

## Attachment 9: Non-Functional System Requirements

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### Non-Functional System Requirements

No.	Category	Description of Capability	Included	Note
1	System Security	Provide role-based security (i.e., control access to data and system functions according to user role and password authentication).		
2	Audit	Provide application-level audit trails that show which users and workstation addresses logged onto the system, when they logged on, and what part(s) of the system and database(s) they accessed (e.g., to detect unauthorized browsing) during a specified period; permit audit trails to be accessed, stored, archived, and purged.		
3	Audit	Maintain, and provide the ability to display or print, the audit trail of file additions, modifications, corrections, and deletions, including who made the entry, when the entry was made, and whether the date entered and date filed differ.		
4	Audit	Provide the capability to determine "who (Agency and UserID)" did "what" and "when (Date & Time Stamp)" for any change or addition to system data. Historical, chronological tracking must be able to be recreated by running queries via self-service without vendor involvement.		
5	Help and Documentation	Include a documented entity-relationship diagram and detailed data dictionary.		
6	Help and Documentation	Include a single comprehensive manual containing all documentation required by users. The documentation will merge, rather than separate information for any modifications or enhancements that are delivered.		

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7	Help and Documentation	Include a programmer's guide containing all documentation that details system functions, screen layouts, data and file structures, system program design.		
8	Help and Documentation	Include all documentation in printed and electronic format, and all documentation must be indexed and searchable.		
9	Help and Documentation	Provide context-sensitive help, which will be available online for every screen via function key or icon.		
10	Help and Documentation	Allow the administrator to edit/add to online help text.		
11	Help and Documentation	Provide an online tutorial.		
12	Error Messages	Provide clear error messages (e.g., full explanation of inputs that fail edit or data validation tests, highlight errors). Error messages to remote users must not include references to program code that may facilitate unauthorized access to system resources.		
13	Architecture	Be deployable on a single platform using a modern N-tier, web-based architecture.		
14	Architecture	Support database replication for Disaster Recovery backup.		
15	Architecture	Support deployment on clustered servers.		
16	Architecture	Include detailed, open APIs to support integration with other software applications.		
17	Architecture	Accept updates without major disruptions for customized features.		

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18	Architecture	Provide a keyboard input alternative to any “point and click” operation.		
19	Performance	Provide throttles, thresholds or other measures to ensure that ad-hoc reporting and advanced searches do not return so many results as to negatively affect system performance.		