

Project Investment Justification

AFIS 4.0 Upgrade

GA22001

Division of Business and Finance (Formerly GAO)

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1. GENERAL INFORMATION

PIJ ID: GA22001

PIJ Name: AFIS 4.0 Upgrade

Account: Division of Business and Finance (Formerly GAO)

Business Unit Requesting: Division of Business and Finance (DBF) - General Accounting Office

Sponsor: Angela Dillard

Sponsor Title: Statewide Chief Financial Officer

Sponsor Email: angela.dillard@azdoa.gov

Sponsor Phone: (602) 291-0216

2. MEETING PRE-WORK

2.1 What is the operational issue or business need that the Agency is trying to solve? (i.e....current process is manual, which increases resource time/costs to the State/Agency, and leads to errors...):

The current contract for the Arizona Financial Information System (AFIS) is with CGI utilizing the Advantage software (Advantage version 3.11). CGI also hosts the solution and is responsible for technical support. Advantage version 3.11 will only be supported at a bare minimal level after March of 2023, unless we have entered into a new contract with CGI to implement version 4X.

Remain on version 3.11 of the software, which means we transition to bare minimum support (Tier 2) beginning in April of 2023, and eventually no support once the infrastructure becomes too outdated.

This is a substantial risk for the State of AZ, especially as it relates to vendor payments, appropriation tracking/controls, cash management, and financial tracking and reporting (State and Federal). AFIS is the statewide financial system of record for all State agencies. The system processes over six million transactions per year and includes modules for accounts payable, accounts receivable, general ledger, budgetary control, cash management, cost accounting/cost allocation, fixed assets, debt management, and inventory management. There are currently over 250 inbound and outbound interfaces to and from AFIS (including interfaces with HRIS and the APP systems). In addition, the system includes a data warehouse (infoAdvantage) that is used for statewide reporting, including reports to JLBC/OSPB as well as the Federal government.

2.2 How will solving this issue or addressing this need benefit the State or the Agency?

GAO would like to begin an implementation project to do a major upgrade of the AFIS system to version 4X beginning in April of 2022. The implementation is expected to take approximately 18 months to complete with an anticipated go-live in September of 2023. We chose this time frame in order to avoid a potential go-live during the fiscal year end.

Upgrading to the 4X version would eliminate above mentioned risk for the State of AZ as well as allow us to stay current with technology. It can contribute significant value toward areas such as financial tracking and reporting to enhance efficiency and productivity.

The Advantage product is phasing out version 3X and moving to version 4X, which is a completely new and enhanced end user experience, provides a much higher level of configurability and a pure Software as a Service (SaaS) solution.

2.3 Describe the proposed solution to this business need.

The Advantage product is phasing out version 3X and moving to version 4X, which is a completely new and enhanced end user experience, provides a much higher level of configurability and a pure Software as a Service (SaaS) solution.

The pure SaaS solution means that CGI will baseline many client customizations and deliver new enhancements on a release schedule, which results in the following major improvements:

- The State would not have to do another minor or major upgrade, but would just adopt the new feature sets as they're released.
- CGI will work with the State to eliminate or baseline all of our current customizations (currently 52) into the software. This will standardize the product across their client sites and allow for a more efficient and streamlined support model. CGI staff will no longer have to support many different versions of the Advantage software.
- CGI will provide on-going local support to the State, which is built into the contract. This will allow for faster issue resolution, assistance with establishing, evolving, and executing automated regression tests, assessing impacts for new releases, testing functionality when new releases are deployed, and enabling and testing new features based on business priorities.
- The ability to have much more flexibility in configuring the software to meet the State's needs, as opposed to customizations, which require code changes. CGI refers to this new feature as "extensibility". As an example of extensibility, if sites would like to change the appearance of a certain screen used to key transactions, such as removing fields that are not needed to their processes, this could be accomplished through configuration as opposed to a customization.

2.4 Has the existing technology environment, into which the proposed solution will be implemented, been documented?

Yes

2.4a Please describe the existing technology environment into which the proposed solution will be implemented.

2.5 Have the business requirements been gathered, along with any technology requirements that have been identified?

Yes

2.5a Please explain below why the requirements are not available.

