

Fiscal Year 2015-16 Information Technology Request

Revenue

IT Systems Replacement, Division of Motor Vehicles

PROGRAM PLAN STATUS and OIT BEST PRACTICES

2015-046

Approved Program Plan? Date Approved:

DOR and OIT collaborated in developing the project RFP including the business, technical, and security specifications.

PRIORITY NUMBERS

Prioritized By	Priority	
Dept/Inst	1 of 1	
OSPB	1 of 10	Recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2015-16	FY 2016-17	Future Requests	Total Cost
CCF	\$41,021,167	\$0	\$0	\$0	\$41,021,167
GF	\$0	\$52,350,833	\$0	\$0	\$52,350,833
Total	\$41,021,167	\$52,350,833	\$0	\$0	\$93,372,000

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	\$9,109,167	\$5,350,000	\$0	\$0	\$14,459,167
Construction	\$0	\$0	\$0	\$0	\$0
Equipment	\$14,791,000	\$3,200,000	\$0	\$0	\$17,991,000
Miscellaneous	\$0	\$11,370,833	\$0	\$0	\$11,370,833
Contingency	\$1,910,000	\$2,430,000	\$0	\$0	\$4,340,000
Software Acquisition	\$15,211,000	\$30,000,000	\$0	\$0	\$45,211,000
Total	\$41,021,167	\$52,350,833	\$0	\$0	\$93,372,000

PROJECT STATUS

This project was previously funded in FY 2014-15 for \$41.0 million. This request for Phase II funding will allow the department to complete the project.

PROJECT DESCRIPTION / SCOPE OF WORK

The Department of Revenue (DOR), in cooperation with the Governor's Office of Information Technology (OIT), is requesting state funds for the second phase of a two-phase project to replace the software systems used by the Division of Motor Vehicles (DMV) to process driver's licenses, and titles and registrations, known respectively as the Driver's License System (DLS) and the Colorado State Titling and Registration System (CSTARS). The department is seeking replacement software that will unify the two systems into one master system, will be vendor-provided in a state-hosted environment, and will be supported by network architecture designed by OIT.

CSTARS upgrade history. House Bill 01-1100 provided initial funding to upgrade and replace CSTARS through a temporary, \$2.30 increase in a title fee. The department originally began work on upgrading the system in 2000. In April 2004, the vendor, Avanade, was served with a "notice of nonperformance." However, the contract was

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subsequently amended, and the project recommenced in July 2004. The system went live for state users in September 2006. Although some improvements were noted over the legacy system, there were numerous issues with its functionality. The system was later partially deployed to the counties, but concerns with the system emerged by February 2007. By April 2007, the department reverted to the legacy system. In 2007, the department hired an outside consultant, North Highland, to assess the system and to determine whether and how to complete the project. The consultant found that the CSTARTS application did not meet the needs of state users and that there existed "a major gap between the needs of the county and the current functionality provided." It also found that the concern of greatest significance was poor project management of the CSTARTS upgrade. The consultant concluded that "the DOR does not have the operational capability to manage, develop, and operate a system of this complexity." The total cost of the attempted upgrade, including a feasibility study, was \$11.6 million. The project received an appropriation from FY 2000-01 through FY 2004-05, funded through cash funds, including moneys from the Highway Users Tax Fund and the CSTARTS Account.

In 2013-14, the department collaborated with the Governor's Office of Information Technology (OIT) and stakeholders to develop business and technical requirements for the vendor Request for Proposal (RFP). In February 2014, the department hired a consultant to develop the RFP, which was released in June 2014. Proposals are currently under evaluation and the department plans to award the RFP in March 2015. Phase I of the project is expected to be completed in December 2016, and Phase II has an expected completion date of December 2018. The department assembled three committees to participate in the decision process: the DMV Technology Steering Committee, consisting of agency employees, department directors, financial officers, and representatives from OIT, the Statewide Internet Portal Authority, and counties; the Business Process and Technical Committee, consisting of detailed program managers, subject matter experts, county representation, and the vendor; and the Valuation Committee, which will award the RFPs.

The project includes costs for:

- software and license acquisition;
- consultants, designers, independent testers, and trainers;
- contract employees to work several months of the year while full-time DOR/DMV and OIT employees are engaged in project development and design;
- 16,000-GSF of leased work space; and
- hardware, including servers, storage, backup, and network equipment.

