

Attachment D Technical Requirements Traceability Matrix

Request for Proposal Number 6056 Z1

Bidders are instructed to complete a Technical Requirements Traceability Matrix for Aging Services software replacement. Bidders are required to describe in detail how their proposed solution meets the conformance specification outlined within each Technical Requirement.

The traceability matrix is used to document and track the project requirements from the proposal through testing to verify that the requirement has been completely fulfilled. The contractor will be responsible for maintaining the contract set of Baseline Requirements. The traceability matrix will form one of the key artifacts required for testing and validation that each requirement has been complied with (i.e., 100% fulfilled).

The traceability matrix should indicate how the bidder intends to comply with the requirement and the effort required to achieve that compliance. It is not sufficient for the bidder to simply state that it intends to meet the requirements of the RFP. DHHS will consider any such response to the requirements in this RFP to be non-responsive and the bid may be rejected. The narrative should provide DHHS with sufficient information to differentiate the bidder's technical solution from other bidders' solutions.

The bidder must ensure that the original requirement identifier and requirement description are maintained in the traceability matrix as provided by DHHS. Failure to maintain these elements may render the bid non-responsive and result in for rejection of the bidder.

How to complete the traceability matrix:

Column Description	Bidder Responsibility
Req #	The unique identifier for the requirement as assigned by DHHS, followed by the specific requirement number. This column is dictated by this RFP and should not be modified by the bidder.
Requirement	The statement of the requirement to which the Bidder should respond. This column is dictated by the RFP and must not be modified by the Bidder.
(1) Comply	The Bidder should insert an "X" if the Bidder's proposed solution complies with the requirement. Describe in the response how the Bidder's proposed solution meets the requirement. The Bidder should leave blank if the Bidder's proposed solution does not comply with the requirement. If left blank, the Bidder should also address the following:

Column Description	Bidder Responsibility
	<ul style="list-style-type: none"> • Capability does not currently exist in the proposed system, but is planned in the near future (within the next few months) • Capability not available, is not planned, or requires extensive source-code design and customization to be considered part of the Bidder's standard capability • Requires an extensive integration effort of more than 500 hours
(a) Core	The bidder should insert an "X" if the requirement is met by existing capabilities of the core system or with minor modifications or configuration to existing functionality.
(b) Custom	The bidder should insert an "X" if the bidder proposes to custom develop the capability to meet this requirement. Describe and indicate "custom" for those features that require substantial or "from the ground up" development efforts.
(c) 3rd Party	The bidder should insert an "X" if the bidder proposed to meet this requirement using a 3rd party component or product (e.g., a COTS vendor, or other 3rd party). The bidder must describe the product, including product name, its functionality and benefits in their response.

TECHNICAL REQUIREMENTS

The following requirements describe what is needed to support DHHS technical project operations.

Each requirement is identified by the following first three characters:

TEC	General Technical Requirements
STN	Standards Requirements
ERR	Error Handling Requirements
DBM	Database/Data Management Requirements
BKP	Backup and System Recovery Requirements
SEC	Security Requirements
DOC	System and User Documentation
TRN	Training
PTT	Production, Test and Training Requirements
INT	Interfaces/Imports/Exports Requirements
PER	System Performance Requirements

General Technical Requirements

This section presents the overall technical requirements that apply to the software. Describe in the Response how the proposed solution meets the requirement.

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
TEC-1	Provide a description and diagram of the Bidder's proposed technical architecture. Include all database/web/networking hardware, software, tools, and information on where the solution is hosted.				
Response:					
TEC-2	If the Bidder's proposed solution requires any DHHS data to be stored off-site (including data "in the cloud") describe how the data is stored in federally compliant data centers residing within the continental United States of America and follows HIPAA standards.				
Response:					
TEC-3	Describe how the solution is designed so that business rule parameters and code lookup tables can be easily updated without changing the overall application program logic.				
Response:					