3. PRE-PIJ/ASSESSMENT

3.1 Are you submitting this as a Pre-PIJ in order to issue a Request for Proposal (RFP) to evaluate options and select a solution that meets the project requirements?

No

3.1a Is the final Statement of Work (SOW) for the RFP available for review?

3.2 Will you be completing an assessment/Pilot/RFP phase, i.e. an evaluation by a vendor, 3rd party or your agency, of the current state, needs, & desired future state, in order to determine the cost, effort, approach and/or feasibility of a project?

No

3.2a Describe the reason for completing the assessment/pilot/RFP and the expected deliverables.

3.2b Provide the estimated cost, if any, to conduct the assessment phase and/or Pilot and/or RFP/solicitation process.

3.2e Based on research to date, provide a high-level cost estimate to implement the final solution.

4. PROJECT

4.1 Does your agency have a formal project methodology in place?

Yes

4.2 Describe the high level makeup and roles/responsibilities of the Agency, Vendor(s) and other third parties (i.e. agency will do...vendor will do...third party will do).

Refer to section 5.1 thru 5.20 of the State_of_Arizona_Amendment_23_Exhibit_I_Advantage 4 Upgrade
and

AFIS 4.0 Transformation Comprehensive Project Plan - RACI - Financial.xls

4.3 Will a PM be assigned to manage the project, regardless of whether internal or vendor provided?

Yes

4.3a If the PM is credentialed, e.g., PMP, CPM, State certification etc., please provide certification information.

4.4 Is the proposed procurement the result of an RFP solicitation process?

No

4.5 Is this project referenced in your agency's Strategic IT Plan?

Yes

5. SCHEDULE

5.1 Is a project plan available that reflects the estimated Start Date and End Date of the project, and the supporting Milestones of the project?

Yes

5.2 Provide an estimated start and finish date for implementing the proposed solution.

Est. Implementation Start Date

Est. Implementation End Date

4/1/2022 12:00:00 AM

10/30/2023 12:00:00 AM

5.3 How were the start and end dates determined?

Based on project plan

5.3a List the expected high level project tasks/milestones of the project, e.g., acquire new web server, develop software interfaces, deploy new application, production go live, and estimate start/finish dates for each, if known.

Milestone / Task	Estimated Start Date	Estimated Finish Date
Code Merge/Regression/Packaging	04/01/22	10/13/22
Training Activities	06/24/22	11/14/23
Change Management Activities	08/05/22	10/26/23
Env Installation - FIN/HRM	10/14/22	03/30/23
Forms Migrations	11/16/22	01/12/23
Shakedown testing (7 environments)	11/16/22	04/13/23
Data Warehouse (InfoAdv) Content Migration	11/29/22	04/26/23
Integration System Testing - IST (SH1)	11/30/22	01/10/23
Data Warehouse (InfoAdv) Install (FIN/HRM)	12/13/22	02/02/23
Process Setup / Integration deployment	01/06/23	05/04/23
ETL Execution (Full, then incremental after turnover)	01/10/23	02/23/23
Data Warehouse (InfoAdv) Universe Merge / Report Adjustment	02/02/23	04/19/23
Mock Runs	02/17/23	08/10/23
User Acceptance Testing (UAT) (PRD)	03/03/23	07/20/23
Report Testing	03/30/23	05/24/23
End to End Cycle Testing (PRD)	04/07/23	05/18/23
Performance Testing (PRD)	08/04/23	09/14/23
Cutover Activities	09/15/23	09/27/23
Go-live Complete	10/01/23	10/01/23

5.4 Have steps needed to roll-out to all impacted parties been incorporated, e.g. communications, planned outages, deployment plan?

Yes

5.5 Will any physical infrastructure improvements be required prior to the implementation of the proposed solution. e.g., building reconstruction, cabling, etc.?

No

5.5a Does the PIJ include the facilities costs associated with construction?

5.5b Does the project plan reflect the timeline associated with completing the construction?

6. IMPACT

6.1 Are there any known resource availability conflicts that could impact the project?

No

6.1a Have the identified conflicts been taken into account in the project plan?

6.2 Does your schedule have dependencies on any other projects or procurements?

No

6.2a Please identify the projects or procurements.

