

**ATTACHMENT D**  
**Technical Requirements Traceability Matrix**  
**Request for Proposal Number 6231 Z1**

**Bidder Name:** \_\_\_\_\_

Bidders must describe in detail how the 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 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 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 description of the requirement to which the Bidder should respond. This language is specified in the RFP and must not be modified by the Bidder.
(1) Comply	Bidder should insert an "X" if the system complies with the requirement. Describe in the response how the system meets the requirement. If the system does not comply with the requirement, the Bidder should address the following: <ol style="list-style-type: none"> <li>1. Capability does not currently exist in the system, but is planned in the near future (within the next few months)</li> <li>2. Capability not available, is not planned, or requires extensive source-code design and customization to be considered part of the Bidder's standard capability</li> <li>3. Capability requires an extensive integration effort of more than 500 hours</li> </ol>
(a) Core	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	Bidder should insert an "X" if the Bidder proposes to custom develop the capability to meet this requirement. Indicate "custom" for those features that require substantial or "from the ground up" development efforts.
(c) 3rd Party	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 should describe the product, including product name, functionality, and benefits in the 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
DAC	Data Conversion Requirements
PTT	Production, Test and Training Requirements
INT	Interfaces/Imports/Exports Requirements
PER	System Performance Requirements
DOC	System and User Documentation
TRN	Training

### **General Technical Requirements**

This section presents the overall technical requirements that apply to the software. Describe in the response how the system meets the requirement.

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
TEC-1	<p>The proposed Bidder's solution system must be vendor hosted web based system that supports the Scope of Work of the RFP. The system must be available statewide 24/7.</p> <p>Describe how the solution meets this requirements. Provide a diagram of the technical architecture. Include all database/web/networking hardware, software, tools, etc. Indicate where the system is hosted. Indicate if any components are needed on the client and/or loaded on servers, etc. Describe any redundancy built into the system to limit any downtime.</p>				
Response:					
TEC-2	<p>Describe how the system is responsive to mobile technology and works with mobile devices such as smart phones or tablets.</p>				
Response:					

TEC-3	Describe how the Bidder's proposed 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 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-5	Describe how the Bidder's proposed solution is scalable and flexible enough to accommodate any changes required by the DHHS, or by any federal statute, federal mandate, federal decision or federal policy.				
Response:					
TEC-6	Describe the Bidder's proposed solution for report design tools and output formats. Describe how the system provides for the generation, online viewing, and printing of standard and customizable reports.				
Response:					
TEC-7	The web based system must have the ability to scan, attach, and store different document types (pictures, documents, PDF file, etc.). 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:					

## Standards Requirements

DHHS currently operates its computer system in compliance with many technology and operational standards. These standards originate from internal development, industry best practices and governmental mandates. The Bidder should describe how all applications operate in compliance with these standards and practices.

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
STN-1	Describe what industry standard browsers are supported by the Bidder's proposed system. If the system requires additional components, describe the technical details of those components.				
Response:					
STN-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:					
STN-3	The Bidder's proposed solution must ensure that all data is the property of DHHS, and DHHS will retain the exclusive rights of use now and in perpetuity. Describe how the bidder's solution meets this requirement.				
Response:					
STN-4	The Bidder's proposed solution must comply with accessibility requirements described in the State of Nebraska accessibility requirements located at <a href="http://nitc.nebraska.gov/standards/2-101.html">http://nitc.nebraska.gov/standards/2-101.html</a> along with conforming to the sub-parts of Section 508 of the Americans Disabilities Act (ADA). Refer to <a href="https://www.ada.gov/508/">https://www.ada.gov/508/</a> . Describe how the bidder's solution meets this requirement.				
Response:					
STN-5	Describe how the Bidder's proposed solution complies with digital signature requirements described in the Nebraska Digital Signatures Act, and all other applicable legal requirements in Nebraska for digital signatures. Refer to <a href="http://www.sos.ne.gov/rules-and-regs/regsearch/Rules/Secretary_of_State/Title-437.pdf">http://www.sos.ne.gov/rules-and-regs/regsearch/Rules/Secretary_of_State/Title-437.pdf</a> for definition and standards in Nebraska.				
Response:					

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
STN-6	The Bidder's proposed solution shall provide to DHHS any data files requested in accordance with DHHS requirements and work collaboratively with DHHS to develop and test the data file process incorporating DHHS feedback into the final data file formats. Describe how the bidder's solution meets this requirement.				
Response:					
STN-7	Describe the software licensing model of the solution, including any required third party licensing. Describe how the Bidder maintains licensed software no more than two supported versions behind the latest release and updated with latest security patches.				
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 error handling functionality for the Bidder's proposed solution.				
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 (e.g., spell check, zip codes, etc.).				
Response:					
ERR-3	Describe how the Bidder's proposed solution ensures all errors are written and categorized to an error log. Describe how the system allows for a user to view, filter, sort, and search the error log.				
Response:					
ERR-4	Describe how the system allows for user-defined alerts of errors, including those to external communication mechanisms (e.g., e-mail and text messaging).				

