirements. The CISO was also involved in contract negotiation and ensuring security requirements are enforceable within the vendor contracts. CGI's payroll and time and leave solutions will be in a NIST compliant environment. Workday's Human Capital Management (HCM) will be compliant with ISO 27002 and 27018 certifications.

4. According to the FY 2017-18 Supplemental on page 4:

. . . the state determined there was a need for an intermediary software that would interconnect data. Mulesoft was the vendor chosen for that function.

a) Please list the system data with which Mulesoft will interconnect. Is Mulesoft needed to facilitate the change from Kronos to CGI? Please include technical details of the Mulesoft need. Please discuss other alternatives to Mulesoft and why they were not chosen.

User stories are in development and will continue to be so as MuleSoft is being developed using an Agile project management Methodology. Each individual user story contains the specific data elements within. The user stories identified thus far include the following inventory (see table).

MuleSoft is not needed to move data from Kronos to CGI. Leave balances, and other required data, will be imported to the CGI time and leave application using CGI's designated methods.

Source				Dest			
SOC ID	Vendor	Interface	Type	SOC ID	Vendor / System	Interface	Type
SOC046 (a) / INT006	WorkDay	Job Profile and Job Families	XML File	SOC070	CGI	Job Title Foundation data	XML File
SOC037	(SAP)	(Job data)		SOC071	CGI	Job SubTitle Foundation data	XML File
SOC046 (b) / INT006	WorkDay	Compensation Grades	Web Service	SOC072	CGI	Grade Foundation data	XML File
SOC037	(SAP)	(Grade data)					
SOC047 / INT004	WorkDay	Position Data	XML File	SOC073	CGI	Position foundation data (PSMT)	XML File

SOC037	(SAP)	(Position data)		SOC074	CGI	Position Authorization foundation data (PAMT)	XML File
SOC048 / INT005	WorkDay	PECI (Demographic and Payroll data)	XML File	SOC075	CGI	Employee demographic data (ESMT)	XML File
SOC037	(SAP)	(Demographic and Payroll data)		SOC076	CGI	Supervisor data (DEPTD)	XML File
				SOC077	CGI	Employee Address demographic data (ADDR)	XML File
				SOC078	CGI	Employee Attributes demographic data (ATTR)	XML File
				SOC079	CGI	Direct Deposit (NPD)	XML File
				SOC081	CGI	Employee Identification Change (EICF)	XML File
INT003	WorkDay	Worker Data Extract (Change Only)			One Identity (IdM)	Employee Demographics	
SOC037	(SAP)	(Employee Demographic Export)		SOC087	Swift 911	Employee Demographics	
				SOC004	Business Solvers	Business Solvers Person Import	
				SOC027 (a)	SkillSoft	LIEF Workforce	
				SOC027 (b)	Cyber Training	LIEF Workforce	
				SOC027 (c)	DPA Training	LIEF Workforce	
				SOC028	DPA, DOC, CDLE, DNR, DORA	Linkage Extract	
				SOC030	PERA	PERA Person Import	
				SOC036	PPMS	PPMS Person / Class Import	
				SOC039		State Telephone Directory	
				SOC044	CDOT, DPA, CDLE, DNR	XML Interface	

				SOC049	Origami	Workers Comp Origami Extract	
SOC052 / INT011	WorkDay	W-4 Withholding Election		SOC080	CGI	W4 tax elections (TAX)	XML File
SOC037	(SAP)	(W-4 Withholding Election)					
SOC050 / INT009 SOC051 / INT010	WorkDay	Non-Health Benefit Elections		SOC005	CGI	Benefits Enrollment	XML File
	Benefits Solver	Health Benefit Elections					
SOC053 / INT012	WorkDay	W-2 Printing Election		?			
SOC056 / INT017	WorkDay	W-4 Lock In Letter		?			
?	WorkDay	[May be included in PECL]		SOC082	CGI	Overtime Payment (OTPAY)	
SOC037	(SAP)	(One Time Payment) ?					
SOC033	PERA	Choice Eligibility			WorkDay	Choice Default / Override	
SOC032	PERA	Default Choices					
	PPMS	Performance Ratings Extract		SOC035 / INT014	WorkDay	Performance Ratings Update	
SOC083	CGI	EIWO Rejected / Deferment File			Higher Education		
	One Identify	Employee Email Assignments		INT013	WorkDay	Employee Email Update	

MuleSoft is a platform that fulfills the OIT Enterprise data strategy and meets several critical standards (like TS-APP-002: Secure File Transfer and TS-DAT-001: Enterprise Service Bus). It was chosen to meet HR WORKS needs and also because it was a part of the OIT solution set. The Mulesoft solution being procured for HR WORKS is simply the component of the solution set that is project specific (like software licenses and professional services).

b) Please detail the initial costs of Mulesoft. Are there any ongoing operating costs associated with Mulesoft? If so, how will these be paid?

These costs represent the project costs portion of an enterprise-wide solution, and these are included in the HRWorks budget.

Initial Capital: \$342,000

Ongoing Operating: On average about \$370,000 per year

c) What type of human resources are needed to implement and support Mulesoft (e.g., are any full-time state employees required)? If not specified above, please provide the estimated cost for the complete implementation and support of Mulesoft.

There are three Integration Developer positions that will be implementing and supporting Mulesoft. This support is needed from April 2017 through the December 31, 2018. Total cost for these three developers is \$395,574 over this time period.

Position	Start Date	End Date	Base	Fully Loaded	Pct *	7/1/14 - 6/30/15	7/1/15 - 6/30/16	7/1/16 - 6/30/17	7/1/17 - 6/30/18	7/1/18 - 12/31/18	Total
						FY 2015	FY 2016	FY 2017	FY 2018	FY 2019 ***	Project
Integration Developer 1	4/3/2017	12/31/2018	\$5,511.00	\$7,219.96	31.0%			\$20,937.88	\$88,372.31	\$44,186.16	\$153,496.35
Integration Developer 2	4/24/2017	12/31/2018	\$4,536.00	\$6,025.52	32.8%			\$13,256.14	\$73,752.36	\$36,876.18	\$123,884.69
Integration Developer 3	4/3/2017	12/31/2018	\$4,300.00	\$5,533.38	28.7%			\$16,600.14	\$67,728.57	\$33,864.29	\$118,193.00

5. Since some state agencies will be transitioning from Kronos to the new CGI solution if the request is approved, has the department included costs for the additional change management and training?

Both change management and training are critical components of the overall project; as such, there are leads (state employees) for each component. These positions were extended from the original go live date to support the new go live date.