6.3 Will the implementation involve major end user view or functionality changes?

Yes

6.4 Will the proposed solution result in a change to a public-facing application or system?

No

7. BUDGET

7.1 Is a detailed project budget reflecting all of the up-front/startup costs to implement the project available, e.g, hardware, initial software licenses, training, taxes, P&OS, etc.?

Yes

7.2 Have the ongoing support costs for sustaining the proposed solution over a 5-year lifecycle, once the project is complete, been determined, e.g., ongoing vendor hosting costs, annual maintenance and support not acquired upfront, etc.?

Yes

7.3 Have all required funding sources for the project and ongoing support costs been identified?

Yes

7.4 Will the funding for this project expire on a specific date, regardless of project timelines?

Yes

7.5 Will the funding allocated for this project include any contingency, in the event of cost over-runs or potential changes in scope?

Yes

8. TECHNOLOGY

8.1 Please indicate whether a statewide enterprise solution will be used or select the primary reason for not choosing an enterprise solution.

The project is using a statewide enterprise solution

8.2 Will the technology and all required services be acquired off existing State contract(s)?

Yes

8.3 Will any software be acquired through the current State value-added reseller contract?

No

8.3a Describe how the software was selected below:

8.4 Does the project involve technology that is new and/or unfamiliar to your agency, e.g., software tool never used before, virtualized server environment?

No

8.5 Does your agency have experience with the vendor (if known)?

Yes

8.6 Does the vendor (if known) have professional experience with similar projects?

Yes

8.7 Does the project involve any coordination across multiple vendors?

No

8.8 Does this project require multiple system interfaces, e.g., APIs, data exchange with other external application systems/agencies or other internal systems/divisions?

Yes

8.9 Have any compatibility issues been identified between the proposed solution and the existing environment, e.g., upgrade to server needed before new COTS solution can be installed?

No

8.9a Describe below the issues that were identified and how they have been/will be resolved, or whether an ADOA-ASET representative should contact you.

8.10 Will a migration/conversion step be required, i.e., data extract, transformation and load?

Yes

8.11 Is this replacing an existing solution?

No

8.11a Indicate below when the solution being replaced was originally acquired.

8.11b Describe the planned disposition of the existing technology below, e.g., surplus, retired, used as backup, used for another purpose:

8.12 Describe how the agency determined the quantities reflected in the PIJ, e.g., number of hours of P&OS, disk capacity required, number of licenses, etc. for the proposed solution?

CGI Advantage sizing is based on application users, concurrent users, transaction volumes, retention requirements, number of environments required, total employees, and expected growth rates.

8.13 Does the proposed solution and associated costs reflect any assumptions regarding projected growth, e.g., more users over time, increases in the amount of data to be stored over 5 years?

Yes

8.14 Does the proposed solution and associated costs include failover and disaster recovery contingencies?

Yes

8.14a Please select why failover and disaster recovery is not included in the proposed solution.

8.15 Will the vendor need to configure the proposed solution for use by your agency?

Yes

8.15a Are the costs associated with that configuration included in the PIJ financials?

Yes

8.16 Will any app dev or customization of the proposed solution be required for the agency to use the project in the current/planned tech environment, e.g. a COTS app that will req custom programming, an agency app that will be entirely custom developed?

No

8.16a Will the customizations inhibit the ability to implement regular product updates, or to move to future versions?

No

8.16b Describe who will be customizing the solution below:

8.16c Do the resources that will be customizing the application have experience with the technology platform being used, e.g., .NET, Java, Drupal?

8.16d Please select the application development methodology that will be used:

8.16e Provide an estimate of the amount of customized development required, e.g., 25% for a COTS application, 100% for pure custom development, and describe how that estimate was determined below:

8.16f Are any/all Professional & Outside Services costs associated with the customized development included in the PIJ financials?

8.17 Have you determined that this project is in compliance with all applicable statutes, regulations, policies, standards & procedures, incl. those for network, security, platform, software/application &/or data/info found at aset.az.gov/resources/psp?

