

Fiscal Year 2015-16 Information Technology Request

Human Services

IT Systems Interoperability

PROGRAM PLAN STATUS and OIT BEST PRACTICES

2016-013

Approved Program Plan? Date Approved:

The Governor's Office of Information Technology (OIT) was an active participant in the planning grant. The implementation of interoperability will be accomplished in cooperation with OIT and will align with their enterprise health IT architecture model.

PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	3 of 6	
OSPB	7 of 10	Prioritized and recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2015-16	FY 2016-17	Future Requests	Total Cost
FF	\$0	\$12,725,370	\$7,958,910	\$23,859,585	\$44,543,865
GF	\$0	\$1,413,930	\$2,652,970	\$7,953,135	\$12,020,035
Total	\$0	\$14,139,300	\$10,611,880	\$31,812,720	\$56,563,900

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2015-16	FY 2016-17	Future Requests	Total Cost
Land Acquisition	\$0	\$0	\$0	\$0	\$0
Professional Services	\$0	\$4,015,440	\$3,703,520	\$11,137,700	\$18,856,660
Construction	\$0	\$0	\$0	\$0	\$0
Equipment	\$0	\$6,000,000	\$3,300,000	\$9,850,000	\$19,150,000
Miscellaneous	\$0	\$1,323,360	\$1,323,360	\$3,970,080	\$6,616,800
Contingency	\$0	\$0	\$0	\$0	\$0
Software Acquisition	\$0	\$2,800,500	\$2,285,000	\$6,855,000	\$11,940,500
Total	\$0	\$14,139,300	\$10,611,880	\$31,812,780	\$56,563,960

PROJECT STATUS

This is a new never before requested project.

PROJECT DESCRIPTION / SCOPE OF WORK

The Department of Human Services (DHS) is requesting a combination of state funds and federal funds spending authority for FY 2015-16 to create a new system that will standardize all existing IT systems under this interoperability environment project, while leaving the core systems in place.

The department expects a continuation of spending in the out years on a 75/25 percent match funding model under a time-limited, specific exception to the cost allocation requirements set forth in the federal Office of Management and Budget Circular A-87 (Section C.3) that requires benefitting programs to pay their share of the costs associated with building state-based information technology systems. The exception allows federally-funded human services programs to benefit from investments in the design and development of state eligibility determination systems for state-operated exchanges, Medicaid and the Children's Health Insurance Program (CHIP). DHS says that this

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exception will apply for implementing and maintaining an interoperability environment. The federal funds will be secured through the submission of an Advance Planning Document (APD) to the Centers for Medicare and Medicaid Services (CMS). A requirement for federal approval is demonstrating that the state has committed the 10 percent funding.

Without removing data from the core system, DHS says it will add necessary technology, security, and governance components, while allowing data to be available to users. As the new components come online, the old interfaces will be retired. This will reduce the need to build and maintain unique interfaces among IT systems, where over 500 unique interfaces now exist. DHS says the interoperability environment will also allow for transparency and improved accountability with the added bonus of increased service delivery to clients. This will be possible as two or more systems or applications will be able to share data for better decision-making capabilities.

PROJECT JUSTIFICATION

According to DHS, the department has no standard policy, procedure, or practice addressing interoperability. The department's IT systems are diverse, requiring hundreds of unique interfaces that move programs, services, clients, and financial data to 95 federal, state, and county IT systems using 28 different methodologies. The department has no ability to view or analyze data in its entirety without significant manual intervention. One of the projected outcomes of interoperability is to automate performance management reports and to look at performance across various data systems.

The department believes that its IT future lies with a new connected approach that provides a roadmap for improved business processes and program performance resulting from:

- the use of a Service-oriented Architecture (SOA), allowing faster access to services, case simplification, safety, and outcome measures;
- the creation of an Enterprise Service Bus (ESB);
- development of shared services that will enhance and extend existing applications for use by multiple agencies and business processes; and
- using the new enterprise architecture as an opportunity to improve processes and procedures.

Project alternatives. The department says that it can continue to build custom interfaces at costs ranging from \$10,000 to \$80,000 each, depending on the complexity. Industry standard annual maintenance costs for interfaces, for which the department has over 500, are between \$10,000 and \$30,000 per year. The department says it is not funded to maintain its interfaces at this level.

PROGRAM INFORMATION AND IMPLEMENTATION PLAN

According to DHS, the interoperability roadmap provides multiple work streams of initiatives. The project will develop an interoperability environment for the entire department over the first two years, and then in the next three years, individual data systems will be brought into the environment. The two-year plan can be considered as Phase I, and the three-year plan can be considered Phase II.