PROJECT JUSTIFICATION

The department says that the obsolete information technology system currently in place at the state and county DMVs poses a significant risk of catastrophic failure in systems and loss of motor vehicle data, and causes everyday problems like outages, costly maintenance, an overly complicated user interface, lack of real-time data exchanges, and security issues. According to the department, the DLS and CSTARTS systems significantly impact the provision of customer service, lack flexibility in updating and communicating information to driver and vehicle services customers, are extremely complex to navigate, limit electronic payment options, and lack stability.

In 2012, DOR hired a consultant to assess the current state of the motor vehicle information technology infrastructure. During the assessment, it was discovered that the DLS application was available 92.2 percent of the time in 2011, which equates to 419 hours of unplanned downtime, while the CSTARTS application was available 84.4 percent of the time in 2011, which equates to 1,689 hours of unplanned downtime. These outages impact citizens, county and state employees, and agency partners. In one such outage of the CSTARTS system in March 2011, 880 FTE hours were required to work through the backlog.

The assessment also concluded that the DMV operates on a range of diverse and disparate systems that have often been developed independently of one another. This causes the following major problems:

- (1) frequent application downtime, impacting customer wait times and staff productivity;
- (2) obsolete software that is limited in its functionality and not conducive for future application development;
- (3) dependence on specialized, costly, and labor-intensive technical support;
- (4) lack of real-time data exchanges and reporting capabilities; and

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(5) security issues that include lack of internal controls like user tracking and access levels.

Finally, when legislation passes that impacts DMV processes, the inflexibility of the software system requires labor-intensive updates. Because of the complicated user interfaces of DLS and CSTARS, the department has few employees capable of making these changes.

PROGRAM INFORMATION AND IMPLEMENTATION PLAN

The Driver's License System (DLS). DLS processes driver's license documents from 56 offices throughout the state of Colorado, including 36 state offices and 20 county offices. The system annually processes over 5.1 million records, including driver's licenses, permits, identification cards, and commercial driver's licenses. The DLS was installed in 1995, utilizes over 50 distinct processes, and depends upon complete technical support from the DOR, including hardware, software, and communication links.

There are a number of governmental agencies that interface with the DLS, including: the Secretary of State for motor vehicle registration vehicle information; the Colorado Bureau of Investigation for law enforcement driver inquiries; the Colorado Benefits Management System and the Department of Labor and Employment for lawful presence verification; the Colorado court system for driver citation and conviction information; the Department of Health and Environment for death record transfers; and the U.S. Department of Defense for selective service registration information. Systems maintained by the Donor Alliance and Colorado Interactive also interface with the system.

The Colorado State Titling and Registration System (CSTARS). CSTARS processes title and registration documents from 64 county offices in 106 statewide locations and one department-operated office. There are over 5.2 million registered vehicles in the state. The current version of CSTARS was developed and implemented in the mid-1980s and consists of two major subsystems, the county Distributed Data Processing System, and the Statewide Data Warehouse System.

There are a number of agencies that interface with CSTARS, including: the Colorado Bureau of Investigation for stolen vehicle information; the Regional Transportation District for registration inquiries; the Colorado State Patrol ports of entry for registration and permit issuances; Envirotec for emissions test compliance information; various law enforcement agencies for parking and traffic enforcement registration inquiries; and the National Motor Vehicle Titling Information System for nationwide registration information.

COST SAVINGS / IMPROVED PERFORMANCE OUTCOMES

There are no existing vendor licensing or maintenance agreements for either the DLS or CSTARS, and the only costs the department currently has to cover are mainframe computing costs related to the DLS and CSTARS hardware replacement costs. In FY 2014-15, the department is projected to pay \$1,454,114 in mainframe computing costs. All hardware is expected to have reached its useful life by the end of the DRIVES project and will be surplus. The department notes that ongoing maintenance and support, hardware replacement, and vendor-hosting costs are dependent upon the selected vendor solution, anticipates that these ongoing costs will exceed current costs, and therefore does not expect any net savings.

SECURITY AND BACKUP / DISASTER RECOVERY

The RFP requires the vendor to comply with all applicable standards promulgated by OIT, the National Institute of Standards and Technology (NIST), International Organization for Standardization (ISO), International Electrotechnical Commission (IEC), and the Center for Internet Security (CIS). It also requires the vendor to address: a response plan for various security breaches; a multitude of additional security protocols, such as system health tools and the quarantine of negatively affected data and code; the encryption of designated confidential data, such as Social Security Numbers; point-in-time recovery capabilities that allow the system to be recovered to the last point of consistent state; disaster recovery activities, including backup and restoration requirements; and continuous system and services availability of 99.9 percent of uptime.