Yes

8.17a Describe below the compliance issues that were identified and how they have been/will be resolved, or whether an ADOA-ASET representative should contact you:

8.18 Are there other high risk project issues that have not been identified as part of this PIJ?

No

8.18a Please explain all unidentified high risk project issues below:

9. SECURITY

9.1 Will the proposed solution be vendor-hosted?

Yes

9.1a Please select from the following vendor-hosted options:

Vendor's data center environment

9.1b Describe the rationale for selecting the vendor-hosted option below:

AFIS is already hosted and operated in the CGI Phoenix Data Center and complies with AZRamp requirements. The upgrade of AFIS to Advantage 4 will continue to be hosted and operated in the same data center.

AFIS is already hosted and operated in the CGI Phoenix Data Center. The AFIS environment is within the Fed Cloud FedRAMP (IaaS) boundary and the upgraded Advantage/AFIS 4 will continue to be hosted and operated in the same data center. The IaaS authorization letter attached for your review.

The application will be placed in the StateRAMP environment, but that will be completed in the future.

9.1c Has the agency been able to confirm the long-term viability of the vendor hosted environment?

Yes

9.1d Has the agency addressed contract termination contingencies, e.g., solution ownership, data ownership, application portability, migration plans upon contract/support termination?

Yes

9.1e Has a Conceptual Design/Network Diagram been provided and reviewed by ASET-SPR?

Yes

9.1f Has the spreadsheet located at <https://aset.az.gov/arizona-baseline-security-controls-excel> already been completed by the vendor and approved by ASET-SPR?

Yes

9.2 Will the proposed solution be hosted on-premise in a state agency?

No

9.2a Where will the on-premise solution be located:

9.2b Were vendor-hosted options available and reviewed?

9.2c Describe the rationale for selecting an on-premise option below:

9.2d Will any data be transmitted into or out of the agency's on-premise environment or the State Data Center?

9.3 Will any PII, PHI, CGIS, or other Protected Information as defined in the 8110 Statewide Data Classification Policy be transmitted, stored, or processed with this project?

Yes

9.3a Describe below what security infrastructure/controls are/will be put in place to safeguard this data:

NIST standards were used to evaluate the security infrastructure/controls within the AFIS during the implementation of the AFIS system. Results of the steps completed to conduct an assessment of the AFIS controls are documented within the System Security Plan (SSP). The SSP has been submitted to the CISO and Security Lead. Due to the sensitive nature of the information contained in the SSP, it will not be included as an attachment. The CISO and Security Lead both can grant access to the SSP as deemed necessary.

In addition, SOC 1 Type 2 Report Report on controls placed in operation and tests of operating effectiveness for CGI's Infrastructure as a Services provided at the Phoenix Data Center is provided every year for ASET SPR review. The most recent one has been provided for the period of September 1, 2020 to August 31, 2021.

10. AREAS OF IMPACT

Application Systems

Application Enhancements;Internal Use Web Application;Mobile Application Development

Database Systems

Data Warehouse/Mart;Oracle

Software

COTS Application Acquisition

Hardware

Other

Provided by vendor

Hosted Solution (Cloud Implementation)

Vendor Hosted

Security

Encryption;Firewall;Intrusion Detection System (IDS);Intrusion Prevention System (IPS);Security Controls/Systems - Other

Telecommunications

Enterprise Solutions

Business Intelligence System;Management Systems - Financial, Grants, Asset;Disaster Recovery/Business Continuity

