

Electronic Records Management and Document Capture

Purpose

The purpose of this Request for Proposal (RFP) is to solicit proposals for document capture and electronic records management system(s) to replace the current capture and storage ecosystem used by the City Records Center to centrally manage imaged and born-digital records.

Background

The City of Milwaukee City Records Center manages records inventory for all city departments in accordance with official record retention schedules authorized by a municipal committee (City Information Management Committee) and the Wisconsin Public Records Board. Since approximately 2000, a major portion of CRC service has been providing imaging service for City departments for a number of born-paper critical record series.

City Records staff uses a combination of production-level document-feed scanners, flatbed scanners, and large-format scanners to capture paper documents for which City departments have ongoing access and/or preservation needs. Following scanning, technicians index the documents, utilizing existing metadata indices to auto-fill descriptive data fields, and subsequently upload documents to our existing electronic document management system (EDMS). In the last five years, we have also worked with City Departments to develop workflows to use the existing EDMS for born-digital active and inactive records, with some success.

The existing system was provisioned and configured to serve as a repository for static, scanned copies of paper documents. While it continues to perform adequately in that role, the influx of electronic and born-digital records is proving to be more than the existing system is able to manage. Most notably, the system's ability to manage the requirements of active records management is problematic, both in terms of its ability to capture records and in terms of the ability to make the records work according to established workflows.

Our one full integration with another information system required the better part of 3 years of custom code and development to integrate the file storage, scanning and integrity components of the system; the file access interface of the system itself is not used. Other partial integrations suffer from awkwardness in the way files are collocated and managed; end users must perform work with the files off-system, and can only make metadata changes on-system. Workflow capacities are unsophisticated, limited to simple approval/rejection workflows in most cases, and the interface to view records is not intuitive.

The most problematic issue with our current system is that the idea of a centralized repository for all declared records is increasingly obsolete. The system runs off a duplicated 35 TB storage appliance, which provides adequate storage for the textual documents being scanned but nowhere near enough for the big data, audio, video, and other huge files being created by City Departments. One department's estimate of security footage needs over the next 5 years would completely fill our 35 TB

quota, with no room for other records from any other department. At the same time, a more straightforward solution for storage, such as Azure or Amazon Glacier, would not completely fill the needs of these departments, because they need to be able to manage their records as records, which storage alone is not capable of doing. In an era where more and more records are going paperless, we need an electronic records and document management system that is capable of managing records where they are, and not requiring them to be kept in one specific place.

The new system will replace the current electronic document management system for the following uses:

1. Enterprise-Level Records Management for the City of Milwaukee, a Municipal Government with over 7,000 employees (of whom approximately 3,000 are information workers of some sort). The system should be able to integrate with existing standard and bespoke information systems, such as Microsoft 365, Accela, PeopleSoft, JobAps, and others to provide an overview of records maintained by the City, and integrate with city retention schedules and taxonomies to allow for automated retention, disposition, and archiving of these records, regardless of physical or intellectual location.
2. Document capture for both digitization and born-digital workflows, in which documents can be ingested into the system in original contexts, indexed according to embedded or provided metadata, and made available for use by City employees within or outside of information systems. This component of the system would need dedicated storage attached.
3. Management of Open Records Requests, including associated information about the request and requestor.
4. Secure management, transmission, and destruction of records protected by HIPAA, Wisconsin Open Records Restrictions, and other confidential data standards
5. Basic workflow and processing for records in the system, or integration with existing workflow products to allow a seamless experience during active use of records

As an enterprise system, the system/platform should be available to all City employees who regularly work with records to view their own or their department's records and manage them according to their assigned role. Employees of the City Records Center would have further rights to help capture records and index them appropriately from across all departments. The Document Services Manager and Document Services Supervisor(s) would serve as on-site system administration, with assistance from the Information Technology Management Division (ITMD).

Scope

The City of Milwaukee is requesting proposals for an Electronic document and records management system that meets minimum requirements of all specifications listed in the Systems Requirement and Technical Requirement Sections in this Request for Proposal (RFP). The system's functionality needs to support ARMA International's Principles framework of good practices for records management, and should meet systems requirements described in Department of Defense Instruction 5015.2 (*Design Criteria Standard for Electronic Records Management Software Applications*), as appropriate. The City will entertain either on-premise or cloud-based solutions.

