
JOINT BUDGET COMMITTEE



INTERIM SUPPLEMENTAL BUDGET REQUEST FY 2017-18

CAPITAL CONSTRUCTION INFORMATION TECHNOLOGY PROJECTS

JBC WORKING DOCUMENT - SUBJECT TO CHANGE
STAFF RECOMMENDATION DOES NOT REPRESENT COMMITTEE DECISION

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INTERIM SUPPLEMENTAL REQUESTS

INTERIM SUPPLEMENTAL #1 (FY 2017-18), INFORMATION TECHNOLOGY PROJECTS, DEPARTMENT OF HUMAN SERVICES, CHILD WELFARE CASE MANAGEMENT SYSTEM REPLACEMENT

	REQUEST	RECOMMENDATION
TOTAL	\$9,829,233	\$9,829,233
Capital Construction Fund/General Fund	5,897,540	5,897,540
Cash Funds	0	0
Reappropriated Funds	0	0
Federal Funds	3,931,693	3,931,693

Does JBC staff believe the request satisfies the interim supplemental criteria of Section 24-75-111, C.R.S.? [The Controller may authorize an overexpenditure of the existing appropriation if it: (1) Is approved in whole or in part by the JBC; (2) Is necessary due to unforeseen circumstances arising while the General Assembly is not in session; (3) Is approved by the Office of State Planning and Budgeting (except for State, Law, Treasury, Judicial, and Legislative Departments); (4) Is approved by the Capital Development Committee, if a capital request; (5) Is consistent with all statutory provisions applicable to the program, function or purpose for which the overexpenditure is made; and (6) Does not exceed the unencumbered balance of the fund from which the overexpenditure is to be made.] **YES**

Does JBC staff believe the request meets the Joint Budget Committee's supplemental criteria? [An emergency or act of God; a technical error in calculating the original appropriation; data that was not available when the original appropriation was made; or an unforeseen contingency.] **YES**

Explanation: JBC staff and the Department agree that this request is the result of an unforeseen contingency.

DEPARTMENT REQUEST: The Department of Human Services requests \$9.8 million total funds, including \$5.9 million Capital Construction Fund and \$3.9 federal funds to fund the completion of the delayed Trails Modernization project and provide for integration of the federal Family First Prevention Services Act (FFPSA) requirement functionality. The Department request indicates the request is for FY 2019-20.

JTC RECOMMENDATION: The Joint Technology Committee recommends approval of the request.

STAFF RECOMMENDATION: Staff recommends that the Committee approve the request. The introductory paragraph to Section 24-75-111 (1), C.R.S., (1331 statute) conditions overexpenditure authority on the existence of an "item of appropriation". Staff recommends that the overexpenditure be provided for the FY 2017-18 appropriation for the Child Welfare Case Management System Replacement project. Staff recommends funding the interim supplemental request with General Fund, since all available Capital Construction Fund is appropriated. Spending authority for a FY 2017-18 appropriation extends through FY 2019-20. However, in the January 2020 supplemental, staff will recommend creating a new project appropriation in FY 2019-20 for this interim overexpenditure request to provide spending authority through FY 2021-22. Staff also recommends that the overexpenditure letter to the State Controller include an expansion of scope for that project to accommodate the FFPSA development.

STAFF ANALYSIS:

PROJECT SUMMARY

Trails is Colorado's child welfare automated case management system used to track child abuse and neglect cases, provider licenses, children and youth in the Division of Youth Services, and foster and adoptive services. It facilitates and documents the State's compliance with government regulations and safety standards, and is used by the Division of Child Welfare, the Division of Youth Services, the Office of Early Childhood, the Administrative Review Division, the Office of Child Protection Ombudsman, certain contracted providers, 22 judicial districts, and 64 county departments of human/social services. Trails is accessed by approximately 5,600 users with 87 interfaces to 11 other state systems. It is the reporting system for several sets of federal requirements and it was SACWIS (Statewide Automated Child Welfare Information System) compliant since 2011 until Colorado declared its desire for Trails to become a Comprehensive Child Welfare Information System (CCWIS) in FY 2017-18.

Trails was built in 2001 and an independent analysis of Trails in FY 2013-14 resulted in a recommendation to "modernize" the Trails system through technology upgrades. The following were identified as some limitations with the exiting (legacy) system, including but not limited to: outdated system architecture, limited mobile system access, redundant data entry, missing data interfaces, data integrity, inability to augment case data with attachments, and ad-hoc reporting capabilities. Users are required to enter the same information in more than one area, and have difficulty navigating this complex system, which is compounded by a slow response time due to the client-server based technology. Replacing Trails with a web-based solution was expected to simplify navigation, reduce redundant data entry, provide greater access to the system for the use of mobile technology, and improve the accuracy and efficiency of services and outcomes.