Contract Services/Procurements

11. FINANCIALS

Description	PIJ Category	Cost Type	Fiscal Year Spend	Quantity	Unit Cost	Extended Cost	Tax Rate	Tax	Total Cost
Project Plan Prototype Region Environment Provisioning, Customization Disposition, Code Merge	Professional & Outside Services	Development	1	1	\$2,400,000	\$2,400,000	0.00 %	\$0	\$2,400,000
Software	Software	Operational	1	1	\$1,315,563	\$1,315,563	0.00 %	\$0	\$1,315,563
Managed Services	Other	Operational	1	1	\$3,544,844	\$3,544,844	0.00 %	\$0	\$3,544,844
OCM Strategy and Plan Training Strategy and Plan User Experience (UX) Plan Code Delivery for Cloud Services SH1 Installation, Shakedown and Turnover to State	Professional & Outside Services	Development	2	1	\$1,000,000	\$1,000,000	0.00 %	\$0	\$1,000,000
MA1 Installation, Shakedown and Turnover to State Non Prod InfoAdvantage Standup Mock Conversion plan	Professional & Outside Services	Development	2	1	\$1,000,000	\$1,000,000	0.00 %	\$0	\$1,000,000
IST Support Production Installation, Shakedown and Turnover to State Production InfoAdvantage Standup Production Stand-up Mock Conversion Production Operational Cycle Setup	Professional & Outside Services	Development	2	1	\$1,000,000	\$1,000,000	0.00 %	\$0	\$1,000,000
SH3, SH4, MA2 Installation, Shakedown and Turnover to State	Professional & Outside Services	Development	2	1	\$383,000	\$383,000	0.00 %	\$0	\$383,000

SH4 (AHCCCS) Operational Cycle Setup and Shakedown									
Software	Software	Operational	2	1	\$1,753,707	\$1,753,707	0.00 %	\$0	\$1,753,707
Managed Services	Other	Operational	2	1	\$3,575,844	\$3,575,844	0.00 %	\$0	\$3,575,844
Implementation Services from FY 2022 and 2023 and 2024	Professional & Outside Services	Development	3	1	\$1,919,000	\$1,919,000	0.00 %	\$0	\$1,919,000
Re-pointed InfoAdvantage Reports Technical and User Readiness Assessment Performance Test Plan and Results Updated Cutover Plan Updated Integration APIs Final Mock Conversion User Acceptance Test Support	Professional & Outside Services	Development	3	1	\$1,000,000	\$1,000,000	0.00 %	\$0	\$1,000,000
Production Go Live Knowledge Transfer Plan Delivery Post Implementation Support Year End and Tax Support MA1 Operational Cycle Setup	Professional & Outside Services	Development	3	1	\$1,000,000	\$1,000,000	0.00 %	\$0	\$1,000,000
Software	Software	Operational	3	1	\$1,706,152	\$1,706,152	0.00 %	\$0	\$1,706,152
Managed Services	Other	Operational	3	1	\$3,501,844	\$3,501,844	0.00 %	\$0	\$3,501,844

Base Budget (Available)	Base Budget (To Be Req)	Base Budget % of Project
\$17,397,954	\$7,500,000	99%
APF (Available)	APF (To Be Req)	APF % of Project
\$0	\$0	0%
Other Appropriated (Available)	Other Appropriated (To Be Req)	Other Appropriated % of Project
\$202,000	\$0	1%
Federal (Available)	Federal (To Be Req)	Federal % of Project
\$0	\$0	0%
Other Non-Appropriated (Available)	Other Non-Appropriated (To Be Req)	Other Non-Appropriated % of Project
\$0	\$0	0%

Total Budget Available	Total Development Cost
\$17,599,954	\$9,702,000
Total Budget To Be Req	Total Operational Cost
\$7,500,000	\$15,397,954
Total Budget	Total Cost
\$25,099,954	\$25,099,954

12. PROJECT SUCCESS

Please specify what performance indicator(s) will be referenced in determining the success of the proposed project (e.g. increased productivity, improved customer service, etc.)? (A minimum of one performance indicator must be specified)

Please provide the performance objective as a quantifiable metric for each performance indicator specified.

Note: The performance objective should provide the current performance level, the performance goal, and the time period within which that performance goal is intended to be achieved. You should have an auditable means to measure and take corrective action to address any deviations.

Example: Within 6 months of project completion, the agency would hope to increase "Neighborhood Beautification" program registration by 20% (3,986 registrants) from the current registration count of 19,930 active participants.

Performance Indicators

Continuing with vendor hosted solution, adopting SaaS solution, which will allow us to eliminate 52 current customizations.

Standardization of the product to allow for a more efficient and streamlined support model, including implementation of a test automation tool which will result in decreased staff testing time.

User Experience (UX) modernization (referring to redesigning the user-facing elements) of AFIS application provides better access to information and enables users to perform effectively and efficiently.