TEC-4	Describe the software licensing model of the solution, including any required third party licensing. Describe how the Bidder's maintains licensed software no more than two supported versions behind the latest release and updated with latest security patches				
Response:					
TEC-5	Describe any impact to the solution when customizations are made for upgrades and maintenance processes. DHHS prefers to minimize downtime and impact to the users.				
Response:					
TEC-6	Describe how the proposed solution is scalable and flexible enough to accommodate any changes required by the State and/or federal statute, mandate, decision or policy.				
Response:					
TEC-7	Describe how the system stores objects such as pictures, documents, PDF files, etc. If an electronic document management system is part of the solution, provide a description of the proposed document system and how it is able to support multiple objects.				
Response:					

TEC-8	Describe how the proposed solution is responsive to mobile technology and works with mobile devices such as smart phone or tablets.				
Response:					
TEC-9	Describe what industry standard browsers are supported by the Bidder's solution.				
Response:					

Standards Requirements

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
STN-1	Describe how the Bidder's proposed solution complies with accessibility requirements described in the State of Nebraska accessibility requirements located at http://nitc.nebraska.gov/standards/2-101.html along with conforming to the sub-parts of Section 508 of the Americans Disabilities Act (ADA). Refer to http://www.ada.gov/508/				
Response:					
STN-2	Describe how the Bidder's proposed solution is consistent with all HIPAA and other statutory, regulatory and policy requirements as defined and adopted by DHHS. Refer to http://dhhs.ne.gov/ITSecurity for policies and standards.				
Response:					

Error Handling Requirements

The management of the system requires that all occurrences of errors be logged for review and that critical errors be accompanied by appropriate alerts. Authorized users need to be able to query and review the error log and configure the alerts.

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
ERR-1	Describe the Bidder's proposed Error Handling functionality.				
Response:					
ERR-2	Describe how the Bidder's proposed solution provides a comprehensive set of edits at the point of data entry to minimize data errors and provide immediate feedback in order for incorrect data to be corrected before further processing.				
Response:					
ERR-3	Describe how the Bidder's proposed solution ensures all errors are written and categorized to an error log. Describe how the Bidder's proposed solution allows for a user to view, filter, sort, and search the error log.				
Response:					
ERR-4	Describe how the Bidder's proposed solution provides for the generation of standard and customizable error reports.				
Response:					

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
ERR-5	Describe how the Bidder's proposed solution has the ability to suppress error messages based upon user-defined criteria.				
Response:					

Database/Data Management Requirements

DHHS requires the benefits inherent with a relational database management system (RDBMS). The accessibility, flexibility and maintainability achieved through normalized data structures are essential to achieving the business objectives outlined in this RFP.

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
DBM-1	Describe the Bidder's proposed Database architecture including the database software that is supported by the proposed application.				
Response:					
DBM-2	Describe the Bidder's proposed Database Warehouse solution, if applicable.				
Response:					
DBM-3	Describe how the Bidder's proposed solution maintains an automated history of all transactions, including, but not limited to: date and time of change, "before" and "after" data field contents, and operator identifier or source of the update.				
Response:					
DBM-4	Describe the ability for the Bidder to convert data from the current systems utilized into the Bidder's proposed solution. Describe the technology used to complete the conversion.				
Response:					

Backup and System Recovery Requirements

DHHS requires the ability to create backup copies of the software and to restore and use those backup copies for the basic protection against system problems and data loss. This requirement refers to all application system files, data files, and database data files. The Bidder's proposed solution should provide a comprehensive and easily manageable backup and recovery process that is responsive to DHHS needs.

The Bidder's proposed solution should identify and implement a system recovery plan that ensures component failures do not disrupt services. The plan should be completed, implemented, and tested prior to system implementation.

The successful Bidder's solution should specify all needed hardware, software, and tools, and the plan should clearly define all roles, responsibilities, processes, and procedures. The solution should be sufficiently flexible to integrate with existing DHHS capabilities and accommodate future changes.