The Trails Modernization project was broken into four modules that were each competitively bid: Intake and Resource, Assessment and Commitment, Case, and Fiscal. The same vendor, CGI, was awarded work on the entire project. The Department was appropriated capital funding in FY 2015-16, FY 2016-17, and FY 2017-18 for the project. The following table outlines appropriations and expenditures:

Trails Modernization - Appropriations and Expenditure History					
	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	Total
Capital Construction Fund	\$4,648,707	\$3,374,809	\$3,374,809	\$0	\$11,398,325
Federal Funds	2,175,860	3,374,808	5,847,657	0	11,398,325
Total Funds	\$6,824,567	\$6,749,617	\$9,222,466	\$0	\$22,796,650
Expenditures	\$98,850	\$4,179,226	\$11,241,702	\$6,004,196	\$21,523,974
Appropriation Remaining					\$1,272,676

The original plan was for Trails Modernization to be complete by the end of FY 2019-20. The Department request states that as of November 2018, Trails Modernization was projected to be completed by June 2019. The Department request also states that in late Fall 2018, the project encountered critical issues and challenges that failed to reach executive leadership until March 2019. In April 2019, executive leadership at the Department and OIT determined necessary changes to the project which entailed adding FFPSA functionality to the project and the need for additional capital and operating funding to complete the project.

In July 2019, the Department and OIT began working with an outside consultant, Slalom, to identify root causes of project challenges and recommendations for moving forward. The following were identified as root causes of the 18-month delay:

- The Department and OIT did not have a clear governance structure to escalate and address issues;
- There was no "product owner" to drive the project forward from the Department;
- CGI and OIT had different project methodologies to deliver Trails (agile and waterfall);
- OIT lost critical employees to address data integration efforts and service ticket resolutions and had an insufficient backfill plan;
- Due to non-project OIT delays, Trails Modernization was being built on an old database technology that is not supported and is insufficient;
- CGI was responsible for bug fixes for only 30 days after each release; and,
- The Department experienced "scope creep" where additional development was added without proper approval.

The Department and OIT are engaging in the following activities to address the identified root causes of the 18-month delay:

- A new governance structure for an Executive Committee, program steering, county leaders and end-users was formed and structured to facilitate issue escalation;
- The Department named a product owner;
- OIT and CGI are now using the same Agile approach;
- OIT is contracting with CGI to fill staffing gaps;
- CGI is now responsible for bug fixes six months after each release;
- Planning has begun for a database upgrade (date is to be determined); and
- All current scope and new FFPSA scope will be reviewed against requirements to validate that new estimates are accurate.

The Department reports that phases 1 through 4 are complete. With interim supplemental request funding the Department outlines the following roadmap for development and implementation:

- Release R5, defined as Resource Prerequisites for FFPSA functionality, currently in production, is anticipated for early November 2019;
- Release R6, defined as FFPSA functionality, to include candidacy determination, Qualified Residential Treatment Program (QRTP), evidence-based services, and prevention plans functionality, is anticipated to be ready by the end of January 2020;
- Release R7, defined as DYS, to include Division of Youth Services functionality, is anticipated to be ready by June 2020; and
- Release R8, defined as All Other DCW Development, is anticipated to be ready by September 2020.

The Department states that without additional funding:

- All new development work will stop on September 30;
- The State will be maintaining two systems – the legacy system and the portion of Trails modernization that has been implemented;
- While maintaining the two systems does not double the cost for the State, OIT has delayed implementing necessary updates and improvements to the legacy system, in anticipation of Trails

Modernization, which would become necessary in order to continue operating the legacy system portion of Trails for an additional extended period;

- Update work on the legacy system may create additional instability and programming issues requiring additional development resolution;
- Child welfare staff statewide would continue to work in two systems until Trails Modernization is fully implemented, delaying improved efficiency and effectiveness at the public service interface;
- The federal government could require the State to pay back the federally funded portion of the project;
- Without the proposed FFPSA functionality anticipated to be ready by the end of January 2020, the State would not be able to opt in to the FFPSA program which includes access to additional Title IV-E funds, for services not previously covered, with up to a 50 percent match.

Additionally, the Department and OIT state that a delay of funding of four months – if a regular supplemental was approved in January – would likely delay development and implementation of the project by six to nine months, as all work would stop at the end of September and then the project team reassembled and reorganized once funding was approved.

POINTS OF CONSIDERATION

IS THIS A REQUEST THAT SHOULD BE FUNDED NOW AS A 1331 – INTERIM SUPPLEMENTAL/ OVEREXPENDITURE – OR SHOULD IT BE DELAYED UNTIL JANUARY AS A REGULAR SUPPLEMENTAL?

There are two aspects to this question: the first is whether the request qualifies as a 1331; and the second is whether it should be funded now or whether funding can wait four months.