Vendor must provide administrative training for CRC Management Personnel, training on document capture for CRC staff, and basic use training for departmental end users (records coordinators).

A detailed system migration, configuration and installation plan, including any needed assistance of City of Milwaukee IT personnel will also be required. An implementation/transition plan should include a proposed timeline responsibilities of the vendor and of City IT and CRC staff, as well as those activities and tasks to be performed by the proposer's associates.

System Requirements

Legacy Data Migration

- Migrate from existing FileDirector system the following estimated data/records into the new software solution (numbers are current as of May 9, 2023):
 - 6.5 Million document records, totaling approximately 6 TB in size, including associated metadata
 - 65 Document Type configurations, including index fields, associated keyword lists, associated retention schedules, and associated scanning/OCR profiles
 - Approximately 2 TB of SQL data used for index autofills
 - 150 security/access group profiles
 - 596 existing user profiles

Capture Requirements

The system must support the capture of documents and records stored in any format.

1. The system must support the capture of records in paper format, including the ability to:
 - a. Scan paper documents at 200 or 300 dpi (full-color, grayscale, and bitonal) using ISIS or Twain on desktop document feed scanners at high speed (60+ PPM)
 - b. Support indirect and direct scan integration from multi-function devices
 - c. Perform automatic Barcode/Zone recognition and/or Optical Character Recognition at point of scan to index scanned documents and facilitate full-text search
 - d. Index and search for documents based upon text, date, numeric, formatted or list fields
 - e. Ingest index data from other information systems to facilitate auto population of index fields based on key fields (1:1 and N:1 relationships)
 - f. Create, manage, revise, and control thesauri and keyword lists used to apply metadata to records
 - g. Save scanned documents in a specified preservation format (PDF/A, TIFF, PNG, etc.)
 - h. Grant/deny document viewing, editing and deletion based upon group or user accounts from Active Directory
 - i. View document access and modification audit trail
2. The system must support the capture of records in electronic format, including the ability to:
 - a. Ingest and store or link to individual files in a variety of formats, including image files, audio files, video files, document files and GIS data files
 - b. Connect to City Information Systems to identify, ingest, and store or link to files on those systems (including file storage, e-mail, and database-type systems), with or without user intervention
 - c. Ingest and store or link to email messages, including attachments

- d. Integrate with major productivity software suites (Microsoft 365, Adobe, etc.) to permit user-initiated ingest and storage or linkage of records
- e. Render or play documents in-client for preview purposes, where applicable
- f. Provide automatic Barcode/Zone recognition and/or Optical Character Recognition/Content Analysis to index ingested documents and facilitate full-text search
- g. Extract embedded metadata to index ingested documents (as appropriate)
- h. Index and search for documents based upon text, date, numeric, formatted, or list fields
- i. Grant/deny document viewing, editing and deletion based upon group or user accounts from Active Directory, with ability to modify permissions from the administrator client as needed
- j. View document access and modification audit trail

Document/Records Management Requirements

The system must support document and records management best practices and policies as implemented by the City of Milwaukee.

1. The system must support automatic and manual classification of records, including the ability to:
 - a. Classify records based on records creator, embedded and supplied metadata, content analysis, and other contextual factors
 - b. Link records classification to a taxonomy provided by the City of Milwaukee, which can be edited as needed by authorized administrators
 - c. Export all or part of the classification system for viewing, printing, and displaying in various formats
 - d. Assign a unique identifier to all documents and records as they are created, added, or linked to in the solution
 - e. Manually edit classification in the case of system or user-induced misclassification
2. The system must support records retention and disposition, including the ability to:
 - a. Upload existing city retention schedules, including titles, schedule numbers, descriptions, trigger events, retention periods, and disposition actions
 - b. Associate records with retention schedules based on their classification
 - c. Manually declare records for purposes of authenticity and trigger retention periods based on date of declaration
 - d. Automatically declare records for purposes of authenticity and trigger retention periods based on metadata dates or system events (date of creation, date last modified, etc.)
 - e. Store and preserve records in a secure central repository for their entire retention period as prescribed by Wis. Admin. Code Ch. ADM 12
 - f. Alert authorized administrators to unauthorized deletion or modification of declared records maintained outside the central repository, and/or prevent unauthorized deletion or modification
 - g. Automatically destroy records scheduled for deletion per calculated dates based on retention schedules
 - h. Automatically push deletion actions or alert records creators at point of disposition for declared records maintained outside the central repository
 - i. Maintain designated records on a long-term (7+ year) basis within the central repository using best digital preservation practices