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
BKP-1	Describe the Bidder's proposed Backup and System Recovery plan and readiness. Describe the Bidder's service level agreement on returning the solution to service from a backup. Describe the Bidder's proposed backup retention schedules – daily, weekly, monthly, quarterly, etc.				
Response:					
BKP-2	Describe the Bidder's proposed Disaster Recovery Plan. Describe the Bidder's service level agreement on returning the solution back to operational service.				
Response:					

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
BKP-3	Describe how backups of the Bidder's proposed solution are able to be scheduled without user intervention and without interruption to the system.				
Response:					
BKP-4	Describe how the Bidder's proposed solution provides information on their test and validation process for all of the backup requirements listed previously (BKP-1, BKP-2, and BKP-3).				
Response:					
BKP-5	If there is a backup failure or downtime, describe the Bidder's proposed method and timing of communication to DHHS.				
Response:					

Security and Audit Requirements

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
SEC-1	Describe the Bidder's proposed security safeguards integrated into their application and how these safeguards address DHHS security. Refer to DHHS Information Technology (IT) Access Control Standard (DHHS-IT- 2018-001B) for specific requirements: http://dhhs.ne.gov/ITSecurity				
Response:					
SEC-2	Describe how the Bidder's proposed solution complies with Federal, State, and division-specific security requirements including but not limited to: <ul style="list-style-type: none"> • Health Insurance Portability and Accountability Act (HIPAA) of 1996 • Health Information Technology for Economic and Clinical Health Act (HITECH) of 2009 • Privacy Act of 1974 • 45 CFR Part 164 Security standards for PHI • Office of the National Coordinator's Nationwide Privacy and Security Framework for Electronic Exchange of Individually Identifiable Health information Refer to the Nebraska DHHS Information Systems and Technology Security Policies and Standards for more information (http://dhhs.ne.gov/ITSecurity).				
Response:					

SEC-3	<p>Describe how the Bidder's proposed solution meets the DHHS requirements for unique user ID access. Include:</p> <ul style="list-style-type: none"> • Specification on configuration of the unique user ID. • How the unique user ID is assigned and managed. • How the unique user ID is used to log system activity. • How the system handles the creation of duplicate user ID accounts. 				
Response:					
SEC-4	<p>Describe how the Bidder's proposed solution meets the DHHS standard for administering passwords:</p> <ul style="list-style-type: none"> • Initial Password assignment. • Strong Password Requirements. • Password reset process. • Password expiration policy. • Password controls for automatic lockout access to any user or user group after an administrator-defined number of unsuccessful log-on attempts. 				
Response:					
SEC-5	Describe how the Bidder's proposed solution supports the use of multi-factor authentication.				
Response:					
SEC-6	Describe any security processes for managing security updates, and integrated components subject to vulnerability, including anti-virus.				
Response:					

SEC-7	Describe how the Bidder's proposed solution provides the ability to maintain a directory of all personnel who currently use or access the system.				
Response:					
SEC-8	<p>Describe how the Bidder's proposed solution provides role-based security and allows restricted access to system features, function, screens, fields, database, etc. Role authentication may occur at the directory level, application level, or database level (depending on database platform). Describe the security administration functions integrated into the proposed system that manage role-based access to system functions, features, and data. Include a description of:</p> <ul style="list-style-type: none"> • How and where the proposed system stores security attributes or roles (e.g., LDAP attributes, database tables, a file). • The interface between the LDAP and the application, if roles are assigned in an LDAP directory. • How roles are created and security is applied to the role based on how and where security attributes are stored (if multiple options describe each). • How groups are defined and how roles and security are applied to each group. • How access limits are applied to screens and data on screens by role or group. • How users are created and assigned to one or more roles or groups. • How role and group creation and assignment activity is logged. 				
Response:					

SEC-9	<p>Describe how the Bidder's proposed solution automatically disconnects based upon inactivity, as required by DHHS Policies and Procedures. Describe how the feature is administered and what effect disconnect has on any activity or transaction in process at the time of disconnection.</p> <p>Refer to DHHS Securing Hardware and Software Standard (DHHS-IT-2018-001A) for specific requirements. http://dhhs.ne.gov/ITSecurity</p>				
Response:					
SEC-10	<p>Describe how the Bidder's proposed solution protects Confidential and Highly Restricted Data from unauthorized access during transmission. Describe transmission safeguards that are integrated into the proposed system to protect data during transmission, including any encryption technology.</p> <p>Refer to DHHS Information Technology (IT) Security Policy (DHHS-IT-2018-001) for specific requirements: http://dhhs.ne.gov/ITSecurity</p>				
Response:					