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BUSINESS PROCESS ANALYSIS

In 2012, the department hired a consultant to conduct a Motor Vehicle Infrastructure Analysis. The results of the report were the justification for the DMV IT System Replacement project. In 2013, the department hired a consultant, who worked closely with OIT, to conduct an environmental scan to identify project alternatives to installing a new DMV IT system. The department determined that the replacement of the DLS and CSTARS is the optimal solution based on meeting all the business, technical, and operational goals of the DMV.

In 2013, the DMV published a five-year strategic plan to improve performance, customer service, identity security, and public safety. The plan focused on four areas: organization, business processes, facilities, and IT systems. This IT budget request aligns with the DMV strategic plan.

PROJECT SCHEDULE

	Start Date	Completion Date
RFP	June 2014	March 2015
Contracting	March 2015	May 2015
Implementation	May 2015	December 2018
Completion		December 2018

OPERATING BUDGET

The department is requesting \$11,370,833 in operating funding on behalf of the project in FY 2015-16 to fund DOR/DMV and OIT staff backfill through to project implementation completion in December 2018. This funding will provide DOR/DMV with 44.0 contractors at an estimated cost of \$3,059,166, and OIT with 17.5 contractors at an estimated cost of \$8,311,667.

According to the department, this project will have an impact on future state operating costs, but the department will not know what this is until a vendor has been selected and the contract is executed. These costs will cover vendor maintenance and hosting fees, hardware refresh costs, support, and limited development once the new system is online. Depending upon the results of contract negotiations, the department intends to submit a request seeking funding for ongoing maintenance and support costs.

STAFF QUESTIONS AND ISSUES

1. What are the selection criteria for the chosen vendor?

The RFP states the award will be made to the responsible Offeror whose proposal is determined to be the most advantageous to the State. Section 5 of the RFP - Proposal Evaluation - includes the criteria that will be used for selecting the finalist Offeror. Offeror submissions will be evaluated based on the depth and breadth of responses and a variety of quantitative and qualitative criteria, and the award will be made on a best-value basis according to the Offeror's Business Response and Cost Response. The basis for award will be based on the following factors: (1) Offeror's experience and references; (2) response to the Statements of Work; (3) response to the Functional Requirements; (4) response to the Technical Requirements; (5) response to the Service Level Requirements; and (6) Cost Proposal.

2. Will there be any FTE reductions directly related to the DLS and CSTARS retirements?

The Department does not anticipate any FTE reductions directly related to the DLS and CSTARS retirements.

3. Are there any financial penalties if the vendor does not meet agreed upon project milestones? Should there be?

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The Department anticipates that the contract with the selected vendor will include liquidated damages/financial penalties if the vendor does not meet agreed upon project milestones. However, at this time, the proposals are still under evaluation.

4. Is there a comprehensive master training plan for the project?

The RFP requires the Offeror to describe its understanding and approach to satisfying the State requirements as expressed in the System Implementation phase of the Implementation Scope of Work. An element of System Implementation is training. The Offeror is required to describe its approach to satisfying the training requirements of the DRIVES Scope of Work, including proposed activities, deliverables, descriptions of deliverable content, and methods and tools to be used. The Offeror is also required to identify the risks inherent in the training approach and discuss its mitigation strategies.

5. With a contract award anticipated in January 2015, have the final cost projections been determined?

Proposals are still under evaluation. The schedule has been modified as follows:

*RFP Awarded: 3/9/15
Contract Executed: 5/1/15
Phase I Completed: 12/1/16
Phase II Completed: 12/30/18*

6. Are there any foreign nationals involved in the project? If so, how is personally identifiable information (PII) being protected from disclosure?

Proposals are still under evaluation. However, the RFP states that throughout the term of the contract, the System must comply with OIT Standards and Securities Policies. These policies include, but are not limited to: security, privacy, IT enterprise architecture, software, hardware and system upgrades where applicable. The System will be subject to security reviews by OIT's Office of Cyber Security during the design phase and before State acceptance. Additionally, the RFP requires the Offeror to state how the security requirements will be met, demonstrate both a full comprehension of the security requirements and an intention to comply with the requirements including all personnel, physical, and technical requirements of the solicitation. The Offeror is required to describe its management structure and procedures for protecting State data, information, materials, equipment, and facilities to which prime and subcontractor personnel may have access. The Offeror is required to describe the Offeror's security organization and explain why this organization is appropriate for the project. The Offeror is also required to describe the pre-screening procedures to be used prior to submitting potential employee candidates for facility and/or information access approvals – to include submitting fingerprints to the State. Additionally, all potential employees working on the project must pass background and tax checks.