- j. Allow users to override the records retention schedule and place a hold on disposition of selected records as needed
3. The system must support document management for declared and undeclared records, including the ability to:
- a. Implement version control of documents, including maintaining multiple versions and allowing for reversion to previous versions
 - b. Support the concept of “check out” and “check in” for documents, including configurable automatic check-out (on document open) and configurable automatic check-in (on document close)
 - c. Maintain an audit trail for all documents and processes, documenting all actions taken on a record from creation to disposition
 - d. Manually declare records for purposes of authenticity and place protections on declared records as described above
 - e. Annotate records, or otherwise allow end users to make notes, redactions, etc. on a copy of record without changing the record itself
 - f. Export documents from the system, either on a scheduled or ad hoc basis
4. The System must support workflow and reporting requirements for active records, including the ability to:
- a. Define workflows at either an enterprise or departmental level to facilitate processing of active records
 - b. Build workflows using a graphical user interface with a minimum of required coding or scripting
 - c. Manually and automatically apply workflows to documents based on document type, document metadata, or other characteristics
 - d. Automatically time out workflows or remind end users of workflow tasks after a user-defined period of time
 - e. Designate workflow participants as either role-based (i.e. participants entered by the workflow owner at launch) or as users to be specified during the flow
 - f. Designate substitute workflow participants in the event that assigned participants are unable to complete their workflow due to absence
 - g. Connect to other workflow or workflow-adjacent applications, including electronic signature applications (e.g. DocuSign) and project/task management applications (e.g. Project Manager) to integrate workflow/scheduling capabilities not in the base system
 - h. Allow generation of standardized, pre-defined reports, including but not limited to Audit Trail Report, User Activity Report, Security Permissions Report, Lists of Assets by Department, and other standard criteria
 - i. Allow users to define and generate custom reports, including both graphical and numerical data as appropriate, and to save those reports outside the system in appropriate formats (PDF, Spreadsheet, etc.)

User Experience/Security Requirements

The system must provide an effective, user-friendly experience for users, regardless of context, that allows them to access their records and only their records.

1. The system must support user management and permissions management, including the ability to:
 - a. Create user profiles linked to Active Directory or SAML authentication, or otherwise provide Single Sign-On (SSO) support or similar secure authentication for City of Milwaukee Users
 - b. Assign access and functional rights to users within the system based on organizational placement or administrator configuration
 - c. Notify users via internal or external (message-based) alerts and notifications that disposition or other workflow tasks require their attention
 - d. Revoke user access to documents or document types, as needed
 - e. Control the actions that users are allowed to perform on documents (read, edit, delete, download, etc.) based on document type, organizational placement, and administrator configuration
 - f. Manage security groups based on user roles and organizational placement within the organization
 - g. Apply security and access rules to content based on user roles within the organization
 - h. Apply security and access rules to content based on content type and/or metadata
2. The system must adhere to City of Milwaukee information security standards, including the ability to:
 - a. Utilize 128-bit SSL encryption, or higher, between end-user clients and the Solution (i.e. Secured Shell “SSH”, Pretty Good Privacy “PGP”) and/or Secure File Transfer Protocol “SFTP” encrypted connections);
 - b. Demonstrate an established information security policy that conforms to International Organization for Standardization/International Electro Technical Commission (“ISO/IEC”) 27001:2013 code of practice for information security policy and controls;
 - c. If offering a SaaS solution, demonstrate certification to the highest industry standards (i.e. 15027001 and 15027018) and regularly audited (i.e. Cloud Security Alliance STAR certification, FEDRAMP, SOC1, 2 and 3)
 - d. Comply with encryption and data protection requirements as required by the HIPAA Security Rule, Criminal Justice Information Systems (CJIS) standards, Wisconsin Public Records Law, and other statutory requirements
 - e. Support data security levels as defined by Information Security’s Data Governance Plan (Public, Restricted, Confidential) to allow additional protection for documents mentioned in part (d) (above)
 - f. Redact sensitive or confidential records prior to release via public records requests
 - g. Monitor for potential data breaches, maintain a log of potential information security issues, and notify administrators in the event of a potential breach
3. The system must allow end users to quickly and easily discover and access their records, including the ability to:
 - a. Support a graphical user interface for everyday interaction with records
 - b. Search documents based on full-text or other content analysis created at point of ingest
 - c. Search documents based on added descriptive metadata or system metadata
 - d. Browse for documents via hierarchical taxonomies, a folder-like file structure, or other discovery interface