SEC-11	<p>The proposed system will process Confidential and Highly restricted Data. Describe the Bidder's auditing functions for all data that is viewed or changed. Describe how the Bidder's proposed solution provides System Auditing functions, including but not limited to:</p> <ul style="list-style-type: none"> • The user ID of the person who viewed or made the change to the data. • The date and time of the view or change. • The physical, software/hardware and/or network location of the person while viewing or making the change. • The information that was viewed or changed. • The outcome of the event. <p>Refer to DHHS Information Technology (IT) Audit Standard (DHHS-IT-2018-001F) for specific audit requirements: http://dhhs.ne.gov/ITSecurity</p>				
Response:					
SEC-12	Describe how the Bidder's proposed solution produces daily audit trail reports and allows inquiries, showing updates applied to the data.				
Response:					

SEC-13	Describe how the Bidder's proposed solution provides an auto archive/purge of the log files to prevent uncontrolled growth of the log and historical records storage using administrator-set parameters.				
Response:					
SEC-14	Describe how the Bidder's proposed solution supports encryption of data at rest or an equivalent alternative protection mechanism. Describe the proposed encryption of data. If data is not encrypted, describe in detail compensating controls. Refer to DHHS Information Technology (IT) Security Policy (DHHS-IT-2018-001) for specific requirements: http://dhhs.ne.gov/ITSecurity				
Response:					
SEC-15	Describe how the Bidder's proposed solution is configurable to prevent corruption or loss of data already entered into the solution in the event of failure.				
Response:					
SEC-16	Describe how the Bidder's proposed solution, prior to access of any Confidential or Highly Restricted Data, displays a configurable warning or login banner. In the event that a solution does not support pre-login capabilities, describe how the solution displays the banner immediately following authorization.				
Response:					

SEC-17	Describe how the Bidder's proposed solution recognizes Confidential and Highly Restricted information in screens, reports and views (i.e. PHI and SSN) by restricting distribution and access based upon system security settings and roles. Describe warning banner on printed and viewed reports.				
Response:					
SEC-18	Describe how the Bidder's proposed solution alerts staff authorities identified by DHHS of potential violations of security and privacy safeguards and adheres to the DHHS Information Technology (IT) Incident Management Standard (DHHS-IT- 2018-001E) requirements. http://dhhs.ne.gov/ITSecurity				
Response:					
SEC-19	Describe how the Bidder's proposed solution provides the capability to monitor, identify, and report on events on the information system, detects attacks, and provides identification of unauthorized use and attempts of the system.				
Response:					
SEC-20	Describe how the Bidder's proposed solution provides a process for archiving and/or destroying data and sanitizing storage media in conformance with DHHS data governance policies and subject to applicable HIPAA, and federal (e.g., Federal Information Processing Standards (FIPS), National Institutes of Standards and Technology (NIST), and State laws. Refer to DHHS Securing Hardware and Software Standard (DHHS-IT-2018-001A) for specific requirements. http://dhhs.ne.gov/ITSecurity				
Response:					

SEC-21	Describe how the Bidder's proposed solution has defined and deployed strong controls (including access and query rights) to prevent any data misuse, such as fraud, marketing or other purposes.				
Response:					
SEC-22	<p>Describe how the Bidder's proposed solution supports logging to a common audit engine using the schema and transports specified by DHHS. Describe how the solution exports logs in such a manner as to allow correlation based on time (e.g. Coordinated Universal Time [UTC] synchronization).</p> <p>Refer DHHS-IT-2018-001F - DHHS Information Technology (IT) Auditing Standard located in the polices at http://dhhs.ne.gov/ITSecurity</p>				
Response:					
SEC-23	Describe how the Bidder's proposed solution supports removal of a user's privileges without deleting the user from the solution to ensure a history of user's identity and actions.				
Response:					

System and User Documentation Requirements

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
DOC-1	Describe how the Bidder's proposed solution provides <u>on-line Help</u> for all features, functions, and data element fields, as well as descriptions and resolutions for error messages, using help features including indexing, searching, tool tips, and context-sensitive help topics. Provide a sample copy of five screenshots with on-line help with the bidder's response.				
Response:					
DOC-2	Describe how the Bidder's proposed solution provides an <u>on-line User Manual</u> with a printable version available. The documentation should include full mock-ups of all screens/windows and provide narratives of the navigation features for each window/screen. Provide a sample copy of five pages of the user manual with the bidder's response.				
Response:					
DOC-3	Describe how the Bidder's proposed solution will have <u>on-line Reporting Manual</u> with a printable version available that includes descriptions, definitions, and layouts for each standard report. Include definitions of all selection criteria parameters and each report item/data element, all field calculations defined in detail, and field and report titles. Provide a sample copy of five pages of the Reporting Manual with the bidder's response.				
Response:					