COST SAVINGS / IMPROVED PERFORMANCE OUTCOMES

According to DHS, cost savings will be achieved through interoperability. Using interoperability to view clients across all data systems to align services will result in cost savings, fraud avoidance, and reduced program administrative costs. A proposed strategy for the Colorado Client Information Sharing System (CCISS) is to replace some existing protocols such as Infomover and 81 manual interfaces. Interface maintenance costs run \$15,000 to \$30,000 per interface per year. By eliminating over 80 interfaces, the cost savings the first year would be \$2,430,000. Staff counts 520 interfaces that can be eliminated. The department estimates that over the five-year implementation, \$12,150,000 could be saved on just the first 80 interfaces being eliminated. Additionally, cost savings will be realized as each interface becomes ESB-ready. These cost benefits and savings will be verified during the first year of implementation and will be balanced with potential cost allocation that is currently under exploration with the Department of Health Care Policy and Financing (HCPF) and CMS.

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SECURITY AND BACKUP / DISASTER RECOVERY

According to the department, the infrastructure will be designed to meet federal and state IT architecture, security, and business continuity requirements. Interoperability and the associated systems will follow the state cybersecurity policies set forth by the Office of Information Security. Interoperability will follow the National Institute of Standards and Technology (NIST) 800-53 requirements. The CCISS Interoperability Roadmap will follow established security protocols.

BUSINESS PROCESS ANALYSIS

The department's Office of Children, Youth, and Families was the recipient of a planning grant from the federal Administration for Children, and Families, Office of Child Support Enforcement, and used it to implement a sustainable, strategic pathway to connect all the internal systems, to make data and human services records available without removing the data from the source systems. The department will use the interoperability roadmap in a phased approach that will feed into a larger and more fully developed strategy.

Stakeholders were extensively engaged in the interoperability planning and will be very involved in implementation. Stakeholders include the Governor's Health IT Coordinator and representatives from HCPF, the Colorado Department of Public Health and Environment, and OIT, who meet regularly as the Health Information Technology (HIT) workgroup; the Colorado Department of Education through ongoing data sharing work; and the Department of Public Safety.

PROJECT SCHEDULE

	Start Date	Completion Date
Contracting	N/A	N/A
Implementation	July 2015	June 2020
Equipment	N/A	N/A
Completion		June 2020

OPERATING BUDGET

DHS is requesting \$1,323,360 in operating expenses, 5.0 FTE for OIT, and 15.0 FTE for DHS, as part of this IT budget request. The department says the five-year implementation plan will utilize a 90/10 federal funds split for design development and implementation. Beyond the five-year implementation, the \$1,323,360 will be included in the department's maintenance and operating budget, which the department says will receive a 75/25 federal funds match.

STAFF QUESTIONS AND ISSUES

1. Will there be any increases or decreases in FTE requirements to support interoperability?

The project plan was designed for the work to be accomplished by contract vendors and not to require an increase in FTE. Existing FTE supporting our interfaces will be utilized in ongoing operations of the new environment and therefore there is no planned decrease in FTE.

2. Who will be the participants performing the analysis for business process improvement?

The participants will vary by process but will include all appropriate stakeholders to include the program area, external partners, IT subject matter experts, and other agency representatives as needed.

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3. Who are the members of the Interoperability Council?

The Interoperability Advisory Council is chaired by the CDHS Business Technology Director, has a representative from each Office within CDHS, the Governor's Health IT Coordinator, OIT Data Governance representative, OIT Architecture representative, and State IT Security representative. The Council will have specialty work groups to address technology issues related to Privacy, Security, Compliance and Health IT. The Council will be advised by CDHS Data Governance, the Governor's Data Advisory Board (GDAB) and by stakeholders through outreach conducted by the Council.

4. This project is projected to save \$2.4 million per year and \$12.1 million over 5 years. How are these savings being reinvested in the overall enterprise architecture?

These are projected savings based on industry averages and any savings will be reinvested in the system that was the origin of the data or interface. For example if the Automated Child Support Enforcement System interface was eliminated then the savings would be reinvested in the Automated Child Support Enforcement System.

5. The savings listed above are related just to the replacement of the Infomover protocol and the manual interfaces. What are the projected savings on the rest of the protocols with the understanding that a validated analysis will be performed during the first year of implementation?

The projected cost savings are \$30,000 per interface that is eliminated is based on industry averages.

6. Why are there no contingency costs included for the project?

The costs identified in the Interoperability plan don't have a specific line item identified as contingency costs. The consulting services line can be adjusted as needed to procure the appropriate services to meet unplanned needs.