- e. Employ wildcards, operators, and Boolean logic to expand or narrow search results
 - f. Sort, filter, or refine search results
 - g. Save frequently-used search queries or allow export of search results to tabular data files
 - h. If end-user has editing rights, bulk edit metadata on multiple documents at once
 - i. Limit search results to content that is viewable by user according to their role/security group
 - j. Provide previews of content in-client before invoking the native application to open the document
4. The system must allow administrators to quickly and easily perform interactions with records at scale, including the ability to:
- a. Support a shell-like environment, text-based metadata sidecar files, or other interface to update large numbers of records quickly and efficiently
 - b. Support a dashboard to allow administrators to monitor content within the repository and across all connected systems
 - c. Support an electronic discovery module to search for records across repositories and connected systems, collocate them in search results, and download for processing and delivery to requestor
 - d. Produce a variety of reports on the contents of the repository and connected systems, including reports by department, by content type, by disposition status and date, by security status, and by other criteria specified by administrators
5. The system must connect to other City information systems to allow records management in-place-type actions, including the ability to:
- a. Use REST API or other connectors to push files and file information from line-of-business systems to the repository
 - b. Use REST API or other connectors to push information policy, taxonomy information, and records retention actions and protections to line-of-business systems
 - c. Monitor content regardless of its physical location, including on both on-premise and cloud (AWS, Glacier, Azure) services
 - d. Specifically integrate with the following systems (incomplete list):
 - i. Microsoft 365 suite of products, including OneDrive for Business, Teams, and SharePoint Online
 - ii. Active Directory and existing Windows-based file system servers
 - iii. Open Database Connectivity (ODBC)
 - iv. Microsoft Exchange Email Server
 - v. Enterprise Resource Planning system (prospective)
 - vi. Oracle PeopleSoft
 - vii. ACA Accela Land Management/Permitting/Licensing System
 - viii. JobApsCloud Acquisition and Talent Management System
 - ix. Tyler MUNIS Tax Information System
 - x. Various MS-SQL servers (specific departments)
 - xi. DocuSign E-Signature Solutions
 - xii. GIS Web Services
 - xiii. Intellinetics Law Enforcement Document Management System

- xiv. Gimmal Physical Records Management System
- xv. CATS Court Case Management System
- xvi. City Attorney Legal Document/Case Management System
- xvii. Election Commission Election Management Software

6. The system should be accessible via a variety of platforms, including but not limited to:
- a. Desktop or “thick” client for power users and administrators (Windows compatible)
 - b. Browser-based or “thin” client for end users unwilling/unable to use the desktop client. This client must be fully compatible with all major internet browsers (Chrome, Edge, and Firefox).
 - c. Mobile app and/or responsive web design, including the capacity to capture documents via mobile devices for ingest and later indexing. This should be compatible with both Android and iOS mobile operating systems.