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
Response:					
ERR-5	Describe how the Bidder's proposed solution provides for the generation of standard and customizable error reports.				
Response:					
ERR-6	Describe how the Bidder's proposed solution includes a comprehensive list of error messages with unique message identifiers.				
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. Describe the Bidder's proposed Database Warehouse solution, if applicable.				
Response:					
DBM-2	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:					

**Backup and System Recovery Requirements**

The system must create backup copies of the software and 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 system should provide a comprehensive and easily manageable backup and recovery process.

The system must have a recovery plan that ensures component failures do not disrupt services. The plan should be completed, implemented, and tested prior to system implementation.

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:					
BKP-3	Describe how backups of the system 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:					

## 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: <a href="http://dhhs.ne.gov/ITSecurity">http://dhhs.ne.gov/ITSecurity</a>				
Response:					
SEC-2	The Bidder's proposed solution must comply with Federal, State, and division-specific security requirements including but not limited to:  <ol style="list-style-type: none"> <li>1. Health Insurance Portability and Accountability Act (HIPAA) of 1996</li> <li>2. Health Information Technology for Economic and Clinical Health Act (HITECH) of 2009</li> <li>3. Nebraska Electronic Signature Statute <a href="http://www.nebraskalegislature.gov/laws/statutes.php?statute=86-611">http://www.nebraskalegislature.gov/laws/statutes.php?statute=86-611</a></li> <li>4. Privacy Act of 1974</li> <li>5. 45 CFR 164 Security standards for PHI</li> <li>6. Office of the National Coordinator's Nationwide Privacy and Security Framework for Electronic Exchange of Individually Identifiable Health information <a href="https://www.healthit.gov/sites/default/files/nationwide-ps-framework-5.pdf">https://www.healthit.gov/sites/default/files/nationwide-ps-framework-5.pdf</a></li> </ol> Refer to the Nebraska DHHS Information Systems and Technology Security Policies and Standards for more information ( <a href="http://dhhs.ne.gov/ITSecurity">http://dhhs.ne.gov/ITSecurity</a> )				
Response:					
SEC-3	Describe how the system meets the DHHS requirements for unique user ID access. Include:  <ol style="list-style-type: none"> <li>1. Specification on configuration of the unique user ID.</li> <li>2. How the unique user ID is assigned and managed.</li> <li>3. How the unique user ID is used to log system activity.</li> <li>4. How the system handles the creation of duplicate user ID accounts.</li> </ol>				
Response:					



Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
SEC-4	Describe how the Bidder's proposed solution meets the DHHS standard for administering passwords: <ol style="list-style-type: none"> <li>1. Initial Password assignment.</li> <li>2. Strong Password Requirements.</li> <li>3. Password reset process.</li> <li>4. Password expiration policy.</li> <li>5. Password controls for automatic lockout access to any user or user group after an administrator-defined number of unsuccessful log-on attempts.</li> </ol>				
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 system). Describe the security administration functions integrated into the system that manage role-based access to system functions, features, and data. Include a description of:</p> <ol style="list-style-type: none"> <li>1. How and where the system stores security attributes or roles (e.g., LDAP attributes, database tables, files).</li> <li>2. The interface between the LDAP and the application, if roles are assigned in an LDAP directory.</li> <li>3. 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).</li> <li>4. How groups are defined and how roles and security are applied to each group.</li> <li>5. How access limits are applied to screens and data on screens by role or group.</li> <li>6. How users are created and assigned to one or more roles or groups.</li> <li>7. How role and group creation and assignment activity is logged.</li> </ol>				
Response:					
SEC-9	<p>The Bidder's proposed solution must automatically disconnect based upon inactivity, as required by DHHS Security Policies and Standards. 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:  <a href="http://dhhs.ne.gov/ITSecurity">http://dhhs.ne.gov/ITSecurity</a></p>				
Response:					
SEC-10	<p>The Bidder's proposed solution must protect 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:  <a href="http://dhhs.ne.gov/ITSecurity">http://dhhs.ne.gov/ITSecurity</a></p>				
Response:					