Based on the timeline of events related to the Trails Modernization project development and difficulties encountered, the best argument is that difficulties were identified in late 2018, and perhaps a plan should have been prepared and addressed within the 2019 legislative session. However, this was the period of transition from one administration to the next. It appears reasonable that approvals for a change in plan and additional resources would be delayed through such a transition. It also appears that the decisions made in April 2019 were for the purpose of identifying problems and solutions to move the project forward. Staff is satisfied that efforts were made relatively quickly in the new administration to move the project forward appropriately. Staff is satisfied that this request qualifies as a 1331 request.

Based on the updated project roadmap, the Department and OIT project the FFPSA functionality to be ready by the end of January 2020 – a four-month period for development. Based on the FFPSA requirements to be included in the Trails system, this appears to be a reasonable timeline for such functionality development.

A delay of funding for four months would set this project back by at least four months and by up to as many as nine months, while the project team is dissolved at the end of September 2019 and then reorganized in February of 2020. With such a delay, it is reasonable to expect that current IT vendor and OIT staff resources will have either moved on or been reassigned and new staff would have to be recruited and brought up to speed on the history of the project in order to move forward on the project. Based on this, it does appear that a funding delay of four months is likely to lead to a longer than four-month project delay.

The Department's ability to access additional federal funds through the FFPSA functionality is a strong argument for moving forward on funding immediately. Even if FFPSA functionality implementation extends a month further, followed by a reasonable period for the establishment of Department and statewide child welfare process changes, and followed by a period for training for frontline child welfare staff, additional federal funding related to FFPSA functionality would be accessed by the State four to nine months sooner. Staff recommends funding this request immediately rather than delaying and funding a regular supplemental in January.

SHOULD THIS REQUEST BE FUNDED AT ALL?

This question is best answered by asking if the goal of a Trails Modernization system is still an appropriate and desired objective. It would be a bad budget choice to continue to throw good money after bad for a project that is stalled and in need of additional resources, but for which the original goal or objective has changed. In the case of Trails Modernization, a good portion of the new system has been delivered and implemented, but is currently operating aside the legacy system for the portions left undone. It appears that this project can reasonably be completed despite the technical and managerial setbacks identified in late 2018. It appears that the Department and OIT have taken reasonable steps to move the project forward effectively. Further, it is reasonable that the change in the scope in the project to add FFPSA functionality was a reasonable addition to the project, which causes both an increase in necessary development time to completion as well as requiring additional funding resources. It is staff's opinion that the rationale for funding a Trails Modernization project still holds. It is staff's opinion that adding FFPSA functionality is a reasonable increase in scope to the original Trails Modernization project.

Staff appreciates that the current administration has shifted the IT development emphasis from a "waterfall" to an "agile" approach. In addition to other characteristics, waterfall is the traditional project approach in which timelines for development are established and a switch is turned on at the end of the development to initiate implementation. Agile develops working pieces of an IT system in short-tem – typically two-week "sprints" – which develops a specific IT system function which can be successfully scaled up to the organizational level. The next sprint addresses the next IT system function.

Staff is of the opinion that this change in development methodology will lead to improved IT project outcomes for the State. Staff recommends giving the administration the benefit of the doubt in delivering this project as has been identified based on the move to an agile development approach and due to the increased engagement in IT and OIT policy and processes shown by the administration so far.

However, the Committee and the General Assembly should understand that agile development is also based on the idea that an IT system is never really finished and continues to evolve. Within an agile approach, IT systems are expected to change as policy changes occur, as business process changes are made, and as improvements in IT media are incorporated into a discrete IT system or into outside IT systems interfacing with the IT system. While a "capital" funding approach may be appropriate for the initial phase of development of a system, there should be an expectation of ongoing agile development, more typically funded within an operating budget.

RECOMMENDATION

Staff recommends that the Committee approve the request.

Staff recommends that the overexpenditure be provided for the FY 2017-18 appropriation for the Child Welfare Case Management System Replacement project. The introductory paragraph to Section 24-75-111 (1), C.R.S., (1331 statute) conditions overexpenditure authority on the existence of an "item of appropriation".

Staff recommends funding the interim supplemental request with General Fund. Section 24-75-111 (3)(b), C.R.S., requires that no overexpenditure be allowed in excess of the unencumbered balance of the fund from which the overexpenditure is made. The Capital Construction Fund is completely appropriated. In the letter to the Controller, staff will specify that the overexpenditure will be from General Fund and the identified line item project will include an expansion of scope to provide for this request.

Spending authority for a FY 2017-18 appropriation extends through FY 2019-20. For the supplemental bill to be prepared for the Committee in January, staff will recommend creating a new project appropriation in FY 2019-20 for this project, to provide spending authority through FY 2021-22, and include funding from Capital Construction Fund (IT Capital Account) to include a transfer from General Fund if necessary.