Associated Hardware

The city’s current EDMS contract includes support of hardware used for capture and storage of records. The solution being offered must provide support for, or demonstrate compatibility with, the following additional hardware infrastructure:

- 1. Mirrored/Replicated storage appliance or similar storage space for repository hosting (Current: Nexsan Assureon, replicated)
- 2. Document feeder scanners (6) (Current: Canon DR-G 1100(5) and DR-G 2100(1))
- 3. Flatbed scanners (2) (Current: Canon DR-G1100 Flat Bed 201 scanners)
- 4. Microfilm scanners with autofeed (3) (current: ScanPro 3000)
- 5. Large Format Scanner (1)

Technical Environment

The City of Milwaukee will consider both on-premise and cloud-based solutions. If a Software-as-a-Service solution is proposed, the City must remain owner of its data, the data must be segregated from other user data, and the servers on which the data is hosted must be located within the continental United States.

The ERMS solution must conform to the City’s technical environment and information system standards, unless an explicit exception is granted by the City’s Information Technology Management Department (ITMD).

- 1. Desktop environment: Windows operating system 10 or higher with commonly used applications and file formats, including Microsoft Office Suite and Adobe Acrobat.
- 2. Email-Exchange Microsoft Office 365
- 3. Virtual Server: Microsoft Hyper – V

User Licenses

The City Records Center will require at least two named license for administrators, one for the Document Services Manager (City Records Officer) and one for a dedicated ERM system administrator. Five additional named licenses will be needed for City Records Center staff for scanning and indexing of

paper records received from City Departments. An additional 150 concurrent licenses will be needed for department records coordinators and department heads to manage departmental records and develop workflow processes.

Of the approximately 3000 remaining knowledge workers at the City of Milwaukee, most will not need access to the repository platform, and so their license needs will depend on those licenses necessary to connect other City information systems to the repository for records management in-place purposes. It may be appropriate to provide approximately 50 extra concurrent licenses for read-only access to the repository.

Third Party License Software

The City recognizes the Proposer may have integrated Third-Party Software into the proposed application system. All such software not purchased by the City must be purchased by and licensed to the successful Proposer. All required licenses purchased by the Prime Proposer shall include written acceptance by the Third-Party Software provider. Proposer agrees to provide the City this written acceptance and copies of the software licensing agreement(s) no later than implementation acceptance.

Upon receipt, the City will review the documents of approval. Implementation acceptance is conditioned upon receipt and approval of these documents Software licensing terms and conditions provided by the Proposer which are not in conflict with the City's Terms and Conditions will be accepted by the City provided however that any licensing clause, term or condition representing that the license is superior or takes precedence over other articles, attachments, specification, provisions, contracts, terms or conditions shall be stricken and shall have no legal effect.

Proposer shall hold all licenses until implementation acceptance. After implementation acceptance, the licenses shall automatically pass to the City. In the event the Proposer fails to perform on the contract, Proposer shall immediately grant all software licenses to the City upon request by the City.

Data Migration/Conversion

1. All document assets, existing document type and metadata field definitions, OCR profiles, and existing workflow configurations will be migrated from the existing Electronic Document Management solution to the new solution, or else integrated into the system in-place by means of connectors. City Records staff will be available to work with the selected proposer to export the information needed to populate the databases for the new solution.
2. Records Retention Information for records not currently in our existing EDMS will need to be populated from our physical records management system. The retention schedules themselves can be exported into a text file for ease of import. Please describe the process for importing records retention schedules and attaching them to a taxonomy, or deriving a taxonomy from those schedules.
3. Describe the role of City Records, Information Technology Management Division (ITMD) and proposer related to data conversion/migration. Provide assumptions related to the work effort and staff time estimates.
4. Describe the data conversion/migration process including any tools that will be utilized.
5. Describe Proposer's approach in ensuring that legacy data migrated over to the new system will maintain its integrity. Describe procedures to test the accuracy and correctness of the legacy data when used by the new system.

6. Describe user acceptance testing procedures.

PROPOSAL EVALUATION CRITERIA

The City will use the following criteria to evaluate which response to this RFP is most advantageous to the City:

- Compliance with Proposal Submittal Requirements. (Pass/Fail)
- Solution Design and Functionality. (30 points)
- Transition, Management Plan and Timetable. (20 points)
- Training, Maintenance Support and System Warranty. (10 points)
- Technical Requirements. (10 points)
- References with Comparable Installations. (10 points).
- Cost Proposal. (20 points).