13. CONDITIONS

Conditions for Approval

Should development costs exceed the approved estimates by 10% or more, or should there be significant changes to the proposed technology scope of work or implementation schedule, the Agency must amend the PIJ to reflect the changes and submit it to ADOA-ASET, and ITAC if required, for review and approval prior to further expenditure of funds.

Monthly reporting on the project status is due to ADOA-ASET no later than the 15th of the month following the start of the project. Failure to comply with timely project status reporting will affect the overall project health. The first status report for this project is due on May 15, 2022.

The agency shall provide the quarterly Independent Verification & Validation (IV&V) report, via email communication, to ADOA-ASET 90 days following the start of the project.

14. OVERSIGHT SUMMARY

Project Background

The General Accounting Office (GAO) is responsible for establishing Statewide accounting policies and procedures, managing the Arizona Financial Information System (AFIS), administering the Statewide Payroll through the Human Resources Information Solution (HRIS), preparing the Statewide Financial Reports, and providing technical assistance and other management advisory services. Among the responsibilities of the GAO is the development and maintenance of a “uniform accounting system so designed as to ensure compliance with all legal and constitutional requirements...”. Arizona Revised Statutes, Chapters 35 and 41, are the primary legal basis for the central accounting function of the State of Arizona. All State agencies are required to comply with the central accounting policies and procedures unless otherwise authorized by law or exempted in writing by the Director of the Department of Administration.

AFIS is a statewide financial system used by all state agencies to manage all financial transactions such as Financial Base System, including Annual Comprehensive Financial Reporting (ACFR), grant lifecycle Management, 1099 reporting, inventory management, cash management, accounts payable, accounts receivable, budget controls, debt management, and fixed assets. The AFIS system is being used to provide and/or validate data for reporting to the Governor's Office of Strategic Planning & Budgeting (OSP), provide and/or validate data for reporting to the Joint Legislative Budget Committee (JLBC), interfaces both inbound and outbound with Human Resources Information Solution (HRIS), and interfaces both inbound and outbound with the Arizona Procurement Portal (APP).

Currently, the state of Arizona is utilizing version 3.11 of the Advantage software for the AFIS system which will no longer be supported after March 2023 which creates a vulnerability to all financial information, controls, and security for all agencies within the State of Arizona.

Business Justification

With the completion of the AFIS 4.0 Upgrade, the projected vulnerability which will affect all financial information, controls, and security for all agencies within the State of Arizona will be eliminated. Additionally, the upgraded version includes enhancements that will contribute to end user efficiency and a higher level of configurability by modernizing the technical infrastructure and support processes, tailoring the user experience to State specific user roles to improve usability and enable data driven decisions, analyzing and implementing select functional enhancements to improve business processes, establishing a foundation for and executing test automation to transform the State’s long-term support model to improve quality, drive efficiencies, reduce manual testing, and adjust to the new release cadence

Transition the State to out of the box functionality in CGI Advantage by eliminating product customizations while maintaining critical State business capabilities, establish a backlog inventory for new features and functionality available in Advantage 4 that could be leveraged by the State of Arizona in the future, establish a State specific Advantage 4 environment to allow the State to have hands-on access to the new system and their data at the beginning of the upgrade to enable more effective education, analysis and design, knowledge transfer, and acceptance of the solution.

Implementation Plan

The agency will be responsible for application configuration, application security and workflows, interface updates, integrated system testing, and user acceptance testing.

The vendor will be responsible for project planning and management, organizational change management, technical architecture, BIRT forms, operational cycle, performance testing, disaster recovery, mock conversion and cut-over, and post-implementation support.

Vendor Selection

The Arizona Department of Administration (ADOA) General Accounting Office (GAO) is currently using AFIS which is a product of CGI Advantage. This project is to upgrade the version of Advantage in order to continue support.

Budget or Funding Considerations

Funding for this project will be made up of 98% base budget and 2% other appropriated funds.

15. PIJ REVIEW CHECKLIST

Agency Project Sponsor

Angela Dillard

Agency CIO (or Designee)

JR Sloan

Agency ISO (or designee)

Ryan Murray

OSPB Representative

ASET Engagement Manager

ASET SPR Representative

Thomas Considine

Agency SPO Representative

John Redhorse

Agency CFO

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