DOC-4	Describe how the Bidder's proposed solution provides a data dictionary which can be viewed online and kept updated for each modification.				
Response:					

Training Requirements

This section presents the overall training requirements that apply to the software. They are not specific to any technology or platform.

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
TRN-1	Describe the Bidder's proposed solution training plan. Describe how the bidder develops and provides training material to DHHS for initial training and updates to training material for enhancements and changes made to the system. The content of these materials should be consistent with the on-line Help, User Manual, and Reporting Manual.				
Response:					

Production, Test and Training Requirements

DHHS requires three separate environments (Production, Test, and Training) in order to operate the solution on an ongoing basis:

Test Environment – A test environment is required that mirrors the live production environment, including hardware and software. All data should be de-identified. This test environment will be used to test application changes before they are deployed to production. This step is an important part of quality assurance, where all changes are tested to minimize the risk of adverse reactions in the production environment. While it is necessary to mirror all of the functions of the production environment, it is not necessary to maintain the same load capacity.

Training Environment – A Training environment is also required that allows DHHS to provide hands-on training to users. This environment would allow DHHS to maintain unique de-identified data for use in training and conduct training without interference with the test or production environments. This environment will have occasional use.

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
PTT-1	Describe how the Bidder's proposed solution supports several environments, include production environment, test environment, and training environment.				
Response:					
PTT-2	Describe how the Bidder's proposed solution supports non-production environments such as testing and training environments containing de-identified data and not include Confidential or Highly Restricted data.				
Response:					

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
PTT-3	Describe how the Bidder's proposed solution provides the ability to refresh any testing or training environment. Describe whether the refresh process can be completed using DHHS resources or whether the process requires services from the Bidder.				
Response:					

Interfaces/Imports/Exports Requirements

The proposed software solution is expected to be able to interface with other computer systems as necessary.

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
INT-1	Describe the Bidder's proposed automated approach to managing interfaces. Describe how the proposed solution's interfaces secure and protect the data and the associated infrastructure from a confidentiality, integrity and availability perspective.				
Response:					
INT-2	Describe how the Bidder's proposed solution has the capability to notify System Administrators/system support staff if an interface is not available for any reason.				
Response:					
INT-3	Describe how the Bidder's proposed solution provides necessary Application Programming Interface (API)/Web Services, and/or secure file transfers to create interfaces to and from the proposed solution.				
Response:					

System Performance Requirements

This section describes requirements related to the proposed systems' on-line performance, response times, and sizing from a system architecture standpoint.

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
PER-1	Describe the Bidder's proposed system performance functionality and monitoring tools.				
Response:					
PER-2	<p>Describe the Bidder's expected minimum response times for the following functions, even at peak load. For example, expected response time will be within two (2) seconds 95% of the time, and under 10 seconds for 100% of the time.</p> <ul style="list-style-type: none"> • Record Search Time • Record Retrieval Time • Transaction Response Time • Print Initiation Time • Subsequent Page Display Response Time • Document Availability • Report Generation and Adhoc Queries 				
Response:					
PER-3	Describe how the Bidder's proposed solution captures system downtimes, along with the causes of the downtimes where applicable. Describe the Bidder's proposed method and timing of communication to DHHS on downtimes.				
Response:					

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
PER-4	Describe how the Bidder's proposed solution supports concurrent users with minimal impact to response time, with the ability to increase the demand on the system by 50% without modification to the software or degradation in performance.				
Response:					
PER-5	Describe how the Bidder's proposed solution is available online 24 hours a day and 7 days a week, 99.9% of the time each month. Describe any known timeframes where the system will be unavailable for use.				
Response:					
PER-6	Describe how the Bidder's proposed solution provides application performance monitoring and management capabilities, including any key performance indicators (KPI) or other metrics to measure and report system performance for the proposed system.				
Response:					