The following information must be included in each proposal:

SOLUTION DESIGN AND FUNCTIONALITY (30 points)

Please provide detailed description of software product based on project goals and objectives, scope of services, system and technical requirements and specifications outlined above.

Provide a database schema or other schematic that visually shows how the primary functional components of the software inter-relate.

Provide a list of standardized management reports.

Describe ad hoc search and query program capability.

Bid Award Subject to Successful Demonstration/Review.

TRANSITION, MANAGEMENT PLAN AND TIMETABLE (20 points)

(Migration, Configuration, Installation)

Provide a detailed work plan and schedule, which denotes the major tasks and activities to be performed, percentage of work hours allocated to each specific task or activity, personnel to be assigned and estimated completion data for each task or activity.

Provide a summary of established processes and procedures for migrating data from an existing MS-SQL-based system to your proposed software solution.

Describe the means by which you intend to validate incoming records and provide a mechanism for reporting exceptions for correction or discard purposes.

Provide description of migration processes and include reconciliation tools you propose to ensure migrated records match the number of records from the source system.

Provide proposed configuration and installation plans and to what extent the planning process with involve the City Records management staff and City of Milwaukee Information Technology Management Division staff.

If offering a cloud solution, provide information about cloud configuration, including estimated uptime, security protocols, physical location of data, any multi-tenancy arrangements, and backup and recovery protocols.

TRAINING, MAINTENANCE SUPPORT, & SYSTEM WARRANTY (10 Points)

Please describe your Administrative Training plan.

Please describe your Records Center Staff Training plan.

Please describe your End User (Departmental User) Staff Training Plan.

Please describe annual maintenance program, including your criteria for making onsite visits versus providing technical phone support, and products and services provided. This should include response times for: general application problems, emergencies or work stoppage, telephone support, email support and onsite support.

If offering a cloud solution, please describe the nature of the support that will be provided for City of Milwaukee-effectible components of the system.

Please provide a sample of administrative document/manual for your proposed software solution.

Your proposal should include a detailed description of your product warranty.

Describe product upgrades, how are they deployed and applied.

TECHNICAL REQUIREMENTS (10 Points)

Please list required Server and PC requirements for your software solution.

Please indicate provisions for exporting data from the proposed system in the event of future contract cancellation or non-renewal.

Acceptance of software solution will be subject to performance tests as well as assurance that the integrity of all migrated data can be authenticated. Provide a summary/overview of your anticipated means of system performance testing and the means by which the City will be assured of the integrity of data migrated to your software solution.

REFERENCES WITH COMPARABLE INSTALLATIONS (10 Points)

Describe how the proposed approach is supported by actual experience of your personnel.

Identify the personnel to be assigned to this project, the activities/tasks to which they are to be assigned, and their proportionate contribution (in terms of number of hours) to each activity/task. Discuss the professional qualifications, experience, and education of each person, include resumes of personnel.

The solution provider should have demonstrated experience with similar types of projects and migration of legacy data.

Include relevant prior experience and any specialized expertise. Provide summary of specific experience with public sector clients.

Include information about the financial and organizational stability of the vending organization.

COST PROPOSAL (20 Points)

Please describe software product licensing scheme and costs. If offering both an on-premise and cloud solution, provide both sets of costs and explain the implications of the differences.

Describe annual maintenance plan and costs.

Describe any anticipated upgrade costs that would not be included in your standard maintenance plan.

List hourly costs of personnel required for this project, or other means by which costs will be measured for successful completion of legacy data to be migrated.

List any proposed costs to meet system and technical requirements, project scope, or goals and objectives as a result of your proposed COTS software solution requiring any customization.

Describe in detail the costs associated with any proposed third party software interfaces.

The above Evaluation Criteria amounts to a total of 100 points. However, effective utilization of a city Certified SBE Firm (Optional) can result in up to 10 additional bonus points. Effective utilization of a Local Business Enterprise (LBE) can result in up to a 5 % increase to the total score.