7. Which other states have implemented the COTS products?

Proposals are still under evaluation. However, the RFP states that Offerors must be established prime manufacturers of DMV systems with experience in DMV installations (equivalent to the State of Colorado) in terms of DMV functionality, database size, transaction throughput and identification accuracy, and have systems that are in current productive use in U.S. state DMV applications. Further, the Offeror has to demonstrate implementation of their solution (or a comparable solution) in at least one state-level DMV environment of a similar size and complexity to that of Colorado within the last five years, and have demonstrated experience in the implementation of large technology solutions of a similar size at the state level.

8. Has an IV&V vendor been hired? Who?

The IV&V vendor has not been hired yet. However, DOR and OIT are in the preliminary stages of developing an IV&V plan.

9. Please explain how the \$1.5m for IV&V services will be spent.

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The IV&V vendor has not been hired yet. However, the purpose of the funds is to perform an independent verification and validation of aspects of the project, to be determined jointly by DOR and OIT.

10. Please explain the travel costs associated with training.

The Department and OIT recognized that state and county staff would need to be trained on the new system. There are 56 state and county-operated offices across the State of Colorado that issue driver's license documents. Additionally, title and registration documents are issued by 64 counties and one Department-operated office in 106 locations. It was determined that travel costs would be incurred to train the staff either at remote locations or at the new project office in Lakewood.

11. The request includes funding of \$850,000 for leased space. Do the resources need to be collocated near 1881 Pierce office? Developers, testers, and trainers do not typically work full-time for the length of the project although there is some overlap. Has any thought been given to "hot-desking" where two or more resources share a desk at different times? What options did you consider?

Selection of the lease space was based on a number of different factors, such as cost, size, and proximity to the Pierce office. The space that was selected is located at 143 Union Street in Lakewood, approximately 5.1 miles away from Pierce.

To address "hot desking", based on the Department's experience in implementing the GenTax system, the Department recognizes that there will be staff participating in testing and training on the new system that will not be part of the project team. During space planning for this location, the Department and OIT requested three large rooms: two to be used for training on the system and the other one to be used for testing.

12. How many resources (FTE and contractor) will be utilizing the space?

We have designed the space to accommodate 72 staff (State and contractor). We have also designed the training and testing rooms to accommodate 55 staff.

13. Will all the resources be needed for the entire project or will they come and go as needed?

No. While there will be some resources assigned to support the entire project, most DMV resources will be assigned to support the replacement of specific systems. As designed, the DLS system will be replaced first, followed by the CSTARS system. While there will be some overlap, the staff assigned to replace the DLS will not be required to support the replacement of CSTARS.

14. What is the maximum number of resources you would estimate to utilize the space at any given time?

Until a vendor is selected and a master project schedule is completed, it is difficult to estimate the number of resources that would utilize the space at any given time. However, based on the response to question #17 above, the space is designed to accommodate 72 staff plus an additional 55 staff in the training and testing rooms.

15. Please explain the need for three project managers. Will the vendor provide a project manager(s) as well?

The vision for three project managers is based on the assumption that the Department and OIT would be each assigned a project manager and another project manager would be assigned to manage administrative functions and interfaces with external agencies. The vendor is required to provide a project manager.

16. Are all the listed resources necessary for the entire project?

Because a vendor has not been selected and a master project plan and schedule have not been completed, it is premature to determine what Department resources will be needed for the entire project. However, the staffing plan was developed under the assumption that replacement of DLS would take 18 months and replacement of CSTARS would take 18 months. Some staff would be expected to support the replacement of both systems for the duration of the project such as the project managers and accounting staff, for example.

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17. OIT staff backfills are estimated at \$8.3million for FY 2015-16, for 17.5 FTE (contractors). The staffing breakout based on the cost per hour for each FTE position only equates to \$2.7million (i.e. Testers 1.0 FTE = \$75/hour which equates to $75 \times 2080 = \$156,000$). Please explain.

While funding for the DRIVES project was requested in FY 2014-15 and FY 2015-16, project implementation is projected to take three years. Consequently, funding for the OIT staff backfill was requested for three years.