SEC-11	<p>The Bidder's proposed solution will contain Confidential and Highly Restricted data. The system must provide auditing functions for all data elements that are viewed or changed. Describe the auditing functions which should include but is not limited to:</p> <ol style="list-style-type: none"> <li>1. The user ID of the person who viewed the data.</li> <li>2. The date and time of the viewed data.</li> <li>3. The physical, software/hardware and/or network location of the person viewing the data.</li> <li>4. The information that was viewed or change.</li> </ol> <p>Refer to DHHS Information Technology (IT) Audit Standard (DHHS-IT-2018-001F DHHS IT Audit Standard) for specific audit requirements: <a href="http://dhhs.ne.gov/ITSecurity">http://dhhs.ne.gov/ITSecurity</a></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	<p>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.</p> <p>Refer to DHHS Information Technology (IT) Security Policy (DHHS-IT-2018-001) for specific requirements: <a href="http://dhhs.ne.gov/ITSecurity">http://dhhs.ne.gov/ITSecurity</a></p>				
Response:					
SEC-15	Describe how the Bidder's proposed solution is configurable to prevent corruption or loss of data already entered into the system in the event of failure.				
Response:					

SEC-16	Describe how the system, prior to access of any confidential or highly restricted data, displays a configurable warning or login banner (e.g. "The system should only be accessed by authorized users"). In the event that the system does not support pre-login capabilities, describe how the system 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 DHHS of potential violations of security and privacy safeguards. Incidents that involve or could potentially involve confidential or highly restricted data must be reported immediately as defined in DHHS Policy (DHHS-IT-2018-001E) DHHS IT Incident Management Standard. <a href="http://dhhs.ne.gov/ITSecurity">http://dhhs.ne.gov/ITSecurity</a>				
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. <a href="http://dhhs.ne.gov/ITSecurity">http://dhhs.ne.gov/ITSecurity</a>				
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	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).  Refer DHHS-IT-2018-001F - DHHS Information Technology (IT) Auditing Standard located in the policies at <a href="http://dhhs.ne.gov/ITSecurity">http://dhhs.ne.gov/ITSecurity</a>				
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:					

**Data Conversion Requirements**

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
DAC-1	The proposed bidder must be able to convert all data from the Department's existing system to the new proposed system.  Describe the data conversion plan which includes data element mapping crosswalks, data cleansing, data synchronization for initial and interim conversion activities leading up to the final data conversion, and frequency of interim conversion events and final conversion execution.				
Response:					

## Production, Test and Training Requirements

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

**Test Environment** – A test environment is required that mirrors the live production environment, including hardware and software. This test environment will be used to test application changes before 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 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:					
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:					
PTT-4	Describe the test procedures for any changes to the system. Describe user test planning including unit testing, end-to-end testing, stress testing, and readiness testing prior to "go live" date.				
Response:					

## Interfaces/Imports/Exports Requirements

The system is required 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 are secure and protect the data and the associated infrastructure from a confidentiality, integrity and availability perspective.				
Response:					
INT-2	Describe how the system provides necessary application program interfaces (API) / web services or Secure File Transfer Protocol (SFTP) to allow interfaces to and from the system.				
Response:					
INT-3	Describe how the system has the ability to share data securely, including importing and exporting of data to/from other application software tools, such as a Microsoft Excel file, XML, comma separated value (csv) file, etc.				
Response:					
INT-4	Describe how the system has the capability to notify system administrators/ system support staff if an interface is not available for any reason.				
Response:					

## System Performance Requirements

This section describes requirements related to the 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	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 five (5) seconds for 100% of the time. <ol style="list-style-type: none"> <li>1. Record Search Time</li> <li>2. Record Retrieval Time</li> <li>3. Transaction Response Time</li> <li>4. Print Initiation Time</li> <li>5. Subsequent Page Display Response Time</li> <li>6. Document Availability</li> </ol>				
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:					
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:					



Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
PER-5	The Bidder's proposed solution must be 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 system has the ability to generate reports and ad hoc queries without performance impact to user access or system response time.				
Response:					
PER-7	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:					

### ***System and User Documentation Requirements***

DHHS requires the Contractor to develop, electronically store and distribute system documentation to include, at a minimum:

1. Reference Materials
2. System Documentation
3. A complete Data Dictionary

The Contractor must provide a complete Data Dictionary. The Data Dictionary is to include definitions of all data elements and tables where they reside.

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:					

Req #	Requirement	(1) Comply	(a) Core	(b) Custom	(c) 3rd Party
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:					